
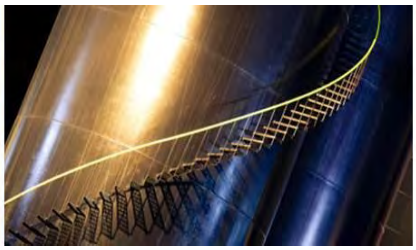


2022 ANNUAL REPORT

Whirlpool Facility
Fort Smith, Arkansas

Prepared for:
Whirlpool Corporation

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Date:
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1 Introduction

On behalf of Whirlpool Corporation (Whirlpool), Ramboll US Consulting, Inc (Ramboll) has prepared this 2022 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 2022. This report was prepared in accordance with the Revised Groundwater Monitoring Plan (RGWMP) approved by ADEQ in September 2016; the Remedial Action Decision Document (RADD) issued by 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 2022. Activities conducted during this 2022 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 2022 semi-annual event. The constituents of concern (COCs) evaluated during this annual event are listed in Table 1 and trichloroethylene (TCE) is the primary COC.

In addition to annual monitoring activities, a bench scale and field pilot study were conducted to assess the viability of injecting remedial products through a Vertebrae Well System (VWS). The studies and their 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 (Kane Logistics, 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 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 2022 annual monitoring event was performed during the week of October 17, 2022. 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 constituents of concern (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 2022 annual air monitoring event was performed during the week of October 31, 2022. 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 17, 2022, monitoring wells were visually inspected. The results of this inspection event are included in Table 3. In summary, 12 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 the samples collected.

ITMW-16 was damaged more severely than other wells as it has been destroyed since the last monitoring event in April 2022. This well is located in the South Plume near the source area in an area of increased trucking operations. An attempt was made to excavate the dirt around the well stick up in order to locate the well, but this effort was unsuccessful. A drilling crew will be scheduled in 2023 to attempt a repair or conduct a replacement of ITMW-16.

3.2 Static Water Level Measurements

Static water levels were measured in a total of 132 monitoring wells in order to provide a current potentiometric surface to evaluate groundwater gradients and flow directions. During the well inspection on the morning of October 17, 2022, monitoring wells were opened to allow water levels to equilibrate to atmospheric conditions. After allowing time for equilibration of groundwater levels, static water level measurements were collected in the afternoon using an electronic water level meter. The instrument was calibrated by the manufacturer prior to its purchase and therefore does not require calibration in the field. 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.

These static water level measurements are presented in Table 4, along with the water level measurements recorded during the April sampling event. Figure 4 provides a potentiometric map drawn based on groundwater elevations observed on October 17, 2022. 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).

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 0.0035 feet/foot;
  - MW-182 to MW-197: Southwest flow direction and a gradient of 0.011 feet/foot; and
  - ITMW-5 to TMW-36: Southerly flow direction and a gradient of 0.0006 feet/foot.
- Northeast Plume: MW-87 to MW-184 with a northeast flow direction and a gradient of 0.005 feet/foot.
- North Plume:
  - MW-58R to TMW-10: Northeast flow direction and a gradient of 0.011 feet/foot; and
  - MW-56R to MW-194: Easterly flow direction and a gradient of 0.02 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 465.97 feet at MW-177 to a low of 460.24 feet at MW-174. The calculated shallow groundwater gradient west to east based on these two wells is 0.0071 feet/foot. Static water elevations in the deeper basal transmissive zone (BTZ) wells also generally decrease from west (MW-70, 463.03 feet) to east (MW-62R, 458.96feet) with a resulting gradient of 0.0063 feet/foot. The highest shallow groundwater elevations were measured in the most up-gradient shallow well MW-178 (470.82 feet). 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 2022 groundwater elevations are as follows:

- Downward vertical gradient (-0.47 feet/foot) at the most up-gradient (i.e., southwestern) well grouping MW-178/MW-83;
- Downward-gradient (-0.28 feet/foot) at MW-177/MW-70;
- Flat-gradient (0.00 feet/foot) at MW-176/MW-46R;
- Downward-gradient (-0.32 feet/foot) at MW-175/MW-46R and MW-56R; and
- Slight downward-gradient (-0.03 feet/foot) at the eastern most well pairing, MW-174/MW-63R.

Vertical gradients were generally consistent with historical gradients with the exception of the vertical gradient between MW-175 to MW-46R and MW-56R changed from 0.05 feet/foot to 0.32 feet/foot. This change represented the biggest difference in gradients from April 2022 to October 2022.

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 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 5 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 2022 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 (Pace) 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), reinstalled or newly installed as a result of continued Site investigative activities.

Table 2 provides a list of the wells sampled during the 2022 annual groundwater monitoring event. Figure 3a and 3b present Site maps showing the locations of these wells. During the October 2022 groundwater monitoring event 92 wells were sampled including 32 wells denoted as North Plume wells, 11 wells denoted as Northeast Plume wells, three wells denoted as East Plume wells, 40 wells denoted as South Plume wells and seven wells denoted as Southwest Plume wells.

In addition to the BTZ monitoring program, four shallow wells (MW-175, MW-176, MW-178 and MW-179) and five vapor points (VP-7, VP-8, VP-10, VP-12 and VP-14) screened above the BTZ were selected for groundwater sampling to support vapor intrusion analysis.

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 include 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, Dehalococcoides (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 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 the additional parameters. The natural attenuation assessment (MNA assessment) has evaluated 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.

ISCR treatment wells are wells located near treatment zones used to assess the efficacy 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 92 groundwater samples, 11 field duplicate samples, five matrix spike/matrix spike duplicate (MS/MSD) samples and four equipment blanks were collected during the 2022 annual event. 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 six 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-26 (EB-01-202210), TMW-21 (EB-02-202210), RW-69 (EB-03-202210), ITMW-9 (EB-04-202210) and MW-57R (EB-05-202210). 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 2022 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 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. The overall data quality assessment indicated that the data are usable for the intended purpose, with no data rejected.

3.4 Air Sampling

Ramboll performed an indoor air and sub-slab soil vapor monitoring events for the Site on November 1-2, 2022. 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 2022 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 November 1, 2022. Sampling was performed between 8:00 am and 5:22 pm central standard time (CST) (i.e., local Site time). The outside temperature ranged from approximately 47°F to 79°F; relative humidity ranged from 100% to 31%; and wind was from the north, northeast with a speed between 7 miles per hour (mph) to 9 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 (November 1, 2022, climate data, weather.gov). 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 November 2, 2022. Sampling was performed between approximately 9:00 am and 5:45 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 50°F to 77°F. On November 2, 2022, the wind was from the east and ranged from 4.6 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 (November 2, 2022, climate data).

Sub-slab vapor samples were collected after at least 2 L 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 -1 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 November 1 and 2. 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 back groundwater 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 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 2022 annual groundwater sampling event are summarized in Table 7 and compared to ADEQ RALs. TCE analytical results and isoconcentration contours based on the October 2022 groundwater analytical data are presented on Figure 7. 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 up-gradient of, within and down-gradient 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 53 of 96 wells measured DO concentrations less than 1 mg/L. Elevated DO levels (> 4 mg/L) were observed in the North Plume area where ISCO injections were previously performed and in the Northeast Plume area similar to previous sampling rounds.
- ORP of groundwater ranged from -312 mV in TMW-11 (located in an ISCR treatment area) to a high of 643 mV in ITMW-5 (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 4.45 s.u. in MW-39R to a high of 7.43 s.u. in RW-1. In general, pH levels are in the range of 5-7.
- Temperature of groundwater ranged from 15.8°C to 28.6°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 2022 annual event in comparison to the 2021 annual event do not vary greatly in terms of 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. The results of the Mann-

Kendall trend testing for all plumes can be seen in Table 8. The applicable 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 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 various 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 2022 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 12018 have been performed to reduce TCE concentrations at the north boundary and the 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] Previous reports 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	24/32	5 µg/L: 16	615 µg/L @ MW-56R
cis-DCE	21/32	70 µg/L: 0	35.6 µg/L @ TMW-22R
VC	9/32	2 µg/L: 2	21.4 µg/L @ TMW-22R

Select* Biogeochemical Parameters	Results Range
TOC	Non-detect to 4,800 µg/L
Ferrous Iron	Non-detect to 5,400 µg/L
Sulfate	1,400 µg/L to 106,000 µg/L
Acetylene	Non-detect in all wells
Ethane	Non-detect to 2.7 µg/L
Ethene	Non-detect to 12 µg/L
Methane	22 µg/L to 10,000 µg/L
Hydrogen	Non-detect to 2.4 nM
Dhc	0.8 cells/mL to 327 cells/ML

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

Ferrous Iron or Fe [II], was not analyzed at MW-50R and RW-69 due to issues with equipment.

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, MW-194, MW-195 and MW-196 remain below TCE reporting criteria and RAL. Water collected from plume boundary wells MW-55R and MW-63R were reported to have a TCE concentrations above the RAL of 5 µg/L (27.5 µg/L and 5.8 µg/L, respectively). Nearby plume boundary wells to MW-55R (TMW-35, MW-50R and MW-68) and MW-63R (MW-52R and MW-194) provide lines of evidence (i.e., TCE non-detect or TCE detection < RAL) that assist to maintain a well-defined North Plume.

During the 2022 annual event, the highest concentration of TCE detected in groundwater samples from the North Plume wells was 615 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 at up-gradient at MW-46R at 298 µg/L. Some 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 wells (i.e., TMW wells) in the North Plume were previously installed to further delineate the northeastern 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 2022 groundwater sampling event cis-1,2-dichloroethene (cis-1,2-DCE), 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 cis-1,2-DCE, was detected in water from only two monitoring wells at concentrations greater than the RAL of 2 µg/L (TMW-10 at 3.8 µg/L and TMW-22R at 21.4 µg/L). As shown on Figure 8, TMW-10 and MW-22R are both 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 wells within the treatment area (TWM-10 and TMW-11) contained hydrogen concentrations that support iron (0.2-0.6 nM) to sulfate (1-4 nM) reducing environments. Hydrogen in groundwater collected from TMW-11 was greater than 1 nM (2.4 nM) and is supportive of 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 0.84 nM, MW-58R at 1.3 nM and RW-69 at 1 nM) which are supportive of 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 from within and adjacent to the North Plume interior. The groundwater from within the treatment area wells (TWM-10 and TMW-11) contained Dhc and VC reductase (vcrA) concentrations within the range of 10^1 to $<10^4$. These concentrations indicate moderate Dhc concentrations and when paired with vcrA as in these wells complete reductive dechlorination of TCE to ethene may still occur.

Groundwater from within and adjacent to the North Plume interior (IW-73, MW-50R, MW-58R and RW-69) contained low to moderate concentrations of Dhc ($<10^1$ to $<10^4$) and were non-detect for vcrA. One well near the up-gradient edge of the North Plume (IW-73) contained a low concentration of the BAV1 VC reductase. The North Plume up-gradient of the 2018 treatment area contains low to moderate levels of microbial populations that suggest complete reductive dechlorination of TCE although possible, needs additional lines of evidence 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. 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. Five wells (18.5%);
- Decreasing. 16 wells (50%); and
- No Trend. Nine wells (28%).

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, three with no trend and two with increasing TCE trends. The wells with increasing trends are MW-61R and MW-195. The October 2022 TCE concentrations for these two wells were 2.8 µg/L and 3 µg/L which are both less than the contaminant RAL of 5 µg/L. Additionally, if a Mann-Kendall test is performed on the MW-61R data set from July 2018 through October 2022 then this well demonstrate no trend for TCE.

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 (MW-82). 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 Northeast Plume

The Northeast Plume is located in the northeast parking lot and offsite to the east. The Northeast Plume is comprised of 11 monitoring wells (Table 2) that were sampled during the 2022 annual event. Two of these wells (MW-87 and MW-89) were sampled for natural

attenuation parameters in accordance with the RGWMP. Additionally, two other wells (MW-91 and MW-99) were sampled for ISCR parameters in accordance with the RGWMP. ISCR injections in 2019 have been performed to reduce TCE concentrations at the Northeast Plume boundaries.

4.2.1 Northeast Analytical Results

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

Primary Site COCs*	No. Detects/ No. Wells Sampled	RAL: No. Wells Exceed RAL	Maximum Detection
TCE	8/11	5 µg/L: 4	242 µg/L @ MW-87
cis-DCE	6/11	70 µg/L: 0	41.2 µg/L @ MW-91
VC	1/11	2 µg/L: 0	0.20 µg/L @ MW-91

Select* Biogeochemical Parameters	Results Range
TOC	Non-detect to 40,000 µg/L
Ferrous Iron	Non-detect to 5,000 µg/L
Sulfate	3,200 µg/L to 12,200 µg/L
Acetylene	Non-detect in all wells
Ethane	Non-detect to 1.8 µg/L
Ethene	Non-detect to 0.9 µg/L
Methane	Non-detect to 13,000 µg/L
Hydrogen	1.2 µg/L
Dhc	Non-detect to 2.9 cells/mL

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

Ferrous Iron or Fe [II], was not analyzed at MW-96, MW-97, MW-98 and MW-184 due to issues with equipment.

4.2.2 Discussion of Results

VOC Discussion

The Northeast Plume remains well defined and TCE results are generally consistent with previous events. Plume boundary wells MW-96, MW-97, MW-98, MW-99, MW-183R and MW-184 remain below TCE reporting criteria and RAL. MW-89 was below the TCE RAL for the second straight monitoring event.

Notable discussions for the Northeast plume area:

- All four monitoring wells located north of Ingersoll Avenue within or adjacent to the Boys and Girls Club are either non-detect for TCE or <1 µg/L (MW-183R at 0.83 µg/L). Additionally, the monitoring wells south of Ingersoll Ave and nearest to the Boys and Girls Club are MW-89 and MW-184 which were both reported with low TCE concentrations in groundwater (4.8 µg/L and 0.55 µg/L, respectively) below the RAL of 5 µg/L.
- MW-91: TCE groundwater concentration of 14.9 µg/L which is on order of magnitude less than the TCE concentration of 437 µg/L from October 2019 just prior to completion of the ISCR treatment near MW-91 and MW-99.
- MW-200: TCE groundwater concentration of 7.4 µg/L. This is the first TCE concentration at this location reported greater than the TCE RAL since the installation in 2020.
- MW-202: TCE groundwater concentration of 158 µg/L. Groundwater TCE concentrations have continued to increase at this location since installation in 2020. Work plans were submitted to the ADEQ on June 1, 2022, for additional investigation near MW-202 and will be completed upon receipt of an executed offsite property access agreement.

During the October 2022 groundwater sampling event neither cis-1,2-DCE or VC, degradation daughter products of TCE, were not detected in any Northeast Plume well exceeding the RAL of 70 µg/L or 2 µg/L, respectively.

Biogeochemical and Microbiological Discussion

Hydrogen analysis was performed on groundwater from two monitoring wells within the Northeast Plume. These wells were within the up-gradient (MW-87) and cross-gradient of the treatment zones established during the 2019 ISCR injections. Groundwater collected from these wells contained hydrogen concentrations (1.2 nM and 1.2 nM, respectively) that support sulfate (1-4 nM) reducing environments and are supportive of reductive dechlorination (USEPA 1998).

Groundwater from the same two wells were also analyzed for Dhc and were found to contain non-detect to low concentrations of Dhc ($<10^1$) and were non-detect for vcrA. These microbial results that suggest complete reductive dechlorination of TCE although possible, needs additional lines of evidence support this conclusion. No microbial analysis was performed on groundwater from wells within the 2019 treatment area during the October 2022 monitoring event.

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 Northeast Plume Stability

In the Northeast Plume wells nine had Mann-Kendall trend tests performed. MW-96 and MW-97 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. Three wells (33.3%);
- Decreasing. Three wells (33.3%); and
- No Trend. Five wells (46%).

There are approximately seven monitoring wells that are within or adjacent to the leading edge of the Northeast Plume (MW-87, MW-89, MW-91, MW-99, MW-184, MW-200 and MW-202). Of these monitoring wells, two demonstrate decreasing TCE trends, two with no trend and three with increasing TCE trends. The wells with increasing trends are MW-184, MW-200 and MW-202 which are down-gradient of the Northeast Plume injection areas. However, TCE concentrations during the October 2022 groundwater monitoring event at MW-184 and MW-200 were only 0.55 ug/L and 7.4 ug/L. As noted in Section 4.2.2, the October 2022 TCE concentration from MW-200 was the first occurrence of a reported results greater than the TCE RAL.

Based on Mann-Kendall analysis of wells along the leading edge of the Northeast Plume demonstrates a potentially expanding plume; however, two of the down-gradient monitoring wells with “increasing trends“ were detectable for TCE in water at very low concentrations (<10 ug/L). Work plans were submitted to the ADEQ on June 1, 2022, for additional investigation near MW-202 and will be completed upon receipt of an executed offsite property access agreement.

4.3 East Plume

The East Plume is located near the southeast dock area of the property. The East Plume is comprised of three monitoring wells that were sampled during the 2022 annual event. Additional investigation in the East Plume area will be conducted in 2023. A limited scale (i.e., only four injection points) injection program was installed in 2018 down-gradient of MW-185.

4.3.1 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	3/3	5 µg/L: 3	500 µg/L @ MW-205
cis-DCE	3/3	70 µg/L: 1	102 µg/L @ MW-205
Vinyl Chloride	1/3	2 µg/L: 0	0.32 µg/L @ MW-205

Select* Biogeochemical Parameters	Results Range
TOC	Non-detect to 350 µg/L
Ferrous Iron	Non-detect to 1,200 µg/L
Sulfate	8,900 µg/L to 11,700 µg/L
Acetylene	Not analyzed
Ethane	None detect in all wells
Ethene	None detect in all wells
Methane	Non-detect to 1,100 µg/L
Hydrogen	Not analyzed
Dhc	Not analyzed

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

Ferrous Iron or Fe [II], was not analyzed at MW-185 due to issues with equipment.

4.3.2 Discussion of Results

The Northeast Plume boundary well concentrations at MW-185, TMW-34 and MW-205 remain generally consistent with previous events. Groundwater monitoring data show that the East Plume boundaries have extended east of TMW-34. Work plans were submitted to 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.

During the October 2022 groundwater sampling event cis-1,2-DCE, a degradation daughter product of TCE, was detected in one East Plume well exceeding the RAL of 70 µg/L (102 µg/L at MW-205). VC, a degradation product of TCE and cis-1,2-DCE, 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.

4.3.3 East Plume Stability

In the East Plume wells, MW-185 and TMW-34 had Mann-Kendall trend tests performed. MW-205 had insufficient data to perform a trend test. Of the wells that were analyzed, the majority showed increasing or no trend results:

- Increasing. Two wells (100%);
- Decreasing. Zero wells (0%); and
- No Trend. Zero wells (0%).

The two wells that had sufficient data sets to run Mann-Kendall were both found to demonstrate increasing TCE trends. Based on this analysis the East Plume demonstrates a potentially expanding plume. Work plans were submitted to 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.

4.4 South Plume

As discussed in Section 3.2, the potentiometric surface map provided in Figure 4 outlines a hydraulic gradient with groundwater flow indicated toward the northeast, east, southeast and southwest away from the source area. This hydraulic flow pattern has helped to develop a series of plume areas with contaminant impacts. The North, Northeast, East and Southwest Plume areas are discussed independently in Sections 4.1, 4.2, 4.3 and 4.5 of this Report. The following discussion will mostly be focused on the source area and toward the south.

The South Plume is located onsite south of Ingersoll Avenue and west of Jenny Lind Road. The South Plume is comprised of 40 monitoring wells that were sampled during the 2022 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 2020 have been performed to reduce TCE concentrations at the southern boundary of the South Plume.

4.4.1 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	31/40	5 µg/L: 27	82,400 µg/L @ RW-1
cis-DCE	28/40	70 µg/L: 7	17,100 µg/L @ RW-1
VC	13/40	2 µg/L: 4	541 µg/L @ MW-38

Select* Biogeochemical Parameters	Results Range
TOC	Non-detect to 6,800 µg/L
Ferrous Iron	Non-detect to 2,200 µg/L
Sulfate	11,100 µg/L to 681,000 µg/L
Acetylene	Non-detect to 0.15 µg/L
Ethane	Non-detect to 5.5 µg/L
Ethene	Non-detect to 25 µg/L
Methane	4.1 µg/L to 13,000 µg/L
Hydrogen	Non-detect to 2.2 nM
Dhc	Non-detect to 174 cells/mL

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

4.4.2 Discussion of Results

VOC Discussion

The South Plume remains fairly well defined with the exception the interior of the Site building 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.

ITMW-20, ITMW-2R, MW-22, MW-26, MW-29, MW-84, MW-191, MW-192, MW-201, MW-206 and TMW-25 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 2022 annual event, the highest concentration of TCE detected in groundwater was 82,400 µg/L as collected from source area recovery well RW-1. This is an increase from this well's maximum concentration of 36,000 µg/L in October 2021. As whole, concentrations within

the source area remain relatively consistent with some historical fluctuation in the magnitude of detections.

Approximately 100 feet south of the property boundary and south of the ISCR treatment area, TCE was detected in groundwater at MW-203 at 228 µg/L. However, groundwater analyzed from monitoring well MW-201 (south and slightly east of MW-203) was non-detect for TCE. The ISCR treatment zone at the south property boundary was installed in 2020 to address additional impacts to offsite groundwater.

During the October 2022 groundwater sampling event cis-1,2-DCE, a degradation daughter product of TCE, was detected in seven wells exceeding the RAL of 70 µg/L. The wells with cis-1,2-DCE exceeding the RAL were ITMW-18, MW-38, MW-93, MW-95, MW-198, RW-1, TWM-36. Six of these wells are within the source area or wells with elevated TCE concentrations near the source area. However, TMW-36 is adjacent to a ISCR treatment area installed in 2020 south of the Site building.

VC, a degradation product of TCE and cis-1,2-DCE, was detected in water from only four monitoring wells at concentrations greater than the RAL of 2 µg/L. The wells with VC exceeding the RAL were MW-25R, MW-38, MW-95 and MW-198. All four of these wells are located within the source area or wells with elevated TCE concentrations near the source area. These elevated results for cis-1,2-DCE and VC provide a line of evidence that reductive dechlorination is occurring in within the source area and the ISCR treatment area.

A work plan was submitted on June 1, 2022, to ADEQ to address comments from the agency regarding installation of additional down-gradient plume boundary monitoring wells. This additional investigation in the areas near MW-190 and MW-203 and are anticipated to be completed in 2023 in concert with additional investigations within the East and Southwest Plume areas.

Biogeochemical and Microbiological Discussion

Hydrogen analysis 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 down-gradient on the south side of the Site building. Groundwater collected from MW-25R and MW-38 were non-detect. However, hydrogen analysis from ITMW-9, MW-95 and MW-198 ranged from 1.1 to 2.2 nM which support to sulfate (1-4 nM) reducing environments and are supportive of reductive dechlorination (USEPA 1998).

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 down-gradient on the south side of the Site building. Groundwater from these wells contained low to moderate concentrations of Dhc and vcrA/BAV1 VC reductases ($<10^1$ to $<10^4$). These levels of microbial populations suggest complete reductive dechlorination of TCE although possible, needs additional lines of evidence 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.

4.4.3 South Plume Stability

In the South Plume wells, 32 wells had Mann-Kendall trend tests performed. Nine 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. 10 wells (31.25%);
- Decreasing. 19 wells (50%); and
- No Trend. Nine wells (23%)

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 eight 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 a decreasing 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 down-gradient plume boundary monitoring wells. This additional investigation in the areas near MW-190 and MW-203 and are anticipated to be completed in 2023 in concert with additional investigations within the East and Southwest Plume areas.

4.5 Southwest Plume

The Southwest Plume is located primarily within the southwest portion of the property boundary and extends offsite to the southwest. The Southwest Plume is comprised of seven monitoring wells (Table 2) that were sampled during the 2022 annual event. ISCR injections in 2018 have been performed to reduce TCE concentrations at the Southwest Plume boundaries.

4.5.1 Southwest 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	6/7	5 µg/L: 3	83.0 µg/L @ MW-199
cis-DCE	5/7	70 µg/L: 0	10.2 µg/L @ MW-199
VC	4/7	2 µg/L: 0	0.74 µg/L @ TMW-26

Select* Biogeochemical Parameters	Results Range
TOC	770 µg/L to 11,600 µg/L
Ferrous Iron	Non-detect to 6,000 µg/L
Sulfate	37,400 µg/L to 138,000 µg/L
Acetylene	Not analyzed
Ethane	0.57 µg/L to 3.9 µg/L
Ethene	0.36 µg/L to 2.2 µg/L
Methane	3,000 µg/L to 16,000 µg/L
Hydrogen	Not analyzed
Dhc	Not analyzed

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

4.5.2 Discussion of Results

The onsite portion of the Southwest Plume remains well defined boundary well TCE concentrations at MW-199 remain generally consistent with previous events. Since initial injections were completed in 2018, TCE concentrations within the Southwest Plume injection area have been significantly reduced such that the Southwest Plume has been cut off from the South Plume (Figure 7). Contaminant concentrations have been reduced in monitoring wells within the treatment area since 2018 to concentrations below the TCE RAL (e.g., TMW-25 – 58.6 µg/L to 2.4 µg/L; TMW-16 – 368 µg/L to 0.54 µg/L; and TMW-26 – 54.4 µg/L to 1.8 µg/L).

TCE concentrations in groundwater at MW-199, down-gradient of the Southwest Plume treatment area, remain above the RAL with the most recent October 2022 concentration reported as 83 µg/L. Additional borings completed approximately 300 feet farther southwest in 2020 indicated TCE at 18.1 µg/L. A work plan was submitted on June 1, 2022, for additional

investigation southwest of the former Whirlpool property and will be completed upon receipt of an executed offsite property access agreement.

During the October 2022 groundwater sampling event neither cis-1,2-DCE or VC, degradation daughter products of TCE, were not detected in any Southwest Plume well exceeding the RAL of 70 µg/L or 2 µg/L, respectively.

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

Groundwater monitoring data show that the Southwest Plume boundaries have extended offsite. A work plan was submitted on June 6, 2022, for additional investigation in the areas near MW-190 and MW-203 and will be completed in 2023.

4.5.3 Southwest Plume Stability

In the Southwest Plume wells, six wells had Mann-Kendall trend tests performed. One well, TMW-27, had insufficient data to perform a trend test. Of the wells that were analyzed, the majority showed decreasing or no trend results:

- Increasing. One well (16.7%);
- Decreasing. Three wells (50%); and
- No Trend – Two wells (33.3%).

The only increasing trend from the Southwest Plume data set was in groundwater collected from TWM-30. Groundwater analyzed from TMW-30 for the October 2022 monitoring event was reported with TCE as 8.8 µg/L. At this well groundwater has been reported as fluctuating between <10 µg/L to 34 µg/L since May 2020. Based on Mann-Kendall analysis of wells with the Southwest plume and supported by on-going remediation through the 2018 ISCR program, this plume demonstrates stability and does not exhibit an expansion at this time.

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 Underground Injection (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, Southwest Plume and Southeast 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 (Northeast 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 2022 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 up-gradient of, within and down-gradient 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

MW-61R, MW-194, TMW-10, TMW-11, TMW-21 and TMW-22/22R are located within or adjacent and down-gradient to a 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 2022 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 2022 TOC concentrations ranged from 0.65 mg/L to 4.8 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 2022 show a decreasing trend of detections, or non-detects for previously detected VFAs.
  - ORP field data measured during the October 2022 groundwater sampling event ranged from -312.2 mV to -46.7 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-2 and TMW-22/22R have been reduced by approximately 97% since each well's respective baseline sampling event.
  - Concentrations of TCE in water collected from MW-61R and MW-194 have been reduced by an average of approximately 66% 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 87%, respectively).
  - cis-1,2-DCE 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, cis-1,2-DCE 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 cis-1,2-DCE 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 was detected in October 2021 at 0.53 µg/L and has increased to 1.4 µg/L in October 2022. 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., cis-1,2-DCE, 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. Ramboll is currently developing an updated remedial plan for this and other areas of the Site that will be submitted to ADEQ within 2023.

5.2.2 Northeast Plume

The bioremediation treatment zones were established adjacent to MW-91 and MW-99 during the December 2019 ISCR injection event and the analytical data for this treatment area can be summarized as follows:

- Biogeochemical data:
  - Iron concentrations initially increased by three orders of magnitude at each of these two monitoring wells post injection as a result of ZVI within the injected reagent and concentrations remain elevated through the October 2022 monitoring event.
  - 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 to 5.3 mg/L and 40 mg/L, respectively, during the October 2022 monitoring event.
  - Nitrate has been reduced at both monitoring wells to non-detect, which is suggestive of reducing conditions have been established within the treatment zone.
  - Sulfate has been reduced at both monitoring wells to approximately 3 mg/L or less, which is suggestive of highly reducing conditions having been established within the treatment zone.
  - VFAs were produced/increased during the 2020 post injection monitoring events at both monitoring wells, however, analytical results from the October 2022 monitoring event show significant decreased detections, or non-detects for previously detected VFAs. The exceptions are lactic and formic acid. The 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.
  - ORP field data measured during groundwater sampling at MW-91 and MW-99 were -131 mV and -110 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 has been reduced in groundwater approximately 95% at MW-91 and by 96% at MW-99.
  - cis-1,2-DCE and VC concentrations in groundwater from MW-91 and cis-1,2-DCE from MW-99 increased briefly in 2020 and have since been reduced during both 2022 sampling events. VC has been non-detect in groundwater sampled from MW-99 since the baseline sample collected in December 2019.
  - Detectable concentrations of ethene and ethane have been observed in groundwater during both the October 2020 and October 2021 sampling events for MW-91 and MW-99 (except for ethene which was non-detect in water from MW-99 in October 2021). During the October 2022 sampling event ethane and ethene were detected in MW-99 but not in MW-91. The detections of ethene and ethane are not as high as ideally desired (generally 2.6 µg/L or lower) based on bioremediation breakdown, but detections of these analytes does demonstrate that complete biodegradation of Site COCs is occurring.
  - Based on the lower detectable concentrations of biodegradation breakdown products (e.g., cis-1,2-DCE 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 Northeast Plume treatment area 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 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. Ramboll is currently developing an updated remedial plan for this and other areas of the Site that will be submitted to ADEQ within 2023.

5.2.3 East Plume

TMW-34 was installed in November 2018 after the ISCR injections to provide monitoring data for the southeast treatment zone. MW-185 is an up-gradient well to this treatment zone and can provide a reasonable comparison to TMW-34. Analytical data for this treatment area can be summarized as follows:

- Biogeochemical data:

  - Iron concentration within the down-gradient 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 2022 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.
  - Nitrate and sulfate concentrations have not substantively decreased in groundwater collected from TMW-34 since initial injection in 2018.
  - Limited detections of VFAs have been detected in groundwater collected from TWM-34 since the 2018 injections.
  - ORP field data measured during groundwater sampling at TMW-34 and MW-185 were -3.3 mV and +583 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.

- VOC data:
  - TCE and cis-1,2-DCE 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 2022 (TCE – 7.4 µg/L to 151 µg/L and cis-1,2-DCE – 1.5 µg/L to 38.7 µg/L).
  - VC has been non-detect in groundwater sampled from TMW-34 since the baseline sample collected in November 2018.
  - Detectable concentrations of ethene and ethane were initially observed in groundwater during the 2018 and 2019 sampling events at TMW-34. The detections of ethene and ethane are not as high as ideally desired (generally 1.1 µg/L or lower), however detections of these analytes do demonstrate that complete biodegradation of Site COCs has occurred. Ethene and ethane were not detected at TMW-34 in October 2022.
  - Similar TCE and cis-1,2-DCE increasing trends in groundwater collected from MW-185 have been observed during the same November 2018 to October 2022 timeframe as with TMW-34 (TCE – 11.7 µg/L to 168 µg/L and cis-1,2-DCE – 1.4 µg/L to 8.9 µg/L).

Analytical data from TWM-34 and MW-185 are suggestive that Site COCs are steadily increasing within the southeastern treatment zone area (see Appendix E graphs). The southeastern treatment zone consisted of only four injection locations and was installed as a limited scale injection area in 2018. Based on analytical data collected since installation of these monitoring wells, further development of a remedial plan is warranted for this area of the Site. Ramboll is currently developing an updated remedial plan for this and other areas of the Site that will be submitted to ADEQ within 2023.

5.2.4 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-19 is a side-gradient well to this treatment zone and can provide a reasonable comparison to TMW-36 and TMW-36B. TMW-36B was non-detect for all chlorinated VOCs from October 2020 through October 2022, therefore discussions below will mostly focus on TMW-36. 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 5,510 µg/L in October 2022.
  - 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 2022 the TOC concentration increased to 0.99 mg/L.
  - 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.
  - Sulfate was reduced in groundwater at TMW-36 from 56.8 mg/L in October 2020 to 15.3 mg/L in October 2021, which is suggestive that strongly reducing conditions were established within the treatment zone. In October 2022 sulfate concentrations increased to 94.1 mg/L, which is similar to the sulfate reported in groundwater from TMW-36B at 106 mg/L.
  - ORP field data measured during groundwater sampling at TMW-36 were +1.3 mV. Negative ORP values are generally indicative of potential reductive dechlorination, however this is not a hard rule and reductive dechlorination can occur within groundwater environments with a positive ORP.
- VOC data:
  - TCE concentrations were reduced in groundwater at TMW-36 from 389 µg/L in October 2019 to 11.3 µg/L in April 2021. However, in October 2021 TCE was reported as 110 µg/L and 86.7 µg/L in October 2022 in groundwater.
  - cis-1,2-DCE concentrations in groundwater from TMW-36 have mostly been stable at concentrations ranging from 3.2 µg/L to 9.5 µg/L from the baseline October 2019 monitoring event through April 2021. However, in October 2021 cis-1,2-DCE was reported as 64.3 µg/L and in October 2022 was reported as 81.5 µg/L in groundwater at TMW-36.
  - 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 2022.

- Detectable concentrations of ethene and ethane have been observed in groundwater during both the October 2020 and October 2021 sampling events at TMW-36 (except for ethene which was non-detect in water in October 2020). The detections of ethene and ethane are not as high as ideally desired (generally 1.2 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 cis-1,2-DCE, VC, ethane and ethene) at TMW-36 and based on elevated iron concentrations during the October 2022 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 a reducing environment 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. Recent TCE concentration increases in October 2021 and into 2022, coupled with increased sulfate concentrations, may indicate greater concentrations of contaminants have more recently been travelling through the South Plume treatment area. The increased cis-1,2-DCE concentrations during the same time period indicate that the South Plume treatment area is continuing to remediate TCE impacted groundwater as is travels through.

5.2.5 Southwest Plume

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. Installation of the southwest treatment zones were completed by August 2018. Analytical data for the treatment area can be summarized as follows:

- Biogeochemical data:
  - Iron concentration within all 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 2022 monitoring event.
  - 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 2022 TOC concentrations ranged from 0.77 mg/L to 11.6 mg/L. At TMW-32, TOC increased initially to 4.8 mg/L by November 2018 and has since dropped to 0.77 mg/L by October 2022.
  - 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 concentrations in groundwater at TMW-16, TMW-25, TMW-26 and MW-186 had dropped to and remained <20 mg/L through October 2021, which is suggestive that strongly reducing conditions have been established within the treatment zone within these areas. During the October 2022 sampling event concentrations of sulfate increased in concentration in each well ranging from 37.4 mg/L to 138 mg/L.
- VFAs (e.g., acetic acid, butyric acid and propionic acid) were generated/ increased during the 2018 post injection monitoring events at TMW-16, TMW-25, TMW-26 and MW-186. However, analytical results from subsequent post injection monitoring events through to October 2021 show a decreasing trend of detections, or non-detects for previously detected VFAs.
- ORP field data measured during the October 2021 groundwater sampling event at TMW-16, TMW-25, TMW-26 and MW-186 were ranged from -173 mV to -132 mV. An ORP measurement of groundwater sampled from TMW-32 in October 2021 was approximately -30.7 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 has been reduced in groundwater an average of 94% from the baseline sampling event in August 2018 through October 2022.
  - cis-1,2-DCE concentrations in groundwater at all monitoring wells briefly increased as TCE was degraded to a temporary peak concentration by April 2019 or October 2019 before decreasing to near baseline concentrations or lower.
  - VC concentrations in groundwater at all monitoring wells briefly increased as TCE and cis-1,2-DCE 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 most post injection monitoring events. The detections of ethene and ethane are not as high as ideally desired (typically <2 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., cis-1,2-DCE, 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 Southwest Plume treatment area 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 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. Ramboll is currently developing a remedial plan for this and other areas of the Site that will be submitted to the ADEQ within 2023.

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 southeastern. 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 east 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.

Ramboll is currently developing a Revised Remedy Work Plan based on the 2014 Final Remedy Work Plan for the Site that will address these areas and is anticipated to be submitted to ADEQ in 2023.

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 2022 (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 2022: 1,2-dichloroethane (1,2-DCA), cis-1,2-DCE, trans-1,2-DCE, tetrachloroethene (PCE) and TCE. TCE was detected in all 11 air samples collected within Zones 1-6, however only seven of these locations reported TCE in air above USEPA and ADEQ indoor air screening levels. TCE concentrations detected in indoor air ranged from 0.47 – 4.6 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 2022: 1,1-dichloroethane (1,1-DCA), PCE, 1,1,1-trichloroethane (1,1,1-TCA), TCE and VC. 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). PCE exceeded its respective screening level in Zones 2, 3 and 4; TCE in Zones 3-1, 3-2, 5-1, 5-2 and Zone 5 Office; and VC in Zone 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 µg/m^3 for the industrial worker. Results of the indoor air sampling indicated that seven of 13 samples exceeded the indoor air screening level in November 2022. 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 zone are presented in Table 13. The cumulative lifetime cancer risk estimate 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 2022 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 2022 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 2016-2022.

This 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 18-21, 2022, 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 MW-175, MW-176 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 and VP-12 and water from these monitoring points could not be purged from the sampling train. Water samples were collected from each of these vapor points, per the sampling modifications discussed in the *Second Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report* (Environ 2014b). Neither an air sample nor a water sample was able to be retrieved from locations VP-9, VP-10 and VP-14 because after purging there was not enough water recharge to collect a sample.

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 18-21 were not preceded by at least five consecutive days with less than 0.1 inches of rain. There was 3.09 inches of rain on October 16, 2022. Precipitation data for October 2022 are provided in Appendix F.

[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.

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 2022 annual sampling event were evaluated. This includes all wells in the North Plume shown in Table 7 except for well screened below 20 feet 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. Figure 14 shows the locations of the groundwater monitoring wells included in Table 14. Third, perched water data from soil vapor points sampled during the 2022 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 2022 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 17, the calculations resulted in upper-bound cumulative cancer risk and non-cancer HI estimates of $3x10^{-6}$ and 0.5, respectively. These risk estimates are below the ADEQ's risk management limits 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 January 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, VP-7 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-7	5.5	$2x10^{-9}$	0.00002
VP-8	10.5	$2x10^{-8}$	0.004

These risk estimates are all within ADEQ's risk management limits 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 0.3, respectively, which are well within the ADEQ's risk management limits 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 drastically increased during this sampling event, 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 µg/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 4-5, 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 µg/m^3) and indoor air (< 0.032 µg/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-179 and the approach discussed above for groundwater. As shown in Table 16, the upper-bound cumulative cancer risk and non-cancer HI estimates from groundwater at MW-179 are 1x10-7 and 0.02, respectively, which are below the ADEQ's risk management limits 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 (see Table 14b). However, MW-33R was abandoned during the 2016 annual event due to road construction. In previous events, samples were also collected at MW-178 and VP-14. No samples were collected at these sampling points in the 2022 annual sampling event.

The results from 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 risk management limits;
- Risk estimates for vapor intrusion from shallow monitoring wells and perched water samples from vapor monitoring points are below ADEQ's and USEPA's risk management limits; 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 Remedial Pilot Test Summary

Ramboll submitted a Source Area Injection Pilot Study Work Plan to the ADEQ on July 12, 2022. This pilot study was developed to assess an injection technology to distribute remediation amendments within the source area. The pilot study focused on the injection of remediation amendments within the BTZ via a unique horizontal well technology developed by EN Rx called vertebrae well systems (VWS). This pilot study was intended to assess the efficacy of the VWS technology to distribute amendments capable of establishing treatment zones for enhanced reductive dechlorination (ERD). The ERD bioremediation amendments proposed for this pilot study were ELS® microemulsion and Geoform™ Soluble, provided by Evonik.

The pilot study work plan was approved by ADEQ on August 3, 2022. EN Rx initially conducted a bench-scale test of the VWS with both a 10-gallon test and larger 440-gallon test using ELS® and Geoform™ provided by Evonik. They ran each test through their proprietary screen and through a stainless-steel screen mesh between 2 to 5 gallons per minute. A wye strainer was used during the 440-gallons tests to filter solids prior to the injectate being pushed through the well screens. In general, ELS® and Geoform™ were run through both screens without any clogging, pressure loss, or product residual build up. These bench scale test results led to the scheduling of a field scale pilot study.

During the week of October 3, 2022, a field pilot study was initiated to first install a single east/west horizontal boring through the source area and then test injections through the VWS injection segments. Unfortunately, drilling related issues prevented the proper installation of the horizontal borehole. A variety of complications were encountered during drilling including wireless tracking signal interferences due to Site features, steering complications due to subsurface geology and poor circulation of drilling fluids.

Ultimately, the EN Rx system was not installed and the injections were not performed as the emplacement conduit casing[4] could not be removed after initial placement to expose the VWS materials. The conduit casing was abandoned in place by capping both ends of the pipe and burying them just below surface at the entrance/exit points of the borehole. Based on this drilling experience, Ramboll has recommended to not proceed with any further VWS pilot testing. Remedial plans will be submitted to ADEQ in 2023 to further the Source Area mass reduction strategy through area injections and\or groundwater intercept treatment zones as stated in the *2022 Five Year Technical Review Report* (Ramboll 2022a).

[4] Conduit is a 4 inch diameter solid wall PVC casing that contained the VWS injection screen segments and lines.

8 Summary and Conclusions

Ramboll performed the semi-annual, annual groundwater and indoor air monitoring events in May and October 2022. 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 2022 annual groundwater monitoring event was completed in October 2022. The groundwater flow conceptual Site model can be categorized as five separate plumes with distinct characteristics (i.e., North Plume, Northeast Plume, South Plume, East Plume and Southwest 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; and
  - Groundwater analyzed from monitoring wells within the North Plume treatment area have shown TCE reduction with temporary cis-1,2-DCE and VC increases and detectable concentrations of ethene and ethane.
- The Northeast Plume is characterized by:
  - An east-northeast potentiometric gradient;
  - Plume stability tests along the leading edge of the Northeast plume potentially demonstrates an expanding plume; however, two of the down-gradient monitoring wells with “increasing trends“ were detectable for TCE in water at very low concentrations (<10 ug/L);
  - Previous injections in 2019 have successfully established a reducing environment that still exists and is capable of complete reductive dechlorination and abiotic degradation of Site COCs; and
  - Groundwater analyzed from monitoring wells within the Northeast Plume treatment area have shown PCE and TCE reduction with temporary cis-1,2-DCE and VC increases and detectable concentrations of ethene and ethane.
- The East Plume is characterized by:
  - A relatively flat east potentiometric gradient.
  - Concentrations within the East Plume have been steadily increasing and plume stability tests demonstrate a potentially eastward expanding plume.

  - The East Plume treatment area was 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.

- The South Plume is characterized by:
  - A relatively flat south-southeast potentiometric gradient with a southwestern gradient in the southwestern section of the plume and an easterly gradient in the east and southeast.
  - 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.
  - 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 cis-1,2-DCE and detectable concentrations of ethane. It is anticipated that the recent increase in cis-1,2-DCE is a result of ongoing TCE reduction in groundwater and the increase will only be temporary, as observed in other treatment areas
- The Southwest Plume is characterized by:
  - A southwest potentiometric gradient;
  - Analytical data, plume stability tests and the on-going remediation through the 2018 ISCR program support that this plume demonstrates stability;
  - 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; and
  - Groundwater analyzed from monitoring wells within the Southwest Plume treatment area have shown TCE reduction with temporary cis-1,2-DCE and VC increases and detectable concentrations of ethene and ethane.

Ramboll is currently developing a revised Remedy Work Plan, based on the 2014 Final Remedy Work Plan, which will describe the redosing of the ISCR treatment areas, as needed. This Revised Remedy Work Plan is anticipated to be submitted to the ADEQ in 2023.

Vapor intrusion monitoring continues to identify that risk estimates for vapor intrusion from the groundwater plume in the neighborhood are below the ADEQ's risk management limits 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 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 2023.

9 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
GROUNDWATER MONITORING WELL NETWORK
Whirlpool Facility - Fort Smith, Arkansas

North Plume Wells				
MW-39R*	MW-58R	MW-194	TMW-10	TMW-23
MW-40R*	MW-60R*	MW-195	TMW-11	TMW-24
MW-46R	MW-61R*	MW-196	TMW-12	TMW-29
MW-50R*	MW-62R*	RW-69	TMW-14	TMW-35
MW-55R	MW-63R*	IW-73	TMW-20	
MW-56R	MW-68*	IW-77	TMW-21	
MW-57R	MW-82	IW-78	TMW-22R	

Northeast Plume Wells				
MW-87	MW-96*	MW-99*	MW-200	
MW-89	MW-97*	MW-183R	MW-202	
MW-91	MW-98*	MW-184		

East Plume Wells				
MW-185	MW-205	TMW-34*		

South Plume Wells				
MW-22*	MW-83	MW-190	ITMW-1R	ITMW-19
MW-24	MW-84	MW-191	ITMW-2R*	ITMW-20*
MW-25R	MW-93	MW-192	ITMW-5	ITMW-21
MW-26*	MW-95	MW-198	ITMW-7	TMW-19
MW-27*	MW-182	MW-201	ITMW-9	TMW-25
MW-28*	MW-187	MW-203	ITMW-10	TMW-36
MW-29*	MW-188	MW-204	ITMW-16*	TMW-36B
MW-38	MW-189	MW-206	ITMW-18	RW-1

Southwest Plume Wells				
MW-186	TMW-16	TMW-27	TMW-32	
MW-199*	TMW-26	TMW-30		

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

Well ID	October 2022 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	no issues	NA
ITMW-7	no issues	NA
ITMW-9	no issues	NA
ITMW-10	no issues	NA
ITMW-11	no issues	NA
ITMW-12R	no issues	NA
ITMW-15	no issues	NA
ITMW-16	surface completion destroyed	NA
ITMW-18	no issues	NA
ITMW-19	no issues	NA
ITMW-20	no issues	NA
ITMW-21	no issues	NA
IW-72	no issues	NA
IW-73	no issues	NA
IW-74	no issues	NA
IW-75	no issues	NA
IW-76	no issues	NA
IW-77	no issues	NA
IW-78	no issues	NA
IW-79	no issues	NA
IW-80	no issues	NA
MW-22	no issues	NA
MW-23	no issues	NA
MW-24	broken bolts	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	Repaired September 2021
MW-35R	no issues	NA
MW-36R	no issues	NA
MW-37	no issues	NA
MW-38	no issues	NA
MW-39R	no issues	Repaired September 2021
MW-40R	no issues	NA
MW-41R	no issues	NA
MW-46R	no issues	NA
MW-50R	no issues	NA
MW-55R	no issues	NA
MW-56R	no issues	NA
MW-57R	no issues	NA
MW-58R	no issues	NA
MW-60R	no issues	NA
MW-61R	no issues	NA
MW-62R	no issues	NA
MW-63R	no issues	NA
MW-65R	no issues	NA
MW-68	no issues	NA
MW-70	no issues	NA
MW-71	no issues	NA
RW-69	no issues	NA
MW-81	no issues	NA

Well ID	October 2022 Well Condition and Notes	Comments
MW-82	no issues	NA
MW-83	no issues	NA
MW-84	no issues	NA
MW-85	no issues	NA
MW-86	no issues	NA
MW-87	no issues	NA
MW-88	no issues	NA
MW-89	no issues	NA
MW-90	no issues	NA
MW-91	no issues	NA
MW-92	no issues	NA
MW-93	no issues	NA
MW-94	no issues	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 issues	NA
MW-173	no issues	NA
MW-174	no issues	NA
MW-175	no issues	NA
MW-176	no issues	NA
MW-177	no issues	NA
MW-178	no issues	NA
MW-179	no issues	NA
MW-180	no issues	NA
MW-181	no issues	NA
MW-182	missing bolt	NA
MW-183R	no issues	NA
MW-184	no issues	NA
MW-185	no issues	NA
MW-186	no issues	NA
MW-187	missing bolt	NA
MW-188	no issues	NA
MW-189	no issues	NA
MW-190	no issues	NA
MW-191	missing bolts	NA
MW-192	well tabs broken	NA
MW-193	no issues	NA
MW-194	no issues	NA
MW-195	no issues	NA
MW-196	no issues	NA
MW-197	missing bolts	NA
MW-198	no issues	NA
MW-199	missing bolt	NA
MW-200	missing bolts	NA
MW-201	missing bolts	NA
MW-202	missing bolts	NA
MW-203	missing bolt	NA
MW-204	no issues	NA
MW-205	no issues	NA
MW-206	no issues	NA
IW-115	no issues	NA
TMW-10	no issues	NA
TMW-11	no issues	NA
TMW-12	no issues	NA
TMW-14	no issues	NA
TMW-16	no issues	NA
TMW-19	missing bolt	NA
TMW-20	no issues	NA
TMW-21	no issues	NA
TMW-22R	no issues	NA
TMW-23	no issues	NA
TMW-24	no issues	NA
TMW-25	no issues	NA
TMW-26	no issues	NA
TMW-27	no issues	NA
TMW-29	no issues	NA
TMW-30	no issues	NA
TMW-32	no issues	NA
TMW-34	no issues	NA
TMW-35	no issues	NA
TMW-36	no issues	NA

Notes:

NA: Not Applicable

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

Location	Well Coordinates		Previous TOC Elevation (feet) (if applicable)	TOC Elevation (feet)	Ground Surface (ft)	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	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)	Minimum Elevation Date	Static Water Elevation (feet)			
	Easting (feet)	Northing (feet)														4/11/2022		10/17/2022	
																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	4/25/2017	NA	NA	NA	NA
ITMW-1R	591378	368921		473.82	NA			10.00			19.00-29.00	NA	NA	NA	NA	13.02	460.8	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	4/25/2017	NA	NA	NA	NA
ITMW-2R	591244	369072		474.84	NA			5.00			26.50-31.50	NA	NA	NA	NA	12.2	462.64	12.42	462.42
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	1/12/2015	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	11/13/2018	18.11	460.08	18.49	459.7
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	4/22/2013	14.12	460.17	14.55	459.74
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	4/22/2013	22.88	460.16	23.43	459.61
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	10/14/2013	19.6	462.35	20.78	461.17
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	4/22/2013	21.95	459.95	22.35	459.55
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	4/22/2013	20.71	460.13	21.12	459.72
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	1/12/2015	9.9	464.17	11.13	462.94
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	4/25/2017	NA	NA	NA	NA
ITMW-12R	591015	369004		474.32	NA			10.00			20.00-30.00	NA	NA	NA	NA	11.3	463.02	11.64	462.68
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	4/25/2017	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	1/12/2015	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	4/25/2017	11.18	463.32	11.1	463.4
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	3/25/2014	15.6	463.19	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	4/25/2017	NA	NA	NA	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	1/12/2015	10.6	462.95	10.9	462.65
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	4/25/2017	13.1	463.15	13.49	462.76
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	11/7/2016	13.7	464.17	14.79	463.08
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	4/22/2013	12.6	463.92	13.54	462.98
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	11/13/2018	11.93	462	11.7	462.23
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	4/25/2017	12.4	463.4	12.8	463
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	4/25/2017	13	463.39	13.4	462.99
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	4/25/2017	NA	NA	NA	NA
MW-25R	590747	368986		472.59	NA			5.00			25.00-30.00	NA	NA	NA	NA	9.5	463.09	9.58	463.01
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	4/25/2017	13.68	464.37	14.61	463.44
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	4/25/2017	12.08	463.34	12.47	462.95
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	1/12/2015	7.51	462.98	7.77	462.72
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	461.19	10/17/2022	11.03	463.88	13.72	461.19
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	461.81	11/7/2016	15.85	463.14	17.05	461.94
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	1/12/2015	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	4/13/2015	NA	NA	NA	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	3/25/2014	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	4/13/2015	NA	NA	NA	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	3/25/2014	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	4/13/2015	NA	NA	NA	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	3/25/2014	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	463.30	4/25/2017	11.44	463.606	11.38	463.666
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	4/25/2017	10.48	463.39	10.38	463.49
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	3/5/2014	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	4/25/2017	9.61	463.368	9.98	462.998
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	462.37	4/25/2017	10.31	463.26	10.63	462.94
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	4/25/2017	11.27	463.33	11.68	462.92
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	3/5/2014	NA	NA	NA	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	462.98	10/17/2022	12.06	463.35	12.43	462.98
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	10/14/2013	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	4/25/2017	9.66	463.43	10.06	463.03

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

Location	Well Coordinates		Previous TOC Elevation (feet) (if applicable)	TOC Elevation (feet)	Ground Surface (ft)	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	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)	Minimum Elevation Date	Static Water Elevation (feet)			
	Easting (feet)	Northing (feet)														4/11/2022		10/17/2022	
																DTW	GW Elevation	DTW	GW Elevation
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	3/25/2014	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	4/25/2017	8.49	463.35	8.91	462.93
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	1/12/2015	2.59	463.195	3.11	462.675
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	1/12/2015	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	4/25/2017	5.01	457.638	5.93	456.718
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	10/1/2012	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	4/25/2017	1.77	463.528	2.38	462.918
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	3/25/2014	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	11/7/2016	1.59	461.582	3.63	459.542
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	10/1/2012	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	11/7/2016	1.38	461.54	3.53	459.39
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	1/12/2015	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	4/25/2017	2.95	463.03	3.64	462.34
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	4/22/2013	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	4/25/2017	4.56	456.1	1.79	458.87
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	3/5/2014	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	4/25/2017	5.01	454.3	4.73	454.58
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	3/5/2014	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	4/25/2017	4.75	459.44	5.23	458.96
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	4/22/2013	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	458.56	4/25/2017	4.77	459.17	3.85	460.09
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	4/25/2017	10.49	463.42	10.89	463.02
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	1/12/2015	NA	NA	NA	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	10/13/2014	NA	NA	NA	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	5/2/2016	NA	NA	NA	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	4/25/2017	6.2	463.61	6.65	463.16
RW-69[3]	591170	369678		470.89	NA	455.89	445.89	10.00	15.00	25.00	15.00 - 25.00	464.97	7/20/2015	462.00	4/25/2017	7.78	463.11	8.2	462.69
MW-70	591162	369693		471.53	NA	NA	NA	NA	NA	NA	NA	465.33	7/20/2015	462.12	4/11/2022	9.41	462.12	8.5	463.03
MW-71	591170	369695		471.35	NA	NA	NA	NA	NA	NA	NA	465.35	7/20/2015	462.36	4/25/2017	7.85	463.5	8.31	463.04
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	4/22/2013	8.34	463.31	8.46	463.19
IW-73	591060	369503		471.48	NA	NA	NA	NA	NA	NA	NA	465.29	7/20/2015	462.38	4/25/2017	8.04	463.44	8.43	463.05
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	4/25/2017	8.64	463.42	9.06	463
IW-75	591072	369605		472.17	NA	NA	NA	NA	NA	NA	NA	465.36	7/20/2015	462.37	4/25/2017	8.7	463.47	9.14	463.03
IW-76	591050	369426		472.26	NA	NA	NA	NA	NA	NA	NA	465.17	7/20/2015	462.21	4/25/2017	8.99	463.27	9.37	462.89
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	4/25/2017	9.53	463.48	9.94	463.07
IW-78	590984	369338		473.49	NA	NA	NA	NA	NA	NA	NA	465.38	7/20/2015	461.77	11/7/2016	10.05	463.44	10.45	463.04
IW-79	591018	369335		473.84	NA	NA	NA	NA	NA	NA	NA	465.39	7/20/2015	462.39	4/25/2017	10.39	463.45	10.75	463.09
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	4/25/2017	9.96	463.34	10.38	462.92
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	462.85	10/17/2022	12.45	463.25	12.85	462.85
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	11/7/2016	10.14	463.27	10.51	462.9
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	5/12/2014	NA	NA	NA	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	5/12/2014	NA	NA	NA	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	5/12/2014	NA	NA	NA	NA
IW-132	590835	369040		475.49	NA			5.00			23.00-28.00	NA	NA	NA	NA	12.26	463.23	12.68	462.81
IW-134	590885	369037		474.22	NA			5.00			23.00-28.00	NA	NA	NA	NA	10.98	463.24	11.35	462.87
IW-147	590782	368993		473.13	NA			5.00			20.00-25.00	NA	NA	NA	NA	9.9	463.23	10.31	462.82
MW-81	591039	369406		473.54	NA	453.54	448.54	5.00	20.00	25.00	20.00-25.00	466.02	10/17/2022	462.35	4/25/2017	10.13	463.41	7.52	466.02
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	4/25/2017	10.18	463.42	10.58	463.02
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	4/25/2017	12.17	463.31	12.58	462.9
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	4/25/2017	12.29	463.24	12.67	462.86

RAMBOLL

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

Location	Well Coordinates		Previous TOC Elevation (feet) (if applicable)	TOC Elevation (feet)	Ground Surface (ft)	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	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)	Minimum Elevation Date	Static Water Elevation (feet)			
	Easting (feet)	Northing (feet)														4/11/2022		10/17/2022	
																DTW	GW Elevation	DTW	GW Elevation
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	4/25/2017	NA	NA	NA	NA
MW-85R	590769	369015		472.34	NA			5.00			24.50-29.50	NA	NA	NA	NA	9.16	463.18	9.88	462.46
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	4/25/2017	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	11/13/2018	12.6	458.18	12.76	458.02
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	457.71	4/23/2019	10.65	458.24	8.36	460.53
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	5/11/2020	10.18	456.73	10.37	456.54
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	4/23/2019	5.93	460.78	3.99	462.72
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	5/11/2020	11.79	457.11	11.86	457.04
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	4/25/2017	10.39	463.35	10.81	462.93
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	4/25/2017	14.64	463.17	15.5	462.31
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	4/25/2017	15	462.86	15.31	462.55
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	4/25/2017	14.65	462.98	15.01	462.62
MW-96	592775	369354		457.83	NA	447.83	442.83	5.00	10.00	15.00	10.00-15.00	451.84	10/22/2019	449.11	4/25/2017	7.29	450.54	7.65	450.18
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	1/12/2015	8.12	451.31	8.56	450.87
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	4/13/2015	11.15	450.47	10.39	451.23
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	5/11/2020	9.68	457.12	9.74	457.06
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	4/25/2017	9.65	463.29	10.05	462.89
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	4/13/2015	NM	NA	2.08	461.48
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	4/13/2015	1.68	461.77	3.21	460.24
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	4/13/2015	2.03	462.14	1.55	462.62
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	4/25/2017	2.11	463.13	2.56	462.68
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	4/25/2017	2.89	468.61	5.53	465.97
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	10/18/2021	4.76	470.64	4.58	470.82
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	4/13/2015	10.5	464.89	9.5	465.89
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	10/18/2021	4.44	470.88	5.36	469.96
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	10/5/2015	3.64	468.23	NA	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	459.35	10/17/2022	14.31	460.332	15.29	459.352
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	10/5/2015	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	11/13/2018	11.79	450.64	11.08	451.35
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	10/5/2020	7.18	458.397	9.43	456.147
MW-185	592256	367995		473.86	NA	453.86	443.86	10.00	20.00	30.00	20.00-30.00	463.49	10/5/2015	458.90	11/13/2018	14.42	459.442	14.7	459.162
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	10/5/2020	13.06	456.744	13.64	456.164
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	11/7/2016	18.62	458.8	19.82	457.6
MW-188	590646	367509	481.14	481.09	NA	455.09	445.09	10.00	26.00	36.00	26.00-36.00	462.10	10/5/2015	459.20	10/17/2022	21.6	459.49	21.89	459.2
MW-189	590860	367666	485.59	485.50	NA	454.50	444.50	10.00	31.00	41.00	31.00-41.00	462.83	10/5/2015	459.41	11/13/2018	25.35	460.15	26.01	459.49
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	11/13/2018	21.26	460.026	21.73	459.556
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	11/13/2018	16.89	459.958	17.32	459.528
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	11/13/2018	15.55	459.777	15.93	459.397
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	10/5/2015	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	4/23/2019	4.66	457.81	4.12	458.35
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	4/25/2017	2.46	456.9	1.75	457.61
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	4/25/2017	3.86	453.77	3.65	453.98
MW-197	589986	367744		466.81				10.00			15.00-25.00	NA	10/1/2012	NA	10/5/2020	11.2	455.612	12.14	454.672
MW-198	590776	368982		473.08				10.00			19.00-29.00	NA	10/1/2012	NA	10/5/2020	9.9	463.18	10.34	462.74
MW-199	589597	367542		463.09				10.00			12.00-22.00	NA	10/1/2012	NA	10/5/2020	8.91	454.18	9.73	453.36
MW-200	592704	368850		467.57				10.00			15.20-25.20	NA	10/1/2012	NA	10/5/2020	10.54	457.03	10.68	456.89
MW-201	591200	367185		481.07				10.00			26.00-36.00	NA	10/1/2012	NA	10/5/2020	20.96	460.11	21.66	459.41
MW-202	592660	368637		468.16				10.00			14.20-24.20	NA	10/1/2012	NA	10/5/2020	10.02	458.14	10.22	457.94
MW-203	591032	367411		483.51				5.00			32.00-37.00	NA	10/1/2012	NA	10/5/2020	23.39	460.12	24.09	459.42
MW-204	590580	367991		481.31				10.00			26.00-36.00	NA	10/1/2012	NA	10/5/2020	20.77	460.54	21.53	459.78

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

Location	Well Coordinates		Previous TOC Elevation (feet) (if applicable)	TOC Elevation (feet)	Ground Surface (ft)	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	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)	Minimum Elevation Date	Static Water Elevation (feet)			
	Easting (feet)	Northing (feet)														4/11/2022		10/17/2022	
																DTW	GW Elevation	DTW	GW Elevation
MW-205	592101	368133		474.66		474.66	474.66	10.00			10.00-20.00	NA	10/1/2012	NA	10/6/2020	15.00	459.661	15.35	459.311
MW-206	590376	367378		476.43		476.43	476.43	10.00			10.00-20.00	NA	10/1/2012	NA	10/7/2020	16.95	459.479	18.28	458.149
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	454.67	10/17/2022	4.84	455.908	4.61	456.138
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	462.74	10/17/2022	4.02	456.177	2.81	457.387
TMW-12[5]	591873	369860	461.77	464.19	461.63	454.19	444.19	10.00	10.00	20.00	10.00-20.00	454.55	4/12/2021	453.36	10/17/2022	3.79	460.4	6.32	457.87
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	456.89	10/17/2022	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	459.41	10/17/2022	1.74	460.15	3.96	457.93
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	457.94	10/17/2022	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	10/5/2020	11.57	458.3	12.49	457.38
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	459.78	10/17/2022	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	4/25/2017	NA	NA	NA	NA
TMW-19[5]	590841	367571	485.35	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	4/25/2017	24.8	460.19	25.6	459.39
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	457.87	10/17/2022	3.4	457.17	3.02	457.55
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	4/25/2017	1.27	458.74	4.01	456
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	457.93	10/17/2022	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	4/25/2017	2.28	458.43	4.21	456.5
TMW-23[5]	591874	370019	461.94	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	11/13/2018	4.74	456.94	3.6	458.08
TMW-24[5]	592006	369808	461.23	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	4/25/2017	1.69	459.46	4.15	NA
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	4/25/2017	14.25	458.89	15.33	457.81
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	11/13/2018	14.77	457.33	15.98	456.12
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	4/23/2019	9.96	457.49	11.12	456.33
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	456.00	10/17/2022	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	10/1/2012	9.2	452.99	9.01	453.18
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	456.50	10/17/2022	14.58	454.79	13.62	455.75
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	4/23/2019	10.54	456.36	11.68	455.22
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	458.21	11/13/2018	12.2	459.17	12.46	458.91
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	11/13/2018	9.62	463.75	10.3	463.07
TMW-36	590884	367543		485.35				5.00			36.00-41.00	457.06	10/22/2019	455.66	11/13/2018	25.27	460.08	25.99	459.36
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	10/5/2020	25.2	460.15	25.9	459.45

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 134.00
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	4/25/2017	10/23/2017	4/17/2018	11/13/2018	4/23/2019	10/22/2019	5/11/2020	10/5/2020	4/12/2021	10/18/2021	4/12/2022	10/17/2022
Shallow Well MW-177 and MW-70																			
MW-177	462.00	466.94	469.09	465.34	469.97	469.00	465.19	461.78	NM	467.56	467.47	467.69	467.31	468.55	468.41	468.44	467.18	468.61	465.97
MW-70	451.53	464.17	465.33	465.15	464.77	464.59	462.70	462.38	462.93	462.85	463.26	463.48	464.06	463.54	464.34	463.52	462.59	462.12	463.03
MW-177/MW-70																			
Shallow Well MW-176 and MW-46R[4]																			
MW-176	451.74	463.81	464.66	464.49	464.38	464.18	462.30	461.99	462.93	462.49	462.86	463.22	463.82	463.35	463.89	463.15	463.27	463.13	462.68
MW-46R	446.69	462.85	464.88	464.67	464.40	464.21	462.34	462.03	462.55	462.53	462.87	463.16	463.74	463.31	463.91	463.30	463.33	463.20	462.68
MW-176/MW-46R																			
Shallow Well MW-175																			
MW-175	450.17	460.25	463.71	463.47	463.37	463.42	462.22	460.74	456.06	461.71	462.08	462.44	464.17	462.90	463.14	463.67	462.79	462.14	462.62
Ave. of MW-46R & MW-56/56R	446.46	461.54	463.68	463.15	463.26	463.21	460.68	461.38	461.24	461.37	461.78	462.28	462.75	462.51	462.98	462.52	462.02	445.43	445.43
MW-175/Ave. of MW-46R & MW-56/56R																			
Shallow Wells MW-173 and MW-174																			
MW-174	451.95	457.67	459.92	461.75	459.71	460.01	459.77	457.87	453.10	458.04	458.69	460.45	460.32	461.85	460.52	460.12	460.16	461.77	460.24
MW-63/MW-63R	445.37	459.36	462.29	462.08	460.93	460.79	460.05	458.56	459.92	458.22	459.35	458.94	460.96	459.57	461.06	459.58	460.81	459.17	460.09
MW-174/MW-63																			
Shallow Wells MW-178, MW-179 and MW-180																			
MW-178	467.90	472.29	471.94	471.48	471.93	472.05	470.38	471.50	471.31	471.54	471.37	471.62	470.99	471.38	471.08	471.36	467.79	470.64	470.82
MW-83	450.98	464.02	465.25	465.01	464.72	464.47	462.64	462.32	462.86	462.69	463.10	463.33	463.88	463.37	463.99	463.12	463.47	463.31	462.90
MW-178/MW-83																			

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

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

Location/ Well Pairs	Middle of Screen Elevation[1] (feet)	Vertical Hydraulic Gradient[2,3] (feet/feet)																	
		4/13/2015	7/20/2015	10/5/2015	1/6/2016	5/2/2016	11/7/2016	4/25/2017	10/23/2017	4/17/2018	11/13/2018	4/23/2019	10/22/2019	5/11/2020	10/5/2020	4/12/2021	10/18/2021	4/12/2022	10/17/2022
Shallow Well MW-177 and MW-70																			
MW-177	462.00																		
MW-70	451.53																		
MW-177/MW-70		-0.26	-0.36	-0.02	-0.50	-0.42	-0.24	0.06	NM	-0.45	-0.40	-0.40	-0.31	-0.48	-0.39	-0.47	-0.44	-0.62	-0.28
Shallow Well MW-176 and MW-46R[4]																			
MW-176	451.74																		
MW-46R	446.69																		
MW-176/MW-46R		-0.19	0.04	0.04	0.004	0.005	0.01	0.01	-0.08	0.01	0.001	-0.01	-0.02	-0.01	0.00	0.03	0.01	0.01	0.00
Shallow Well MW-175																			
MW-175	450.17																		
Ave. of MW-46R & MW-56/56R	446.46																		
MW-175/Ave. of MW-46R & MW-56/56R		0.35	-0.007	-0.07	-0.02	-0.04	-0.32	0.14	1.09	-0.07	-0.06	-0.03	-0.30	-0.08	-0.03	-0.24	-0.16	0.05	-0.32
Shallow Wells MW-173 and MW-174																			
MW-174	451.95																		
MW-63/MW-63R	445.37																		
MW-174/MW-63		0.26	0.43	0.06	0.22	0.14	0.05	0.13	1.24	0.03	0.12	-0.27	0.12	-0.41	0.10	-0.10	0.12	-0.47	-0.03
Shallow Wells MW-178, MW-179 and MW-18																			
MW-178	467.90																		
MW-83	450.98																		
MW-178/MW-83		-0.49	-0.40	-0.38	-0.43	-0.45	-0.46	-0.54	-0.50	-0.52	-0.49	-0.49	-0.42	-0.47	-0.42	-0.49	-0.26	-0.43	-0.47

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

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 (ft btoc)	Total Depth of Well Casing (feet)	Set Tubing Depth (feet)	Time Sampled	Water Level after Purging (ft btoc)	Purge Volume (Gallons)	Purge Rate (ml/min)	Temperature (°C)	Specific Conductivity (µS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Persulfate (mg/L)	Color
RW-1	4	10/20/2022	9.83	33.56	22.00	16:40	10.21	4.0	300	23.1	1,313	2.10	7.43	-105.3	11.18	0.00	NM	Clear
ITMW-1R	4	10/19/2022	12.76	34.05	30.00	15:35	DRY	2.5	75	27.3	631	1.47	6.31	522.9	190.00	0.13	NM	Light yellow
ITMW-2R	4	10/18/2022	14.45	27.00	20.78	16:15	12.67	4.3	100	22.3	524	0.14	5.85	175.5	0.51	0.10	NM	Clear
ITMW-5	4	10/20/2022	14.17	29.83	24.83	16:30	14.43	2.6	250	22.2	899	0.16	5.72	642.6	7.92	0.00	NM	Clear
ITMW-7	4	10/19/2022	20.91	36.98	29.50	11:25	21.09	4.8	100	19.5	720	0.30	4.99	266.9	0.75	0.00	NM	Clear
ITMW-9	4	10/21/2022	22.03	34.95	28.20	9:35	22.09	1.5	200	19.7	645	2.90	5.46	436.9	1.22	0.02	NM	Clear
ITMW-10	4	10/21/2022	20.83	36.82	31.30	9:00	21.21	4.5	100	19.8	1,214	3.70	5.51	484.5	1.01	0.06	NM	Clear
ITMW-16	4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	---
ITMW-18	4	10/20/2022	10.77	29.50	22.00	9:09	10.91	4.8	150	19.7	3,421	0.63	5.69	-94.8	3.26	0.14	NM	Clear
ITMW-19	4	10/20/2022	13.40	33.23	28.23	10:38	13.65	4.5	150	18.8	4,473	2.26	5.96	-31.8	2.01	0.00	NM	Clear
ITMW-20	4	10/17/2022	14.75	31.03	23.50	16:03	15.57	2.5	150	21.0	1	1.11	4.76	154.2	1.51	NM	NM	Clear
ITMW-21	4	10/19/2022	13.72	32.99	25.50	10:005	15.25	6.0	400	19.4	2,730	0.71	4.79	299.7	12.10	0.10	NM	Clear
MW-22	4	10/18/2022	11.75	29.20	22.00	8:55	11.97	2.0	150	20.5	0	220.00	5.26	171.8	1.88	0.21	NM	Clear
MW-24	4	10/20/2022	13.17	32.51	25.00	13:17	13.15	4.0	100	21.6	1,297	0.13	4.78	203.2	1.53	0.04	NM	Clear
MW-25R	4	10/20/2022	9.73	39.00	27.10	12:45	18.30	1.8	100	18.3	2,689	0.26	6.28	552.7	8.75	0.00	NM	Clear
MW-26	4	10/17/2022	14.51	35.14	30.14	17:15	14.89	4.5	100	20.3	1,180	1.00	5.04	186.9	1.53	0.16	NM	Clear
MW-27	2	10/18/2022	12.58	30.14	25.14	10:32	12.68	4.0	100	21.9	1	1.30	5.18	192.5	4.72	0.00	NM	Clear
MW-28	2	10/18/2022	8.86	27.45	20.00	14:55	9.47	7.5	400	24.3	396	1.30	5.94	-26.6	12.90	1.23	NM	Clear
MW-29	2	10/17/2022	12.53	30.32	22.82	15:48	12.81	4.3	100	22.3	528	0.28	4.80	-136.3	0.87	NM	NM	Clear
MW-38	2	10/20/2022	11.44	29.83	22.30	14:35	11.52	2.9	200	26.5	887	0.06	6.04	113.2	1.90	NM	NM	Clear
MW-39R	2	10/17/2022	12.36	29.69	27.19	17:15	12.52	1.5	100	19.4	1	0.10	4.45	121.6	4.45	NM	NM	Clear
MW-40R	2	10/19/2022	10.25	28.30	23.30	9:39	10.30	3.5	100	20.0	692	0.13	5.02	-136.8	2.74	1.23	NM	Clear
MW-46R	2	10/20/2022	3.79	25.01	19.01	17:09	3.51	5.0	100	21.3	814	0.23	5.19	-214.2	4.11	1.46	NM	Clear/brown haze
MW-50R	2	10/18/2022	4.10	18.24	15.75	11:40	21.33	1.6	100	21.3	1,249	1.40	6.33	122.3	6.53	NM	NM	Clear
MW-55R	2	10/19/2022	2.32	20.96	19.96	13:35	6.21	3.5	100	19.5	980	0.24	5.40	152.2	0.63	0.23	NM	Clear
MW-56R	2	10/20/2022	3.42	19.79	18.80	14:37	4.94	2.5	100	19.8	682	0.13	5.47	136.2	9.11	0.28	NM	Clear
MW-57R	2	10/20/2022	3.79	19.35	16.85	15:57	6.99	5.0	150	21.9	801	0.07	5.25	64.0	7.10	1.26	NM	Clear
MW-58R	2	10/20/2022	3.51	21.88	19.38	12:47	5.04	2.6	200	21.1	850	0.60	4.82	182.3	1.87	0.00	NM	Clear
MW-60R	2	10/17/2022	1.82	14.86	12.00	16:28	7.85	3.2	200	72.8	1,355	0.49	6.66	485.2	10.20	NM	NM	Clear/haze
MW-61R	2	10/19/2022	4.97	15.28	12.80	11:37	7.09	4.0	100	22.0	1,161	3.26	6.45	-46.7	4.71	0.00	NM	Clear
MW-62R	2	10/17/2022	5.79	20.01	17.50	15:50	7.61	3.4	200	19.9	1	4.20	5.41	98.0	46.30	NM	NM	Clear to light brown
MW-63R	2	10/19/2022	4.01	19.72	17.25	14:47	9.31	3.6	100	19.3	1	1.80	5.44	195.8	26.30	0.27	NM	Slight brown hue
MW-68	2	10/18/2022	6.85	20.35	16.30	9:10	7.14	3.8	150	17.8	880	0.07	5.14	-172.5	2.10	NM	NM	Clear
RW-69	4	10/19/2022	8.18	28.71	23.71	16:50	8.35	4.0	100	19.2	924	1.60	4.95	177.7	4.00	NM	NM	Clear
MW-82	2	10/19/2022	9.60	25.98	23.40	15:52	10.65	2.0	150	19.9	1,060	0.10	4.89	205.1	6.36	0.24	NM	Clear
MW-83	2	10/19/2022	12.69	25.98	23.50	13:57	12.65	4.0	100	23.6	2,290	1.58	6.69	67.2	12.50	0.00	NM	Clear
MW-84	2	10/19/2022	12.85	26.77	24.10	10:25	13.28	4.0	400	23.1	5,268	3.20	6.71	198.9	8.14	0.04	45	Clear
MW-87	2	10/20/2022	12.59	26.84	21.84	12:28	12.87	4.8	150	24.6	496	0.03	5.63	-294.5	11.50	0.10	NM	Slight orange/brown
MW-89	2	10/18/2022	10.31	25.08	20.00	17:27	13.53	3.1	200	23.6	970	1.90	6.13	190.1	4.68	0.26	NM	Clear
MW-91	2	10/18/2022	12.00	25.70	20.70	14:47	15.39	4.0	100	23.1	914	0.50	6.76	-131.1	7.02	5.00	NM	Clear
MW-93	2	10/20/2022	14.76	34.21	29.21	16:19	14.91	3.0	100	21.8	1,330	0.57	4.90	251.6	1.97	0.07	NM	Clear
MW-95	2	10/21/2022	14.76	34.14	29.14	8:58	14.91	3.1	100	22.1	1,410	0.09	5.11	270.6	1.76	0.00	NM	Clear
MW-96	2	10/17/2022	6.00	14.53	12.00	16:25	10.10	4.5	300	25.2	194	8.50	5.10	153.6	2.43	NM	NM	Clear
MW-97	2	10/17/2022	8.60	15.20	13.00	18:00	14.13	3.0	50	23.5	242	31.60	5.51	162.3	23.70	NM	NM	Cloudy/light brown
MW-98	2	10/17/2022	10.53	19.65	17.50	17:45	18.18	4.5	100	22.1	278	0.28	5.90	106.3	1.62	NM	NM	Clear
MW-99	2	10/19/2022	9.83	22.74	20.20	16:20	18.73	2.4	100	18.9	2,064	0.10	7.14	-110.0	14.50	0.00	NM	Clear
IW-73	2	10/20/2022	8.20	26.82	21.82	14:55	8.21	4.5	100	20.4	704	2.40	5.28	169.1	1.65	0.15	NM	Clear
IW-77	2	10/20/2022	9.78	28.70	23.70	13:40	9.83	4.2	100	19.8	1,874	2.10	6.81	50.7	3.78	0.00	0.00	Clear
IW-78	2	10/20/2022	10.33	10.30	5.30	9:50	10.41	4.0	100	19.6	4,868	21.10	6.83	171.6	4.42	0.00	NM	Clear
MW-175	2	10/20/2022	1.64	14.59	14.09	14:26	DRY	2.0	200	20.4	1,441	2.66	7.32	-60.0	0.61	NM	NM	Clear
MW-176	2	10/18/2022	2.73	14.00	13.50	14:26	6.99	2.8	200	20.2	1,018	0.13	6.44	-227.8	16.9	0.18	NM	Clear
MW-178	2	10/18/2022	5.12	7.97	7.47	NS	DRY	0.8	200	28.6	257	1.98	6.48	-116.6	55.00	2.05	NM	Dark brown haze with black, fine particles
MW-179	2	10/20/2022	9.51	12.79	12.39	15:51	DRY	0.5	200	27.8	150	3.66	5.23	-38.3	31.80	0.58	NM	Clear
MW-182	2	10/19/2022	15.41	31.09	26.09	10:05	15.48	3.1	250	15.8	508	0.09	5.64	580.1	4.9	NM	NM	Clear
MW-183R	2	10/18/2022	11.45	17.82	15.00	16:10	14.51	2.5	50	23.9	235	25.80	5.62	141.6	18.60	0.01	NM	Clear
MW-184	2	10/18/2022	9.65	23.55	18.55	9:50	10.73	4.0	100	19.5	130	0.33	5.92	143.0	77.4	NM	NM	Light brown, cloudy
MW-185	2	10/20/2022	14.54	29.19	24.00	10:00	14.57	2.6	200	21.9	369	0.43	6.04	583.0	3.37	NM	NM	Light brown/slightly turbid
MW-186	2	10/18/2022	13.76	27.80	22.00	14:30	20.18	3.0	175	17.7	2	1.30	7.02	-132.4	20.10	6.00	NM	Clear, some sheen
MW-187	2	10/19/2022	19.78	30.25	26.00	14:55	20.44	4.2	300	17.9	769	3.10	5.64	160.0	29.40	0.06	NM	Clear
MW-188	2	10/19/2022	21.60	34.58	29.00	13:40	22.31	4.5	500	18.9	440.8	1.90	6.01	-39.3	6.50	2.20	NM	Clear

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 (ft btoc)	Total Depth of Well Casing (feet)	Set Tubing Depth (feet)	Time Sampled	Water Level after Purging (ft btoc)	Purge Volume (Gallons)	Purge Rate (ml/min)	Temperature (°C)	Specific Conductivity (µS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Persulfate (mg/L)	Color
MW-189	2	10/20/2022	25.63	40.85	38.85	16:45	25.63	4.5	100	20.9	1,410	0.20	6.15	196.6	0.97	0.00	NM	Clear
MW-190	2	10/19/2022	21.72	36.10	31.10	15:01	22.11	3.2	200	21.3	786	0.42	6.95	425.6	1.57	0.00	NM	Clear with slight haze
MW-191	2	10/17/2022	16.21	33.20	30.70	17:19	17.20	4.0	100	22.5	235	0.26	5.66	-214.1	2.72	NM	NM	Clear
MW-192	2	10/19/2022	16.02	30.19	27.70	11:55	16.02	3.0	300	23.1	140	7.50	4.92	290.5	7.30	0.00	NM	Clear
MW-194	2	10/19/2022	4.27	21.30	16.30	13:27	4.45	3.0	100	21.5	1	2.10	6.34	-59.9	2.81	0.07	NM	Clear
MW-195	2	10/18/2022	1.91	17.20	14.70	11:32	9.49	3.5	100	20.0	925	0.19	6.51	166.0	11.00	NM	NM	Clear
MW-196	2	10/18/2022	3.75	15.00	12.50	9:51	10.53	2.5	75	22.1	1,477	0.43	6.72	234.2	52.50	NM	NM	Clear
MW-198	2	10/21/2022	10.06	29.00	24.00	9:10	10.11	5.0	200	20.9	1,711	0.11	5.80	-198.9	7.61	0.00	NM	Clear
MW-199	2	10/20/2022	9.44	22.00	17.00	13:45	9.59	4.9	100	20.5	820	0.21	6.09	165.6	21.80	0.03	NM	Clear
MW-200	2	10/18/2022	10.79	25.20	20.20	14:35	10.93	4.6	100	20.0	223	0.28	6.22	102.5	21.20	0.05	NM	Clear
MW-201	2	10/19/2022	21.56	36.00	31.00	16:52	21.60	3.25	150	19.0	517	0.13	5.76	-233.6	2.13	0.24	NM	Clear
MW-202	2	10/20/2022	13.03	24.20	19.20	9:10	10.14	5.00	100	17.7	233	0.52	6.12	175.0	17.60	0.01	NM	Clear
MW-203	2	10/19/2022	24.29	37.00	34.50	9:45	24.19	4.90	100	18.7	570	0.28	5.53	217.0	1.06	0.00	NM	Clear
MW-204	2	10/20/2022	21.32	36.00	32.00	11:15	21.93	4.8	90	16.2	810	0.23	5.79	244.9	57.50	0.03	NM	Slightly brown/milky
MW-205	2	10/19/2022	15.25	28.49	23.50	16:50	15.25	1.2	140	21.0	355	0.14	6.09	527.9	105.00	0.00	NM	Clear
MW-206	2	10/18/2022	18.40	31.58	25.00	10:00	19.30	5.0	500	19.3	593	1.60	5.82	225.8	7.70	NM	NM	Clear
TMW-10	2	10/19/2022	4.24	15.19	12.69	11:20	5.62	2.5	100	20.1	1,502	0.05	6.77	-258.4	9.59	5.40	NM	Clear w/ black particles
TMW-11	2	10/19/2022	2.99	15.13	12.63	13:58	4.51	3.0	100	21.9	1,012	0.04	7.07	-312.2	4.57	3.20	NM	Clear w/ black particles
TMW-12	2	10/20/2022	6.09	20.00	15.00	10:43	6.28	2.5	200	19.4	538	1.00	5.31	185.5	5.23	0.07	NM	Clear
TMW-14	2	10/19/2022	4.21	21.00	15.00	9:43	7.62	2.0	100	18.6	0	2.00	6.09	-61.5	5.00	3.50	NM	Slight yellow hue
TMW-16	2	10/18/2022	12.60	28.00	23.00	12:22	19.37	3.2	100	18.1	2	2.10	7.12	-173.8	11.0	2.98	NM	Clear
TMW-19	2	10/18/2022	25.59	43.00	38.00	16:10	25.78	1.8	200	18.3	578	0.21	6.01	462.1	1.22	0.00	NM	Clear
TMW-20	2	10/18/2022	3.26	17.90	14.40	13:00	4.50	1.7	100	21.3	1,332	3.45	6.63	-139.9	7.47	0.82	NM	Clear
TMW-21	2	10/18/2022	4.03	19.70	14.70	17:15	7.21	3.0	200	20.2	1,387	2.10	6.34	-94.2	5.87	2.20	NM	Clear
TMW-22R	2	10/20/2022	4.07	17.80	15.30	11:30	10.77	3.2	100	20.9	1,582	2.50	6.60	-93.4	31.80	2.20	NM	Clear
TMW-23	2	10/20/2022	3.55	20.00	17.50	9:09	9.85	3.2	100	19.7	1	1.10	6.30	107.0	4.29	0.00	NM	Clear
TMW-24	2	10/20/2022	3.76	19.50	16.00	15:06	4.75	4.1	100	21.1	830	1.50	5.65	81.3	11.91	2.70	NM	Clear
TMW-25	2	10/19/2022	15.49	30.50	25.50	11:34	19.89	2.2	150	16.7	1	2.20	6.74	-129.5	10.4	2.09	NM	Clear with black particles
TMW-26	2	10/18/2022	16.10	28.60	23.60	15:53	20.60	2.2	100	17.6	2	1.40	6.85	-134.6	15.60	0.16	NM	Light brown hue w/ some fine particles
TMW-27	2	10/18/2022	11.18	26.40	21.40	14:31	11.38	3.2	200	16.8	355	0.09	5.44	297.3	9.61	0.00	NM	Clear
TMW-29	2	10/17/2022	8.95	27.50	22.50	18:00	12.78	2.5	200	18.9	1,209	0.09	6.37	181.2	42.90	NM	NM	Slightly hazy
TMW-30	2	10/19/2022	13.70	28.80	23.80	12:15	18.66	1.8	410	15.9	2,764	0.03	7.11	-128.7	718	5.10	NM	Yellow/black
TMW-32	2	10/20/2022	11.40	26.50	21.50	9:13	11.46	4.0	100	17.5	742	0.10	6.35	-30.7	3.79	4.90	NM	Clear
TMW-34	2	10/20/2022	12.34	24.78	22.30	11:09	13.47	4.0	200	23.1	458	0.12	6.28	-3.3	4.63	1.20	NM	Clear
TMW-35	2	10/18/2022	10.48	23.00	20.50	12:10	11.24	4.5	100	18.1	259	0.16	5.35	221.3	2.29	0.05	NM	Clear
TMW-36	2	10/18/2022	26.06	41.00	38.50	11:55	26.12	2.9	200	18.4	945	0.27	6.36	1.3	4.15	NM	NM	Slight white haze
TMW-36B	2	10/18/2022	25.95	31.00	28.50	9:55	26.31	1.5	200	18.9	1,983	0.21	6.17	48.1	3.85	NM	NM	Clear

Notes:

ft btoc = Feet below top of casing
ORP = Oxidation reduction potential
DO = Dissolved oxygen
(°C) = Degrees Celsius

mL/min = Milliliters per minute
mg/L = Milligrams per liter
NTUs = Nephelometric turbidity units
NM = Not measured

mV = Millivolts
NS = Well not sampled
(µS/cm) = Microsiemens per centimeter
NR = Due to the recording of erroneous field data, this value is not reported

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 Analytical Results
Whirlpool, Fort Smith, AR

Plume	Remedial Action Levels per ADEQ RADD Issued Dec 2013			
Location		IW-73	IW-77	IW-78
Sample Date		10/21/2022	10/20/2022	10/20/2022
Comments				
Volatile Organic Compounds				
Acetone	12000	U (2.5)	U (2.5)	U (2.5)
Benzene	5.0	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	80	U (0.16)	U (0.16)	U (0.16)
Bromoform	80	U (0.68)	U (0.68)	13.4 J (0.68)
Bromomethane	7.0	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	5	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	100	U (0.089)	U (0.089)	U (0.089)
Chloroethane	12000	U (0.37)	U (0.37)	U (0.37)
Chloroform	80	U (0.22)	U (0.22)	U (0.22)
Chloromethane	190	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	80	U (0.30)	U (0.30)	0.91 J (0.30)
1,1-Dichloroethane	2.4	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	5.0	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	7.0	0.83 J (0.22)	0.73 J (0.22)	U (0.22)
cis-1,2-Dichloroethene	70	6.4 (0.13)	5.7 (0.13)	0.24 J (0.13)
trans-1,2-Dichloroethene	100	U (0.10)	0.28 J (0.10)	U (0.10)
1,3-Dichloropropene (total)	0.41	U (0.18)	U (0.18)	U (0.18)
trans-1,3-Dichloropropene	NE	U (0.18)	U (0.18)	U (0.18)
Ethyl Benzene	700	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	1000	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	0.066	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	5.0	U (0.33)	U (0.33)	U (0.33)
Toluene	1000	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	200	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	5.0	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	5.0	189 (1.0)	157 (1.0)	17.9 (0.21)
Vinyl Chloride	2.0	U (0.17)	U (0.17)	U (0.17)
Xylenes (total)	10000	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	NE	215 (50.0)	--	--
Iron, Ferrous	NE	150	U	U
Monitored Natural Attenuation Parameters (Laboratory)				
Acetic acid	NE	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Remedial Action Levels per ADEQ RADD Issued Dec 2013			
Location		IW-73	IW-77	IW-78
Sample Date		10/21/2022	10/20/2022	10/20/2022
Comments				
Butyric acid	NE	--	--	--
Organic Carbon (total)	NE	U (1000)	--	--
Organic Carbon (dissolved)	NE	--	--	--
Chloride	NE	--	--	--
Formic acid	NE	--	--	--
Lactic Acid	NE	--	--	--
Nitrate/Nitrite	NE	270 J- (100)	--	--
Sodium Persulfate	NE	--	U	--
Sulfide (total)	NE	UJ (50)	--	--
Sulfate	NE	34400 (10000)	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Remedial Action Levels per ADEQ RADD Issued Dec 2013			
Location		IW-73	IW-77	IW-78
Sample Date		10/21/2022	10/20/2022	10/20/2022
Comments				
Gasses				
Acetylene	NE	--	--	--
Methane	NE	--	--	--
Ethane	NE	--	--	--
Ethene	NE	--	--	--
HYDROGEN (H2) [nM]	NE	U (1.9)	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	0.70 (0.30)	--	--
Dehalococcoides (DHC) [cells/mL]	NE	22.00 (0.30)	--	--
tceA Reductase [cells/mL]	NE	U (0.30)	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.50)	--	--
Field Parameters				
Dissolved Oxygen	NE	2400	2100	21100
Depth to Water [ft BTOC]	NE	8.2	9.78	10.33
Oxidation Reduction Potential [mV]	NE	169.1	50.7	171.6
pH (Field Analysis) [SU]	NE	5.28	6.81	6.83
Specific Conductivity (Field Analysis) [uS/cm]	NE	704	1874	4868
Temperature (Field) [C]	NE	20.4	19.8	19.6
Turbidity (Field Parameters) [NTU]	NE	1.65	3.78	4.42

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Remedial Action Levels per ADEQ RADD Issued Dec 2013			
Location		IW-73	IW-77	IW-78
Sample Date		10/21/2022	10/20/2022	10/20/2022
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	**IW-78**	**MW-39R**	**MW-40R**	**MW-46R**
Sample Date	**10/20/2022**	**10/17/2022**	**10/19/2022**	**10/20/2022**
Comments	**Field Duplicate**			
Volatile Organic Compounds				
Acetone	2.7 J (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	0.20 J (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	21.8 J (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	0.57 J (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	U (0.22)	U (0.22)	U (0.22)	1.1 (0.22)
cis-1,2-Dichloroethene	0.49 J (0.13)	U (0.13)	U (0.13)	8.7 (0.13)
trans-1,2-Dichloroethene	U (0.10)	U (0.10)	U (0.10)	0.23 J (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	19.3 (0.21)	U (0.21)	U (0.21)	298 (2.1)
Vinyl Chloride	U (0.17)	U (0.17)	U (0.17)	0.26 J (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	--	--	--	--
Iron, Ferrous	--	--	1230	1460
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	**IW-78**	**MW-39R**	**MW-40R**	**MW-46R**
Sample Date	**10/20/2022**	**10/17/2022**	**10/19/2022**	**10/20/2022**
Comments	**Field Duplicate**			
Butyric acid	--	--	--	--
Organic Carbon (total)	--	--	--	--
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	--	--	--	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	IW-78	MW-39R	MW-40R	MW-46R
Sample Date	10/20/2022	10/17/2022	10/19/2022	10/20/2022
Comments	Field Duplicate			
Gasses				
Acetylene	--	--	--	--
Methane	--	--	--	--
Ethane	--	--	--	--
Ethene	--	--	--	--
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalococcoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	--	100	130	230
Depth to Water [ft BTOC]	--	12.36	10.25	3.79
Oxidation Reduction Potential [mV]	--	121.6	-136.8	-214.2
pH (Field Analysis) [SU]	--	4.45	5.02	5.19
Specific Conductivity (Field Analysis) [uS/cm]	--	1.25	692	814
Temperature (Field) [C]	--	19.4	20	21.3
Turbidity (Field Parameters) [NTU]	--	4.45	2.74	4.11

Notes:

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3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	IW-78	MW-39R	MW-40R	MW-46R
Sample Date	10/20/2022	10/17/2022	10/19/2022	10/20/2022
Comments	Field Duplicate			

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-50R**	**MW-55R**	**MW-56R**	**MW-57R**
Sample Date	**10/18/2022**	**10/19/2022**	**10/20/2022**	**10/20/2022**
Comments				
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	UJ (0.21)
1,1-Dichloroethene	U (0.22)	U (0.22)	1.1 (0.22)	3.6 (0.22)
cis-1,2-Dichloroethene	U (0.13)	0.72 J (0.13)	11.5 (0.13)	12.0 (0.13)
trans-1,2-Dichloroethene	U (0.10)	U (0.10)	0.14 J (0.10)	0.13 J (0.10)
1,3-Dichloropropene (total)	U (0.18)	U (0.18)	U (0.18)	0.32 J (0.18)
trans-1,3-Dichloropropene	U (0.18)	U (0.18)	U (0.18)	0.32 J (0.18)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	1.1 (0.21)	27.5 (0.21)	615 (4.2)	258 (2.1)
Vinyl Chloride	U (0.17)	U (0.17)	U (0.17)	1.3 (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	232 (50.0)	--	--	--
Iron, Ferrous	--	230	280	1260
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-50R**	**MW-55R**	**MW-56R**	**MW-57R**
Sample Date	**10/18/2022**	**10/19/2022**	**10/20/2022**	**10/20/2022**
Comments				
Butyric acid	--	--	--	--
Organic Carbon (total)	370 J (1000)	--	--	--
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	U (100)	--	--	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	U (50)	--	--	--
Sulfate	106000 (20000)	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-50R**	**MW-55R**	**MW-56R**	**MW-57R**
Sample Date	**10/18/2022**	**10/19/2022**	**10/20/2022**	**10/20/2022**
Comments				
Gasses				
Acetylene	U (0.50)	--	--	--
Methane	31 J (5.0)	--	--	--
Ethane	U (1.0)	--	--	--
Ethene	U (1.0)	--	--	--
HYDROGEN (H2) [nM]	0.84 J (1.9)	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	U (0.50)	--	--	--
Dehalocaccoides (DHC) [cells/mL]	0.80 (0.50)	--	--	--
tceA Reductase [cells/mL]	U (0.50)	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	U	--	--	--
Field Parameters				
Dissolved Oxygen	1400	240	130	70
Depth to Water [ft BTOC]	4.1	2.32	3.42	3.79
Oxidation Reduction Potential [mV]	122.3	152.2	136.2	64
pH (Field Analysis) [SU]	6.33	5.4	5.47	5.25
Specific Conductivity (Field Analysis) [uS/cm]	1249	980	682	801
Temperature (Field) [C]	21.33	19.5	19.8	21.9
Turbidity (Field Parameters) [NTU]	6.53	0.63	9.11	7.1

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
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Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-50R**	**MW-55R**	**MW-56R**	**MW-57R**
Sample Date	**10/18/2022**	**10/19/2022**	**10/20/2022**	**10/20/2022**
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	**MW-58R**	**MW-60R**	**MW-61R**	**MW-62R**
Sample Date	**10/20/2022**	**10/17/2022**	**10/19/2022**	**10/17/2022**
Comments				
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	1.7 (0.22)	U (0.22)	U (0.22)	U (0.22)
cis-1,2-Dichloroethene	6.9 (0.13)	U (0.13)	2.0 (0.13)	U (0.13)
trans-1,2-Dichloroethene	U (0.10)	U (0.10)	U (0.10)	U (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	226 (2.1)	U (0.21)	2.8 (0.21)	U (0.21)
Vinyl Chloride	0.45 J (0.17)	U (0.17)	1.4 (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	294 (50.0)	--	11200 (50.0)	--
Iron, Ferrous	U	--	U	--
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	1600 J (5000)	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	**MW-58R**	**MW-60R**	**MW-61R**	**MW-62R**
Sample Date	**10/20/2022**	**10/17/2022**	**10/19/2022**	**10/17/2022**
Comments				
Butyric acid	--	--	640 J (5000)	--
Organic Carbon (total)	U (1000)	--	1600 (1000)	--
Organic Carbon (dissolved)	--	--	1500 (1000)	--
Chloride	--	--	156000 J- (20000)	--
Formic acid	--	--	57000 (5000)	--
Lactic Acid	--	--	3100 J (5000)	--
Nitrate/Nitrite	2100 J- (100)	--	U (100)	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	UJ (50)	--	--	--
Sulfate	2400 (1000)	--	3200 (1000)	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	MW-58R	MW-60R	MW-61R	MW-62R
Sample Date	10/20/2022	10/17/2022	10/19/2022	10/17/2022
Comments				
Gasses				
Acetylene	U (0.50)	--	--	--
Methane	22 J (5.0)	--	1000 (5.0)	--
Ethane	U (1.0)	--	U (1.0)	--
Ethene	U (1.0)	--	U (1.0)	--
HYDROGEN (H2) [nM]	1.3 J (1.9)	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	U (0.50)	--	--	--
Dehalococcoides (DHC) [cells/mL]	1.20 (0.50)	--	--	--
tceA Reductase [cells/mL]	U (0.50)	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	U (0.30)	--	--	--
Field Parameters				
Dissolved Oxygen	600	490	3260	4200
Depth to Water [ft BTOC]	3.51	1.82	4.97	5.79
Oxidation Reduction Potential [mV]	182.3	485.2	-46.7	98
pH (Field Analysis) [SU]	4.82	6.66	6.45	5.41
Specific Conductivity (Field Analysis) [uS/cm]	850	1355	1161	0.72
Temperature (Field) [C]	21.1	72.8	22	19.9
Turbidity (Field Parameters) [NTU]	1.87	10.2	4.71	46.3

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	MW-58R	MW-60R	MW-61R	MW-62R
Sample Date	10/20/2022	10/17/2022	10/19/2022	10/17/2022
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-63R**	**MW-68**	**MW-82**	**MW-194**
Sample Date	**10/19/2022**	**10/18/2022**	**10/19/2022**	**10/19/2022**
Comments				
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	U (0.22)	U (0.22)	U (0.22)	U (0.22)
cis-1,2-Dichloroethene	0.82 J (0.13)	U (0.13)	0.62 J (0.13)	1.8 (0.13)
trans-1,2-Dichloroethene	U (0.10)	U (0.10)	U (0.10)	U (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	5.8 (0.21)	U (0.21)	34.7 (0.21)	3.8 (0.21)
Vinyl Chloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	--	--	--	8610 (50.0)
Iron, Ferrous	270	--	240	70
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	1600 J (5000)

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-63R**	**MW-68**	**MW-82**	**MW-194**
Sample Date	**10/19/2022**	**10/18/2022**	**10/19/2022**	**10/19/2022**
Comments				
Butyric acid	--	--	--	U (5000)
Organic Carbon (total)	--	--	--	650 J (1000)
Organic Carbon (dissolved)	--	--	--	400 J (1000)
Chloride	--	--	--	188000 J- (10000)
Formic acid	--	--	--	54000 (5000)
Lactic Acid	--	--	--	3400 J (5000)
Nitrate/Nitrite	--	--	--	U (100)
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	--	--	--	11400 (10000)

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-63R**	**MW-68**	**MW-82**	**MW-194**
Sample Date	**10/19/2022**	**10/18/2022**	**10/19/2022**	**10/19/2022**
Comments				
Gasses				
Acetylene	--	--	--	--
Methane	--	--	--	8800 (5.0)
Ethane	--	--	--	0.98 J (1.0)
Ethene	--	--	--	3.2 (1.0)
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalococcoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	1800	70	100	2100
Depth to Water [ft BTOC]	4.01	6.85	9.6	4.27
Oxidation Reduction Potential [mV]	195.8	-172.5	205.1	-59.9
pH (Field Analysis) [SU]	5.44	5.14	4.89	6.34
Specific Conductivity (Field Analysis) [uS/cm]	0.55	880	1060	1.04
Temperature (Field) [C]	19.3	17.8	19.9	21.5
Turbidity (Field Parameters) [NTU]	26.3	2.1	6.36	2.81

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
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3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-63R**	**MW-68**	**MW-82**	**MW-194**
Sample Date	**10/19/2022**	**10/18/2022**	**10/19/2022**	**10/19/2022**
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	MW-195	MW-195	MW-196	RW-69
Sample Date	10/18/2022	10/18/2022	10/18/2022	10/19/2022
Comments		Field Duplicate		
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	U (0.22)	U (0.22)	U (0.22)	1.2 (0.22)
cis-1,2-Dichloroethene	U (0.13)	0.20 J (0.13)	U (0.13)	7.8 (0.13)
trans-1,2-Dichloroethene	U (0.10)	U (0.10)	U (0.10)	U (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	3.0 (0.21)	3.0 (0.21)	0.33 J (0.21)	97.6 (0.21)
Vinyl Chloride	U (0.17)	U (0.17)	U (0.17)	0.30 J (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	--	--	--	2350 (50.0)
Iron, Ferrous	--	--	--	--
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	**MW-195**	**MW-195**	**MW-196**	**RW-69**
Sample Date	**10/18/2022**	**10/18/2022**	**10/18/2022**	**10/19/2022**
Comments		**Field Duplicate**		
Butyric acid	--	--	--	--
Organic Carbon (total)	--	--	--	U (1000)
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	--	--	--	UJ (100)
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	U (50)
Sulfate	--	--	--	1400 (1000)

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	MW-195	MW-195	MW-196	RW-69
Sample Date	10/18/2022	10/18/2022	10/18/2022	10/19/2022
Comments		Field Duplicate		
Gasses				
Acetylene	--	--	--	U (0.50)
Methane	--	--	--	52 J (5.0)
Ethane	--	--	--	U (1.0)
Ethene	--	--	--	U (1.0)
HYDROGEN (H2) [nM]	--	--	--	1.0 J (1.9)
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	U (0.30)
Dehalococcoides (DHC) [cells/mL]	--	--	--	0.80 (0.30)
tceA Reductase [cells/mL]	--	--	--	U (0.30)
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	U (0.30)
Field Parameters				
Dissolved Oxygen	190	--	430	1600
Depth to Water [ft BTOC]	1.91	--	3.75	8.18
Oxidation Reduction Potential [mV]	166	--	234.2	177.7
pH (Field Analysis) [SU]	6.51	--	6.72	4.95
Specific Conductivity (Field Analysis) [uS/cm]	925	--	1477	924
Temperature (Field) [C]	20	--	22.1	19.2
Turbidity (Field Parameters) [NTU]	11	--	52.5	4

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
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Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	MW-195	MW-195	MW-196	RW-69
Sample Date	10/18/2022	10/18/2022	10/18/2022	10/19/2022
Comments		Field Duplicate		

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**TMW-10**	**TMW-10**	**TMW-11**	**TMW-11**
Sample Date	**10/19/2022**	**10/19/2022**	**10/19/2022**	**10/19/2022**
Comments		**Field Duplicate**		**Field Duplicate**
Volatile Organic Compounds				
Acetone	U (2.5)	--	U (2.5)	--
Benzene	U (0.14)	--	U (0.14)	--
Bromodichloromethane	U (0.16)	--	U (0.16)	--
Bromoform	U (0.68)	--	U (0.68)	--
Bromomethane	U (0.46)	--	U (0.46)	--
Carbon Tetrachloride	U (0.17)	--	U (0.17)	--
Chlorobenzene	U (0.089)	--	U (0.089)	--
Chloroethane	U (0.37)	--	U (0.37)	--
Chloroform	U (0.22)	--	U (0.22)	--
Chloromethane	U (0.28)	--	U (0.28)	--
Dibromochloromethane	U (0.30)	--	U (0.30)	--
1,1-Dichloroethane	U (0.12)	--	U (0.12)	--
1,2-Dichloroethane	U (0.21)	--	U (0.21)	--
1,1-Dichloroethene	U (0.22)	--	U (0.22)	--
cis-1,2-Dichloroethene	0.71 J (0.13)	--	U (0.13)	--
trans-1,2-Dichloroethene	0.20 J (0.10)	--	U (0.10)	--
1,3-Dichloropropene (total)	U (0.18)	--	U (0.18)	--
trans-1,3-Dichloropropene	U (0.18)	--	U (0.18)	--
Ethyl Benzene	U (0.12)	--	U (0.12)	--
4-Methyl-2-pentanone	U (0.74)	--	U (0.74)	--
1,1,2,2-Tetrachloroethane	U (0.15)	--	U (0.15)	--
Tetrachloroethene	U (0.33)	--	U (0.33)	--
Toluene	U (0.25)	--	U (0.25)	--
1,1,1-Trichloroethane	U (0.11)	--	U (0.11)	--
1,1,2-Trichloroethane	U (0.14)	--	U (0.14)	--
Trichloroethene	2.1 (0.21)	--	U (0.21)	--
Vinyl Chloride	3.8 (0.17)	--	U (0.17)	--
Xylenes (total)	U (0.28)	--	U (0.28)	--
Metals				
Iron	11300 (50.0)	11700 (50.0)	4210 (50.0)	4070 (50.0)
Iron, Ferrous	5400	--	3200	--
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	1600 J (5000)	--	1700 J (5000)	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**TMW-10**	**TMW-10**	**TMW-11**	**TMW-11**
Sample Date	**10/19/2022**	**10/19/2022**	**10/19/2022**	**10/19/2022**
Comments		**Field Duplicate**		**Field Duplicate**
Butyric acid	610 J (5000)	--	730 J (5000)	--
Organic Carbon (total)	2600 (1000)	1800 (1000)	4800 (2000)	2100 (1000)
Organic Carbon (dissolved)	2000 (1000)	--	4100 (1000)	--
Chloride	166000 J- (20000)	--	65100 J (20000)	--
Formic acid	49000 (5000)	--	49000 (5000)	--
Lactic Acid	4900 J (5000)	--	7200 (5000)	--
Nitrate/Nitrite	U (100)	U (100)	U (100)	UJ (100)
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	U (50)	--	U (50)
Sulfate	2000 (1000)	2000 (1000)	1900 (1000)	1800 (1000)

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**TMW-10**	**TMW-10**	**TMW-11**	**TMW-11**
Sample Date	**10/19/2022**	**10/19/2022**	**10/19/2022**	**10/19/2022**
Comments		**Field Duplicate**		**Field Duplicate**
Gasses				
Acetylene	--	U (0.50)	--	U (0.50)
Methane	1200 (5.0)	5700 J (5.0)	6000 (5.0)	3300 J (5.0)
Ethane	U (1.0)	0.57 J (1.0)	0.70 J (1.0)	0.47 J (1.0)
Ethene	U (1.0)	2.6 (1.0)	U (1.0)	U (1.0)
HYDROGEN (H2) [nM]	--	0.58 J (1.9)	--	2.4 (1.9)
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	U (0.50)	--	U (0.50)	--
Dehalococcoides (DHC) [cells/mL]	327.00 (0.50)	--	185.00 (0.50)	--
tceA Reductase [cells/mL]	108.00 (0.50)	--	29.90 (0.50)	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	51.60 (0.50)	--	16.60 (0.50)	--
Field Parameters				
Dissolved Oxygen	50	--	40	--
Depth to Water [ft BTOC]	4.24	--	2.99	--
Oxidation Reduction Potential [mV]	-258.4	--	-312.2	--
pH (Field Analysis) [SU]	6.77	--	7.07	--
Specific Conductivity (Field Analysis) [uS/cm]	1502	--	1012	--
Temperature (Field) [C]	20.1	--	21.9	--
Turbidity (Field Parameters) [NTU]	9.59	--	4.57	--

Notes:

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Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	TMW-10	TMW-10	TMW-11	TMW-11
Sample Date	10/19/2022	10/19/2022	10/19/2022	10/19/2022
Comments		Field Duplicate		Field Duplicate

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				North Plume
Location	**TMW-12**	**TMW-12**	**TMW-14**	**TMW-20**
Sample Date	**10/20/2022**	**10/20/2022**	**10/19/2022**	**10/18/2022**
Comments		**Field Duplicate**		
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	1.4 (0.22)	1.5 (0.22)	U (0.22)	U (0.22)
cis-1,2-Dichloroethene	8.4 (0.13)	9.0 (0.13)	7.2 (0.13)	U (0.13)
trans-1,2-Dichloroethene	0.18 J (0.10)	U (0.10)	0.11 J (0.10)	U (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	U (0.25)	0.89 J (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	330 (2.1)	318 (2.1)	6.1 (0.21)	0.21 J (0.21)
Vinyl Chloride	0.22 J (0.17)	0.20 J (0.17)	U (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	--	--	--	--
Iron, Ferrous	70	--	3500	820
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				North Plume
Location	**TMW-12**	**TMW-12**	**TMW-14**	**TMW-20**
Sample Date	**10/20/2022**	**10/20/2022**	**10/19/2022**	**10/18/2022**
Comments		**Field Duplicate**		
Butyric acid	--	--	--	--
Organic Carbon (total)	--	--	--	--
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	--	--	--	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				North Plume
Location	**TMW-12**	**TMW-12**	**TMW-14**	**TMW-20**
Sample Date	**10/20/2022**	**10/20/2022**	**10/19/2022**	**10/18/2022**
Comments		**Field Duplicate**		
Gasses				
Acetylene	--	--	--	--
Methane	--	--	--	--
Ethane	--	--	--	--
Ethene	--	--	--	--
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalocaccoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	1000	--	2000	3450
Depth to Water [ft BTOC]	6.09	--	4.21	3.26
Oxidation Reduction Potential [mV]	185.5	--	-61.5	-139.9
pH (Field Analysis) [SU]	5.31	--	6.09	6.63
Specific Conductivity (Field Analysis) [uS/cm]	538	--	0.412	1332
Temperature (Field) [C]	19.4	--	18.6	21.3
Turbidity (Field Parameters) [NTU]	5.23	--	5	7.47

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				North Plume
Location	TMW-12	TMW-12	TMW-14	TMW-20
Sample Date	10/20/2022	10/20/2022	10/19/2022	10/18/2022
Comments		Field Duplicate		

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**TMW-21**	**TMW-22R**	**TMW-23**	**TMW-24**
Sample Date	**10/18/2022**	**10/20/2022**	**10/20/2022**	**10/20/2022**
Comments				
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	0.21 J (0.14)	0.23 J (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	3.5 (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	UJ (0.21)	U (0.21)
1,1-Dichloroethene	U (0.22)	0.33 J (0.22)	2.9 (0.22)	1.1 (0.22)
cis-1,2-Dichloroethene	1.3 (0.13)	35.6 (0.13)	6.0 (0.13)	8.7 (0.13)
trans-1,2-Dichloroethene	0.27 J (0.10)	1.3 (0.10)	UJ (0.10)	U (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	0.21 J (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	0.88 J (0.25)	0.30 J (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	2.8 (0.21)	35.9 (0.21)	154 (1.0)	393 (2.1)
Vinyl Chloride	2.0 (0.17)	21.4 (0.17)	U (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	12300 (50.0)	#REF!	--	--
Iron, Ferrous	2200	2200	U	2700
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	2200 J (5000)	1700 J (5000)	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**TMW-21**	**TMW-22R**	**TMW-23**	**TMW-24**
Sample Date	**10/18/2022**	**10/20/2022**	**10/20/2022**	**10/20/2022**
Comments				
Butyric acid	U (5000)	U (5000)	--	--
Organic Carbon (total)	900 J (1000)	680 J (1000)	--	--
Organic Carbon (dissolved)	2200 (1000)	880 J (1000)	--	--
Chloride	241000 (20000)	202000 (20000)	--	--
Formic acid	54000 (5000)	49000 (5000)	--	--
Lactic Acid	3700 J (5000)	4300 J (5000)	--	--
Nitrate/Nitrite	UJ (100)	UJ (100)	--	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	6300 (1000)	1700 (1000)	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**TMW-21**	**TMW-22R**	**TMW-23**	**TMW-24**
Sample Date	**10/18/2022**	**10/20/2022**	**10/20/2022**	**10/20/2022**
Comments				
Gasses				
Acetylene	--	--	--	--
Methane	10000 (5.0)	6300 (5.0)	--	--
Ethane	1.2 (1.0)	2.7 (1.0)	--	--
Ethene	1.8 (1.0)	12 (1.0)	--	--
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalococcoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	2100	2500	1100	1500
Depth to Water [ft BTOC]	4.03	4.07	3.55	3.76
Oxidation Reduction Potential [mV]	-94.2	-93.4	107	81.3
pH (Field Analysis) [SU]	6.34	6.6	6.3	5.65
Specific Conductivity (Field Analysis) [uS/cm]	1387	1582	1	830
Temperature (Field) [C]	20.2	20.9	19.7	21.1
Turbidity (Field Parameters) [NTU]	5.87	31.8	4.29	11.91

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
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3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**TMW-21**	**TMW-22R**	**TMW-23**	**TMW-24**
Sample Date	**10/18/2022**	**10/20/2022**	**10/20/2022**	**10/20/2022**
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	**TMW-29**	**TMW-35**	**TMW-35**	**MW-87**
Sample Date	**10/17/2022**	**10/18/2022**	**10/18/2022**	**10/20/2022**
Comments			**Field Duplicate**	
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	0.96 J (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	U (0.22)	U (0.22)	U (0.22)	3.0 (0.22)
cis-1,2-Dichloroethene	U (0.13)	U (0.13)	U (0.13)	20.9 (0.13)
trans-1,2-Dichloroethene	U (0.10)	U (0.10)	U (0.10)	0.40 J (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	3.1 (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	U (0.21)	U (0.21)	U (0.21)	242 (2.1)
Vinyl Chloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	--	--	--	837 (50.0)
Iron, Ferrous	--	50	--	100
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	**TMW-29**	**TMW-35**	**TMW-35**	**MW-87**
Sample Date	**10/17/2022**	**10/18/2022**	**10/18/2022**	**10/20/2022**
Comments			**Field Duplicate**	
Butyric acid	--	--	--	--
Organic Carbon (total)	--	--	--	U (1000)
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	--	--	--	1500 J- (100)
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	23 J (50)
Sulfate	--	--	--	12200 (2000)

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	TMW-29	TMW-35	TMW-35	MW-87
Sample Date	10/17/2022	10/18/2022	10/18/2022	10/20/2022
Comments			Field Duplicate	
Gasses				
Acetylene	--	--	--	U (0.50)
Methane	--	--	--	U (5.0)
Ethane	--	--	--	U (1.0)
Ethene	--	--	--	U (1.0)
HYDROGEN (H2) [nM]	--	--	--	1.2 J (1.9)
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	U (0.70)
Dehalococcoides (DHC) [cells/mL]	--	--	--	U (0.70)
tceA Reductase [cells/mL]	--	--	--	U (0.70)
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	U (0.50)
Field Parameters				
Dissolved Oxygen	90	160	--	30
Depth to Water [ft BTOC]	8.95	10.48	--	12.59
Oxidation Reduction Potential [mV]	181.2	221.3	--	-294.5
pH (Field Analysis) [SU]	6.37	5.35	--	5.63
Specific Conductivity (Field Analysis) [uS/cm]	1209	259	--	496.2
Temperature (Field) [C]	18.9	18.1	--	24.6
Turbidity (Field Parameters) [NTU]	42.9	2.29	--	11.5

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	North Plume			
Location	TMW-29	TMW-35	TMW-35	MW-87
Sample Date	10/17/2022	10/18/2022	10/18/2022	10/20/2022
Comments			Field Duplicate	

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Northeast Plume			
Location	**MW-89**	**MW-91**	**MW-96**	**MW-96**
Sample Date	**10/18/2022**	**10/18/2022**	**10/17/2022**	**10/17/2022**
Comments				**Field Duplicate**
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	0.35 J (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	U (0.22)	0.48 J (0.22)	U (0.22)	U (0.22)
cis-1,2-Dichloroethene	0.25 J (0.13)	41.2 (0.13)	U (0.13)	U (0.13)
trans-1,2-Dichloroethene	U (0.10)	0.19 J (0.10)	U (0.10)	U (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	0.76 J (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	4.8 (0.21)	14.9 (0.21)	U (0.21)	U (0.21)
Vinyl Chloride	U (0.17)	0.20 J (0.17)	U (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	138 (50.0)	11800 (50.0)	--	--
Iron, Ferrous	260	5000	--	--
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	2100 J (5000)	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Northeast Plume			
Location	**MW-89**	**MW-91**	**MW-96**	**MW-96**
Sample Date	**10/18/2022**	**10/18/2022**	**10/17/2022**	**10/17/2022**
Comments				**Field Duplicate**
Butyric acid	--	U (5000)	--	--
Organic Carbon (total)	910 J (1000)	5300 (1000)	--	--
Organic Carbon (dissolved)	--	7100 (1000)	--	--
Chloride	--	78700 J+ (20000)	--	--
Formic acid	--	55000 (5000)	--	--
Lactic Acid	--	5700 (5000)	--	--
Nitrate/Nitrite	93200 J- (5000)	UJ (100)	--	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	U (50)	--	--	--
Sulfate	3200 (1000)	5000 (1000)	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Northeast Plume			
Location	**MW-89**	**MW-91**	**MW-96**	**MW-96**
Sample Date	**10/18/2022**	**10/18/2022**	**10/17/2022**	**10/17/2022**
Comments				**Field Duplicate**
Gasses				
Acetylene	U (0.50)	--	--	--
Methane	9.7 J (5.0)	U (5.0)	--	--
Ethane	U (1.0)	U (1.0)	--	--
Ethene	U (1.0)	U (1.0)	--	--
HYDROGEN (H2) [nM]	1.2 J (1.9)	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	U (0.50)	--	--	--
Dehalocaccoides (DHC) [cells/mL]	2.90 (0.50)	--	--	--
tceA Reductase [cells/mL]	U (0.50)	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	U (0.50)	--	--	--
Field Parameters				
Dissolved Oxygen	1900	500	8500	--
Depth to Water [ft BTOC]	10.31	12	6	--
Oxidation Reduction Potential [mV]	190.1	-131.1	153.6	--
pH (Field Analysis) [SU]	6.13	6.76	5.1	--
Specific Conductivity (Field Analysis) [uS/cm]	970	914	194	--
Temperature (Field) [C]	23.6	23.1	25.2	--
Turbidity (Field Parameters) [NTU]	4.68	7.02	2.43	--

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Northeast Plume			
Location	MW-89	MW-91	MW-96	MW-96
Sample Date	10/18/2022	10/18/2022	10/17/2022	10/17/2022
Comments				Field Duplicate

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-97**	**MW-98**	**MW-99**	**MW-183R**
Sample Date	**10/17/2022**	**10/17/2022**	**10/19/2022**	**10/18/2022**
Comments				
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	0.53 J (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	UJ (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	UJ (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	U (0.22)	U (0.22)	U (0.22)	U (0.22)
cis-1,2-Dichloroethene	U (0.13)	U (0.13)	1.9 (0.13)	U (0.13)
trans-1,2-Dichloroethene	U (0.10)	U (0.10)	U (0.10)	U (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	0.22 J (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	1.4 J (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	U (0.25)	1.2 (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	U (0.21)	U (0.21)	2.2 (0.21)	0.83 J (0.21)
Vinyl Chloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	--	--	6660 (50.0)	--
Iron, Ferrous	--	--	U	10
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	1800 J (5000)	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-97**	**MW-98**	**MW-99**	**MW-183R**
Sample Date	**10/17/2022**	**10/17/2022**	**10/19/2022**	**10/18/2022**
Comments				
Butyric acid	--	--	710 J (5000)	--
Organic Carbon (total)	--	--	40000 (5000)	--
Organic Carbon (dissolved)	--	--	42100 (5000)	--
Chloride	--	--	83800 J (20000)	--
Formic acid	--	--	53000 (5000)	--
Lactic Acid	--	--	7200 (5000)	--
Nitrate/Nitrite	--	--	U (100)	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	--	--	4400 (1000)	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-97**	**MW-98**	**MW-99**	**MW-183R**
Sample Date	**10/17/2022**	**10/17/2022**	**10/19/2022**	**10/18/2022**
Comments				
Gasses				
Acetylene	--	--	--	--
Methane	--	--	13000 (5.0)	--
Ethane	--	--	1.8 (1.0)	--
Ethene	--	--	0.90 J (1.0)	--
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalococcoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	31600	280	100	25800
Depth to Water [ft BTOC]	8.6	10.53	9.83	11.45
Oxidation Reduction Potential [mV]	162.3	106.3	-110	141.6
pH (Field Analysis) [SU]	5.51	5.9	7.14	5.62
Specific Conductivity (Field Analysis) [uS/cm]	242.2	278	2064	235.3
Temperature (Field) [C]	23.5	22.1	18.9	23.9
Turbidity (Field Parameters) [NTU]	23.7	1.62	14.5	18.6

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-97**	**MW-98**	**MW-99**	**MW-183R**
Sample Date	**10/17/2022**	**10/17/2022**	**10/19/2022**	**10/18/2022**
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Northeast Plume			
Location	**MW-184**	**MW-184**	**MW-200**	**MW-202**
Sample Date	**10/18/2022**	**10/18/2022**	**10/18/2022**	**10/20/2022**
Comments		**Field Duplicate**		
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	0.30 J (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	0.24 J (0.21)
1,1-Dichloroethene	U (0.22)	U (0.22)	U (0.22)	3.4 (0.22)
cis-1,2-Dichloroethene	U (0.13)	U (0.13)	0.59 J (0.13)	15.7 (0.13)
trans-1,2-Dichloroethene	U (0.10)	U (0.10)	U (0.10)	0.17 J (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	0.49 J (0.21)	0.55 J (0.21)	7.4 (0.21)	158 (0.21)
Vinyl Chloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	--	--	--	--
Iron, Ferrous	--	--	50	10
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Northeast Plume			
Location	**MW-184**	**MW-184**	**MW-200**	**MW-202**
Sample Date	**10/18/2022**	**10/18/2022**	**10/18/2022**	**10/20/2022**
Comments		**Field Duplicate**		
Butyric acid	--	--	--	--
Organic Carbon (total)	--	--	--	--
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	--	--	--	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Northeast Plume			
Location	MW-184	MW-184	MW-200	MW-202
Sample Date	10/18/2022	10/18/2022	10/18/2022	10/20/2022
Comments		Field Duplicate		
Gasses				
Acetylene	--	--	--	--
Methane	--	--	--	--
Ethane	--	--	--	--
Ethene	--	--	--	--
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalococcoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	330	--	280	520
Depth to Water [ft BTOC]	9.65	--	10.79	13.03
Oxidation Reduction Potential [mV]	143	--	102.5	175
pH (Field Analysis) [SU]	5.92	--	6.22	6.12
Specific Conductivity (Field Analysis) [uS/cm]	130	--	223	233
Temperature (Field) [C]	19.5	--	20	17.7
Turbidity (Field Parameters) [NTU]	77.4	--	21.2	17.6

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
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Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Northeast Plume			
Location	**MW-184**	**MW-184**	**MW-200**	**MW-202**
Sample Date	**10/18/2022**	**10/18/2022**	**10/18/2022**	**10/20/2022**
Comments		**Field Duplicate**		

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				South
Location	**ITMW-1R**	**ITMW-2R**	**ITMW-5**	**ITMW-7**
Sample Date	**10/19/2022**	**10/18/2022**	**10/20/2022**	**10/19/2022**
Comments				
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	0.17 J (0.14)	U (0.14)	U (0.14)	0.14 J (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	5.6 (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	0.68 J (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	7.7 (0.12)	U (0.12)	0.77 J (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	0.33 J (0.22)	U (0.22)	5.6 (0.22)	U (0.22)
cis-1,2-Dichloroethene	38.8 (0.13)	U (0.13)	27.6 (0.13)	6.6 (0.13)
trans-1,2-Dichloroethene	0.21 J (0.10)	U (0.10)	0.31 J (0.10)	U (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	1.5 (0.33)	U (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	0.17 J (0.14)	U (0.14)
Trichloroethene	18.6 (0.21)	0.34 J (0.21)	2710 (4.2)	18.7 (0.21)
Vinyl Chloride	U (0.17)	U (0.17)	1.1 (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	--	--	--	--
Iron, Ferrous	130	100	0 U	0 U
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				South
Location	**ITMW-1R**	**ITMW-2R**	**ITMW-5**	**ITMW-7**
Sample Date	**10/19/2022**	**10/18/2022**	**10/20/2022**	**10/19/2022**
Comments				
Butyric acid	--	--	--	--
Organic Carbon (total)	--	--	--	--
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	--	--	--	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				South
Location	ITMW-1R	ITMW-2R	ITMW-5	ITMW-7
Sample Date	10/19/2022	10/18/2022	10/20/2022	10/19/2022
Comments				
Gasses				
Acetylene	--	--	--	--
Methane	--	--	--	--
Ethane	--	--	--	--
Ethene	--	--	--	--
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalococcoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	1470	140	160	300
Depth to Water [ft BTOC]	12.76	14.45	14.17	20.91
Oxidation Reduction Potential [mV]	522.9	175.5	642.6	266.9
pH (Field Analysis) [SU]	6.3	5.85	5.72	4.99
Specific Conductivity (Field Analysis) [uS/cm]	631	524	899	720
Temperature (Field) [C]	27.3	22.3	22.2	19.5
Turbidity (Field Parameters) [NTU]	190	0.51	7.92	0.75

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
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Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				South
Location	**ITMW-1R**	**ITMW-2R**	**ITMW-5**	**ITMW-7**
Sample Date	**10/19/2022**	**10/18/2022**	**10/20/2022**	**10/19/2022**
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Plume			
Location	**ITMW-9**	**ITMW-10**	**ITMW-18**	**ITMW-19**
Sample Date	**10/21/2022**	**10/21/2022**	**10/20/2022**	**10/20/2022**
Comments				
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	0.31 J (0.14)	U (0.14)	0.19 J (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	0.60 J (0.16)	0.59 J (0.16)
Bromoform	U (0.68)	U (0.68)	2.6 (0.68)	11.5 (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	1.2 J (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	0.36 J (0.22)	U (0.22)	2.0 (0.22)	1.9 (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	0.89 J (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	0.87 J (0.30)
1,1-Dichloroethane	0.88 J (0.12)	0.29 J (0.12)	0.46 J (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	2.9 (0.22)	0.93 J (0.22)	U (0.22)	U (0.22)
cis-1,2-Dichloroethene	39.3 (0.13)	5.7 (0.13)	183 (0.13)	12.2 (0.13)
trans-1,2-Dichloroethene	1.4 (0.10)	U (0.10)	34.9 (0.10)	2.1 (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	0.24 J (0.15)	0.55 J (0.15)
Tetrachloroethene	0.86 J (0.33)	0.33 J (0.33)	1.1 (0.33)	0.69 J (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	0.28 J (0.14)	U (0.14)
Trichloroethene	802 (10.5)	326 (2.1)	2930 (4.2)	1570 (2.1)
Vinyl Chloride	0.91 J (0.17)	0.29 J (0.17)	U (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	11.6 J (50.0)	--	--	--
Iron, Ferrous	20	60	140	0 U
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Plume			
Location	**ITMW-9**	**ITMW-10**	**ITMW-18**	**ITMW-19**
Sample Date	**10/21/2022**	**10/21/2022**	**10/20/2022**	**10/20/2022**
Comments				
Butyric acid	--	--	--	--
Organic Carbon (total)	480 J (1000)	--	--	--
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	8700 (500)	--	--	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	U (50)	--	--	--
Sulfate	24200 (10000)	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Plume			
Location	**ITMW-9**	**ITMW-10**	**ITMW-18**	**ITMW-19**
Sample Date	**10/21/2022**	**10/21/2022**	**10/20/2022**	**10/20/2022**
Comments				
Gasses				
Acetylene	U (0.50)	--	--	--
Methane	4.7 J (5.0)	--	--	--
Ethane	U (1.0)	--	--	--
Ethene	U (1.0)	--	--	--
HYDROGEN (H2) [nM]	1.5 J (1.9)	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	7.2 (0.5)	--	--	--
Dehalocaccoides (DHC) [cells/mL]	3.1 (0.5)	--	--	--
tceA Reductase [cells/mL]	14.7 (0.5)	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	111 (0.5)	--	--	--
Field Parameters				
Dissolved Oxygen	2900	3700	630	2260
Depth to Water [ft BTOC]	22.03	20.83	10.77	13.4
Oxidation Reduction Potential [mV]	436.9	484.5	-94.8	-31.8
pH (Field Analysis) [SU]	5.46	5.51	5.69	5.96
Specific Conductivity (Field Analysis) [uS/cm]	645	1214	3421	4473
Temperature (Field) [C]	19.7	19.8	19.7	18.8
Turbidity (Field Parameters) [NTU]	1.22	1.01	3.26	2.01

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Plume			
Location	**ITMW-9**	**ITMW-10**	**ITMW-18**	**ITMW-19**
Sample Date	**10/21/2022**	**10/21/2022**	**10/20/2022**	**10/20/2022**
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**ITMW-20**	**ITMW-20**	**ITMW-21**	**ITMW-21**
Sample Date	**10/17/2022**	**10/17/2022**	**10/19/2022**	**10/19/2022**
Comments		**Field Duplicate**		**Field Duplicate**
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	U (0.22)	U (0.22)	U (0.22)	U (0.22)
cis-1,2-Dichloroethene	U (0.13)	U (0.13)	0.29 J (0.13)	0.29 J (0.13)
trans-1,2-Dichloroethene	U (0.10)	U (0.10)	U (0.10)	U (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	U (0.21)	U (0.21)	6.4 (0.21)	5.4 (0.21)
Vinyl Chloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	--	--	--	--
Iron, Ferrous	--	--	100	--
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**ITMW-20**	**ITMW-20**	**ITMW-21**	**ITMW-21**
Sample Date	**10/17/2022**	**10/17/2022**	**10/19/2022**	**10/19/2022**
Comments		**Field Duplicate**		**Field Duplicate**
Butyric acid	--	--	--	--
Organic Carbon (total)	--	--	--	--
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	--	--	--	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**ITMW-20**	**ITMW-20**	**ITMW-21**	**ITMW-21**
Sample Date	**10/17/2022**	**10/17/2022**	**10/19/2022**	**10/19/2022**
Comments		**Field Duplicate**		**Field Duplicate**
Gasses				
Acetylene	--	--	--	--
Methane	--	--	--	--
Ethane	--	--	--	--
Ethene	--	--	--	--
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalococcoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	1110	--	710	--
Depth to Water [ft BTOC]	14.75	--	13.72	--
Oxidation Reduction Potential [mV]	154.2	--	299.7	--
pH (Field Analysis) [SU]	4.76	--	4.79	--
Specific Conductivity (Field Analysis) [uS/cm]	0.59	--	2730	--
Temperature (Field) [C]	21	--	19.4	--
Turbidity (Field Parameters) [NTU]	1.51	--	12.1	--

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	ITMW-20	ITMW-20	ITMW-21	ITMW-21
Sample Date	10/17/2022	10/17/2022	10/19/2022	10/19/2022
Comments		Field Duplicate		Field Duplicate

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	**MW-22**	**MW-24**	**MW-24**	**MW-25R**
Sample Date	**10/18/2022**	**10/20/2022**	**10/20/2022**	**10/20/2022**
Comments			**Field Duplicate**	
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	0.62 J (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	4.5 (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	1.6 (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	0.42 J (0.21)
1,1-Dichloroethene	U (0.22)	U (0.22)	U (0.22)	16.1 (0.22)
cis-1,2-Dichloroethene	U (0.13)	U (0.13)	0.31 J (0.13)	U (0.13)
trans-1,2-Dichloroethene	U (0.10)	U (0.10)	U (0.10)	97.6 (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	1.6 (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	2.0 (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	0.31 J (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	0.34 J (0.14)
Trichloroethene	U (0.21)	10.5 (0.21)	10.9 (0.21)	7530 (10.5)
Vinyl Chloride	U (0.17)	U (0.17)	U (0.17)	26.4 (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	--	--	--	118 (50.0)
Iron, Ferrous	210	40	--	U
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	**MW-22**	**MW-24**	**MW-24**	**MW-25R**
Sample Date	**10/18/2022**	**10/20/2022**	**10/20/2022**	**10/20/2022**
Comments			**Field Duplicate**	
Butyric acid	--	--	--	--
Organic Carbon (total)	--	--	--	420 J (1000)
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	--	--	--	430 J- (100)
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	UJ (50)
Sulfate	--	--	--	681000 (100000)

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	MW-22	MW-24	MW-24	MW-25R
Sample Date	10/18/2022	10/20/2022	10/20/2022	10/20/2022
Comments			Field Duplicate	
Gasses				
Acetylene	--	--	--	U (0.50)
Methane	--	--	--	38 J (5.0)
Ethane	--	--	--	5.5 (1.0)
Ethene	--	--	--	0.27 J (1.0)
HYDROGEN (H2) [nM]	--	--	--	U (1.9)
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	U (0.50)
Dehalococcoides (DHC) [cells/mL]	--	--	--	U (0.50)
tceA Reductase [cells/mL]	--	--	--	U (0.50)
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	U (0.50)
Field Parameters				
Dissolved Oxygen	220000	130	--	260
Depth to Water [ft BTOC]	11.75	13.17	--	9.73
Oxidation Reduction Potential [mV]	171.8	203.2	--	552.7
pH (Field Analysis) [SU]	5.26	4.78	--	6.28
Specific Conductivity (Field Analysis) [uS/cm]	0.09	1297	--	2689
Temperature (Field) [C]	20.5	21.6	--	18.3
Turbidity (Field Parameters) [NTU]	1.88	1.53	--	8.75

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
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Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	MW-22	MW-24	MW-24	MW-25R
Sample Date	10/18/2022	10/20/2022	10/20/2022	10/20/2022
Comments			Field Duplicate	

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-26**	**MW-27**	**MW-28**	**MW-29**
Sample Date	**10/17/2022**	**10/18/2022**	**10/18/2022**	**10/17/2022**
Comments				
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	5.5 (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	UJ (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	U (0.22)	U (0.22)	U (0.22)	U (0.22)
cis-1,2-Dichloroethene	U (0.13)	1.8 (0.13)	U (0.13)	U (0.13)
trans-1,2-Dichloroethene	U (0.10)	0.33 J (0.10)	U (0.10)	U (0.10)
1,3-Dichloropropene (total)	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)	UJ (0.18)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	UJ (0.14)
Trichloroethene	U (0.21)	105 (0.21)	U (0.21)	U (0.21)
Vinyl Chloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	--	--	--	--
Iron, Ferrous	160	U	1230	--
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-26**	**MW-27**	**MW-28**	**MW-29**
Sample Date	**10/17/2022**	**10/18/2022**	**10/18/2022**	**10/17/2022**
Comments				
Butyric acid	--	--	--	--
Organic Carbon (total)	--	--	--	--
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	--	--	--	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-26**	**MW-27**	**MW-28**	**MW-29**
Sample Date	**10/17/2022**	**10/18/2022**	**10/18/2022**	**10/17/2022**
Comments				
Gasses				
Acetylene	--	--	--	--
Methane	--	--	--	--
Ethane	--	--	--	--
Ethene	--	--	--	--
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalococcoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	1000	1300	1300	280
Depth to Water [ft BTOC]	14.51	12.58	8.86	12.53
Oxidation Reduction Potential [mV]	186.9	192.5	-26.6	-136.3
pH (Field Analysis) [SU]	5.04	5.18	5.94	4.8
Specific Conductivity (Field Analysis) [uS/cm]	1180	1.36	396	527.6
Temperature (Field) [C]	20.3	21.9	24.3	22.3
Turbidity (Field Parameters) [NTU]	1.53	4.72	12.9	0.87

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
2 Only compounds with at least one detection are shown.
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Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-26**	**MW-27**	**MW-28**	**MW-29**
Sample Date	**10/17/2022**	**10/18/2022**	**10/18/2022**	**10/17/2022**
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	MW-38	MW-83	MW-84	MW-93
Sample Date	10/20/2022	10/19/2022	10/19/2022	10/20/2022
Comments				
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	3.2 J (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	0.20 J (0.14)
Bromodichloromethane	U (0.16)	0.62 J (0.16)	0.50 J (0.16)	U (0.16)
Bromoform	U (0.68)	3.0 (0.68)	3.6 (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	0.81 J (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	2.2 (0.22)
Chloromethane	U (0.28)	U (0.28)	1.8 (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	0.65 J (0.30)	0.68 J (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	0.20 J (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	4.7 (0.22)	U (0.22)	U (0.22)	13.5 (0.22)
cis-1,2-Dichloroethene	695 (6.4)	0.54 J (0.13)	U (0.13)	81.9 (0.13)
trans-1,2-Dichloroethene	2.8 (0.10)	0.11 J (0.10)	U (0.10)	4.8 (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	3.5 (0.33)
Toluene	0.37 J (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	0.14 J (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	0.58 J (0.14)
Trichloroethene	1250 (10.5)	28.1 (0.21)	2.2 (0.21)	9010 (42.0)
Vinyl Chloride	541 (8.4)	U (0.17)	U (0.17)	1.2 (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	5770 (50.0)	--	--	--
Iron, Ferrous	--	U	40	70
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	**MW-38**	**MW-83**	**MW-84**	**MW-93**
Sample Date	**10/20/2022**	**10/19/2022**	**10/19/2022**	**10/20/2022**
Comments				
Butyric acid	--	--	--	--
Organic Carbon (total)	U (1000)	--	--	--
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	UJ (100)	--	--	--
Sodium Persulfate	--	--	45000	--
Sulfide (total)	UJ (50)	--	--	--
Sulfate	109000 (20000)	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	MW-38	MW-83	MW-84	MW-93
Sample Date	10/20/2022	10/19/2022	10/19/2022	10/20/2022
Comments				
Gasses				
Acetylene	U (0.50)	--	--	--
Methane	10 J (5.0)	--	--	--
Ethane	0.37 J (1.0)	--	--	--
Ethene	25 (1.0)	--	--	--
HYDROGEN (H2) [nM]	U (1.9)	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	52.80 (0.50)	--	--	--
Dehalococcoides (DHC) [cells/mL]	174.00 (0.50)	--	--	--
tceA Reductase [cells/mL]	U (0.50)	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	0.10 J (0.70)	--	--	--
Field Parameters				
Dissolved Oxygen	60	1580	3200	570
Depth to Water [ft BTOC]	11.44	12.69	12.85	14.76
Oxidation Reduction Potential [mV]	113.2	67.2	198.9	251.6
pH (Field Analysis) [SU]	6.04	6.69	6.71	4.9
Specific Conductivity (Field Analysis) [uS/cm]	887	2290	5268	1330
Temperature (Field) [C]	26.5	23.6	23.1	21.8
Turbidity (Field Parameters) [NTU]	1.9	12.5	8.14	1.97

Notes:

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Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	MW-38	MW-83	MW-84	MW-93
Sample Date	10/20/2022	10/19/2022	10/19/2022	10/20/2022
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
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TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	
Location	**MW-95**
Sample Date	**10/21/2022**
Comments	
Volatile Organic Compounds	
Acetone	U (2.5)
Benzene	0.16 J (0.14)
Bromodichloromethane	0.41 J (0.16)
Bromoform	U (0.68)
Bromomethane	U (0.46)
Carbon Tetrachloride	0.46 J (0.17)
Chlorobenzene	U (0.089)
Chloroethane	U (0.37)
Chloroform	7.2 (0.22)
Chloromethane	U (0.28)
Dibromochloromethane	U (0.30)
1,1-Dichloroethane	0.71 J (0.12)
1,2-Dichloroethane	0.22 J (0.21)
1,1-Dichloroethene	46.0 (0.22)
cis-1,2-Dichloroethene	674 (12.9)
trans-1,2-Dichloroethene	28.5 (0.10)
1,3-Dichloropropene (total)	U (0.18)
trans-1,3-Dichloropropene	U (0.18)
Ethyl Benzene	U (0.12)
4-Methyl-2-pentanone	U (0.74)
1,1,2,2-Tetrachloroethane	0.75 J (0.15)
Tetrachloroethene	11.9 (0.33)
Toluene	1.4 (0.25)
1,1,1-Trichloroethane	5.7 (0.11)
1,1,2-Trichloroethane	2.5 (0.14)
Trichloroethene	36200 J (105)
Vinyl Chloride	5.3 (0.17)
Xylenes (total)	U (0.28)
Metals	
Iron	16.7 J (50.0)
Iron, Ferrous	U
Monitored Natural Attenuation Parameters (Lab	
Acetic acid	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume		
Location		**MW-95**
Sample Date		**10/21/2022**
Comments		
Butyric acid		--
Organic Carbon (total)		U (1000)
Organic Carbon (dissolved)		--
Chloride		--
Formic acid		--
Lactic Acid		--
Nitrate/Nitrite	750	(100)
Sodium Persulfate		--
Sulfide (total)		U (50)
Sulfate	133000	(10000)

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	
Location	**MW-95**
Sample Date	**10/21/2022**
Comments	
Gasses	
Acetylene	U (0.50)
Methane	4.1 J (5.0)
Ethane	0.70 J (1.0)
Ethene	U (1.0)
HYDROGEN (H2) [nM]	2.2 (1.9)
Molecular Analyses	
BAV1 Vinyl Chloride Reductase [cells/mL]	1.2 (0.5)
Dehalococcoides (DHC) [cells/mL]	U (0.5)
tceA Reductase [cells/mL]	0.2 J (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	3.2 (0.5)
Field Parameters	
Dissolved Oxygen	90
Depth to Water [ft BTOC]	14.76
Oxidation Reduction Potential [mV]	270.6
pH (Field Analysis) [SU]	5.11
Specific Conductivity (Field Analysis) [uS/cm]	1410
Temperature (Field) [C]	22.1
Turbidity (Field Parameters) [NTU]	1.76

Notes:

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Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	
Location	**MW-95**
Sample Date	**10/21/2022**
Comments	

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R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-182**	**MW-182**	**MW-187**	**MW-188**
Sample Date	**10/19/2022**	**10/19/2022**	**10/19/2022**	**10/19/2022**
Comments		**Field Duplicate**		
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	4.9 (0.089)	5.0 (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	UJ (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	U (0.12)	0.72 J (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	U (0.22)	U (0.22)	0.48 J (0.22)	U (0.22)
cis-1,2-Dichloroethene	0.87 J (0.13)	0.79 J (0.13)	3.2 (0.13)	0.94 J (0.13)
trans-1,2-Dichloroethene	U (0.10)	U (0.10)	U (0.10)	U (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	16.3 (0.21)	16.7 (0.21)	74.2 J+ (0.21)	11.2 (0.21)
Vinyl Chloride	U (0.17)	U (0.17)	0.17 J (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	--	--	--	--
Iron, Ferrous	--	--	60	2200
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-182**	**MW-182**	**MW-187**	**MW-188**
Sample Date	**10/19/2022**	**10/19/2022**	**10/19/2022**	**10/19/2022**
Comments		**Field Duplicate**		
Butyric acid	--	--	--	--
Organic Carbon (total)	--	--	--	--
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	--	--	--	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-182**	**MW-182**	**MW-187**	**MW-188**
Sample Date	**10/19/2022**	**10/19/2022**	**10/19/2022**	**10/19/2022**
Comments		**Field Duplicate**		
Gasses				
Acetylene	--	--	--	--
Methane	--	--	--	--
Ethane	--	--	--	--
Ethene	--	--	--	--
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalococcoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	90	--	3100	1900
Depth to Water [ft BTOC]	15.41	--	19.78	21.6
Oxidation Reduction Potential [mV]	580.1	--	160	-39.3
pH (Field Analysis) [SU]	5.64	--	5.64	6.01
Specific Conductivity (Field Analysis) [uS/cm]	507.7	--	769	440.8
Temperature (Field) [C]	15.78	--	17.9	18.9
Turbidity (Field Parameters) [NTU]	4.91	--	29.4	6.5

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-182**	**MW-182**	**MW-187**	**MW-188**
Sample Date	**10/19/2022**	**10/19/2022**	**10/19/2022**	**10/19/2022**
Comments		**Field Duplicate**		

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	**MW-189**	**MW-190**	**MW-191**	**MW-192**
Sample Date	**10/20/2022**	**10/19/2022**	**10/17/2022**	**10/19/2022**
Comments				
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	0.28 J (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	0.69 J (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	0.29 J (0.12)	0.33 J (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	0.39 J (0.22)	0.86 J (0.22)	U (0.22)	U (0.22)
cis-1,2-Dichloroethene	7.0 (0.13)	4.7 (0.13)	U (0.13)	U (0.13)
trans-1,2-Dichloroethene	U (0.10)	U (0.10)	U (0.10)	U (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	221 (2.1)	319 (2.1)	2.8 (0.21)	U (0.21)
Vinyl Chloride	0.23 J (0.17)	0.28 J (0.17)	U (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	--	--	--	--
Iron, Ferrous	U	U	--	U
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	**MW-189**	**MW-190**	**MW-191**	**MW-192**
Sample Date	**10/20/2022**	**10/19/2022**	**10/17/2022**	**10/19/2022**
Comments				
Butyric acid	--	--	--	--
Organic Carbon (total)	--	--	--	--
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	--	--	--	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	MW-189	MW-190	MW-191	MW-192
Sample Date	10/20/2022	10/19/2022	10/17/2022	10/19/2022
Comments				
Gasses				
Acetylene	--	--	--	--
Methane	--	--	--	--
Ethane	--	--	--	--
Ethene	--	--	--	--
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalococcoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	200	420	260	7500
Depth to Water [ft BTOC]	25.63	21.72	16.21	16.02
Oxidation Reduction Potential [mV]	196.6	425.6	-214.1	290.5
pH (Field Analysis) [SU]	6.15	6.95	5.66	4.92
Specific Conductivity (Field Analysis) [uS/cm]	1410	786	234.8	140
Temperature (Field) [C]	20.9	21.3	22.5	23.1
Turbidity (Field Parameters) [NTU]	0.97	1.57	2.72	7.3

Notes:

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Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	MW-189	MW-190	MW-191	MW-192
Sample Date	10/20/2022	10/19/2022	10/17/2022	10/19/2022
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-198**	**MW-201**	**MW-203**	**MW-204**
Sample Date	**10/21/2022**	**10/19/2022**	**10/19/2022**	**10/20/2022**
Comments				
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	0.24 J (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	0.46 J (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	0.85 J (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	0.41 J (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	0.96 J (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	7.2 (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	0.49 J (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	1.1 (0.12)	U (0.12)	0.42 J (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (0.21)	UJ (0.21)
1,1-Dichloroethene	32.3 (0.22)	U (0.22)	0.65 J (0.22)	U (0.22)
cis-1,2-Dichloroethene	1720 (12.9)	U (0.13)	5.7 (0.13)	4.8 (0.13)
trans-1,2-Dichloroethene	45.6 (0.10)	U (0.10)	U (0.10)	UJ (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	9.9 (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	8.4 (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	0.50 J (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	18.3 (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	0.80 J (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	18800 (21.0)	U (0.21)	228 (2.1)	39.4 (0.21)
Vinyl Chloride	95.4 (0.17)	U (0.17)	U (0.17)	U (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	49.9 J (50.0)	--	--	--
Iron, Ferrous	U	240	U	30
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-198**	**MW-201**	**MW-203**	**MW-204**
Sample Date	**10/21/2022**	**10/19/2022**	**10/19/2022**	**10/20/2022**
Comments				
Butyric acid	--	--	--	--
Organic Carbon (total)	400 J (1000)	--	--	--
Organic Carbon (dissolved)	--	--	--	--
Chloride	--	--	--	--
Formic acid	--	--	--	--
Lactic Acid	--	--	--	--
Nitrate/Nitrite	1300 (100)	--	--	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	U (50)	--	--	--
Sulfate	191000 (10000)	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-198**	**MW-201**	**MW-203**	**MW-204**
Sample Date	**10/21/2022**	**10/19/2022**	**10/19/2022**	**10/20/2022**
Comments				
Gasses				
Acetylene	0.15 J (0.50)	--	--	--
Methane	17 J (5.0)	--	--	--
Ethane	3.5 (1.0)	--	--	--
Ethene	0.40 J (1.0)	--	--	--
HYDROGEN (H2) [nM]	1.1 J (1.9)	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	U (0.5)	--	--	--
Dehalocaccoides (DHC) [cells/mL]	U (0.5)	--	--	--
tceA Reductase [cells/mL]	U (0.5)	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	U (0.5)	--	--	--
Field Parameters				
Dissolved Oxygen	110	130	280	230
Depth to Water [ft BTOC]	10.06	21.56	24.29	21.32
Oxidation Reduction Potential [mV]	-198.9	-233.6	217	244.9
pH (Field Analysis) [SU]	5.8	5.76	5.53	5.79
Specific Conductivity (Field Analysis) [uS/cm]	1711	517.3	570	810
Temperature (Field) [C]	20.9	19	18.7	16.2
Turbidity (Field Parameters) [NTU]	7.61	2.13	1.06	57.5

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**MW-198**	**MW-201**	**MW-203**	**MW-204**
Sample Date	**10/21/2022**	**10/19/2022**	**10/19/2022**	**10/20/2022**
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	MW-206	RW-1	TMW-19	TMW-25
Sample Date	10/18/2022	10/20/2022	10/18/2022	10/19/2022
Comments				
Volatile Organic Compounds				
Acetone	U (2.5)	11.4 (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	1.3 (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	U (0.16)	0.25 J (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	2.2 (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	11.9 (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	U (0.12)	1.8 (0.12)	0.35 J (0.12)	U (0.12)
1,2-Dichloroethane	U (0.21)	0.58 J (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	U (0.22)	186 (0.22)	0.33 J (0.22)	U (0.22)
cis-1,2-Dichloroethene	0.58 J (0.13)	17100 (129)	2.7 (0.13)	0.81 J (0.13)
trans-1,2-Dichloroethene	U (0.10)	76.5 (0.10)	U (0.10)	U (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	0.42 J (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	3.2 (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	31.4 (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	6.8 (0.25)	U (0.25)	0.27 J (0.25)
1,1,1-Trichloroethane	U (0.11)	13.1 (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	3.1 (0.14)	U (0.14)	U (0.14)
Trichloroethene	3.9 (0.21)	82400 (210)	31.8 (0.21)	2.4 (0.21)
Vinyl Chloride	U (0.17)	U (167)	U (0.17)	0.60 J (0.17)
Xylenes (total)	U (0.28)	2.2 J (0.28)	U (0.28)	U (0.28)
Metals				
Iron	--	--	59.3 B (50.0)	17100 (50.0)
Iron, Ferrous	--	U	U	2090
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	--	--	2700 J (5000)	2000 J (5000)

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	**MW-206**	**RW-1**	**TMW-19**	**TMW-25**
Sample Date	**10/18/2022**	**10/20/2022**	**10/18/2022**	**10/19/2022**
Comments				
Butyric acid	--	--	U (5000)	660 J (5000)
Organic Carbon (total)	--	--	960 J (1000)	6800 (2000)
Organic Carbon (dissolved)	--	--	1200 (1000)	4300 (1000)
Chloride	--	--	104000 B (20000)	154000 J- (10000)
Formic acid	--	--	57000 (5000)	55000 (5000)
Lactic Acid	--	--	1700 J (5000)	4900 J (5000)
Nitrate/Nitrite	--	--	4600 (100)	U (100)
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	--	--	16000 (1000)	11100 (10000)

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	MW-206	RW-1	TMW-19	TMW-25
Sample Date	10/18/2022	10/20/2022	10/18/2022	10/19/2022
Comments				
Gasses				
Acetylene	--	--	--	--
Methane	--	--	8.0 (5.0)	13000 (5.0)
Ethane	--	--	U (1.0)	2.4 (1.0)
Ethene	--	--	0.27 J (1.0)	1.9 (1.0)
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalococcoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	1600	2100	210	2200
Depth to Water [ft BTOC]	18.4	9.83	25.59	15.49
Oxidation Reduction Potential [mV]	225.8	-105.3	462.1	-129.5
pH (Field Analysis) [SU]	5.82	7.43	6.01	6.74
Specific Conductivity (Field Analysis) [uS/cm]	593	1313	578	0.98
Temperature (Field) [C]	19.3	23.1	18.3	16.7
Turbidity (Field Parameters) [NTU]	7.7	11.18	1.22	10.37

Notes:

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Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	South Plume			
Location	MW-206	RW-1	TMW-19	TMW-25
Sample Date	10/18/2022	10/20/2022	10/18/2022	10/19/2022
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume			East Plume	
Location	TMW-36	TMW-36B	MW-185	MW-205
Sample Date	10/18/2022	10/18/2022	10/20/2022	10/19/2022
Comments				
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	0.19 J (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	U (0.089)	0.13 J (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	0.54 J (0.12)	U (0.12)	0.48 J (0.12)	0.93 J (0.12)
1,2-Dichloroethane	U (0.21)	U (0.21)	UJ (0.21)	U (0.21)
1,1-Dichloroethene	1.1 (0.22)	U (0.22)	3.5 (0.22)	2.7 (0.22)
cis-1,2-Dichloroethene	81.5 (0.13)	U (0.13)	8.9 (0.13)	102 (0.13)
trans-1,2-Dichloroethene	0.14 J (0.10)	U (0.10)	0.14 J (0.10)	0.39 J (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	1.2 (0.33)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	0.64 J (0.14)
Trichloroethene	86.7 (0.21)	U (0.21)	168 (1.0)	500 (2.1)
Vinyl Chloride	0.37 J (0.17)	U (0.17)	U (0.17)	0.32 J (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	5510 (50.0)	3610 (50.0)	73.6 (50.0)	--
Iron, Ferrous	--	--	--	U
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	2600 J (5000)	4200 J (10000)	260 J (500)	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume			East Plume	
Location	**TMW-36**	**TMW-36B**	**MW-185**	**MW-205**
Sample Date	**10/18/2022**	**10/18/2022**	**10/20/2022**	**10/19/2022**
Comments				
Butyric acid	630 J (5000)	U (10000)	U (500)	--
Organic Carbon (total)	990 J (1000)	380 J (1000)	U (1000)	--
Organic Carbon (dissolved)	1500 (1000)	910 J (1000)	420 J (1000)	--
Chloride	132000 (20000)	467000 (50000)	53300 B (10000)	--
Formic acid	60000 (5000)	110000 (10000)	5300 (500)	--
Lactic Acid	2300 J (5000)	2400 J (10000)	2100 (500)	--
Nitrate/Nitrite	750 (100)	860 (100)	5600 (200)	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	94100 (20000)	106000 (20000)	11700 (10000)	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume			East Plume	
Location	TMW-36	TMW-36B	MW-185	MW-205
Sample Date	10/18/2022	10/18/2022	10/20/2022	10/19/2022
Comments				
Gasses				
Acetylene	--	--	--	--
Methane	4700 (5.0)	72 (5.0)	U (5.0)	--
Ethane	0.69 J (1.0)	U (1.0)	U (1.0)	--
Ethene	U (1.0)	U (1.0)	U (1.0)	--
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalococcoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	270	210	430	140
Depth to Water [ft BTOC]	26.06	25.95	14.54	15.25
Oxidation Reduction Potential [mV]	1.3	48.1	583	527.9
pH (Field Analysis) [SU]	6.36	6.17	6.04	6.09
Specific Conductivity (Field Analysis) [uS/cm]	945	1983	369.3	355.4
Temperature (Field) [C]	18.4	18.9	21.9	21
Turbidity (Field Parameters) [NTU]	4.15	3.85	3.37	105

Notes:

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Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume			East Plume	
Location	TMW-36	TMW-36B	MW-185	MW-205
Sample Date	10/18/2022	10/18/2022	10/20/2022	10/19/2022
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**TMW-34**	**MW-186**	**MW-199**	**TMW-16**
Sample Date	**10/20/2022**	**10/18/2022**	**10/20/2022**	**10/18/2022**
Comments				
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	0.25 J (0.14)
Bromodichloromethane	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	U (0.68)	U (0.68)	U (0.68)	U (0.68)
Bromomethane	U (0.46)	U (0.46)	U (0.46)	U (0.46)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	U (0.089)	U (0.089)	0.79 J (0.089)	U (0.089)
Chloroethane	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	0.44 J (0.12)	U (0.12)	0.17 J (0.12)	U (0.12)
1,2-Dichloroethane	UJ (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	3.7 (0.22)	U (0.22)	U (0.22)	U (0.22)
cis-1,2-Dichloroethene	38.7 (0.13)	0.76 J (0.13)	10.2 (0.13)	0.57 J (0.13)
trans-1,2-Dichloroethene	0.17 J (0.10)	U (0.10)	U (0.10)	U (0.10)
1,3-Dichloropropene (total)	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)
Ethyl Benzene	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (0.74)	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	U (0.25)	0.62 J (0.25)	U (0.25)	0.52 J (0.25)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	151 (0.21)	0.49 J (0.21)	83.0 (0.21)	0.54 J (0.21)
Vinyl Chloride	U (0.17)	0.43 J (0.17)	U (0.17)	0.62 J (0.17)
Xylenes (total)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals				
Iron	1240 (50.0)	12000 (50.0)	--	6060 (50.0)
Iron, Ferrous	1200	6000	30	2980
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	2100 J (5000)	2400 J (5000)	--	2900 J (5000)

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**TMW-34**	**MW-186**	**MW-199**	**TMW-16**
Sample Date	**10/20/2022**	**10/18/2022**	**10/20/2022**	**10/18/2022**
Comments				
Butyric acid	640 J (5000)	590 J (5000)	--	1400 J (5000)
Organic Carbon (total)	350 J (1000)	7800 (1000)	--	7600 (1000)
Organic Carbon (dissolved)	1000 J (1000)	11400 (1000)	--	11600 (1000)
Chloride	49600 B (20000)	172000 (20000)	--	309000 (20000)
Formic acid	56000 (5000)	57000 (5000)	--	55000 (5000)
Lactic Acid	4000 J (5000)	4600 J (5000)	--	5000 J (5000)
Nitrate/Nitrite	2600 (100)	U (100)	--	U (100)
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	8900 (1000)	80200 (20000)	--	85100 (20000)

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**TMW-34**	**MW-186**	**MW-199**	**TMW-16**
Sample Date	**10/20/2022**	**10/18/2022**	**10/20/2022**	**10/18/2022**
Comments				
Gasses				
Acetylene	--	--	--	--
Methane	1100 (5.0)	16000 (5.0)	--	16000 (5.0)
Ethane	U (1.0)	0.91 J (1.0)	--	3.9 (1.0)
Ethene	U (1.0)	1.3 (1.0)	--	2.2 (1.0)
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalococcoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	120	1300	210	2100
Depth to Water [ft BTOC]	12.34	13.76	9.44	12.6
Oxidation Reduction Potential [mV]	-3.3	-132.4	165.6	-173.8
pH (Field Analysis) [SU]	6.28	7.02	6.09	7.12
Specific Conductivity (Field Analysis) [uS/cm]	457.7	1.61	820	1.6
Temperature (Field) [C]	23.1	17.7	20.5	18.1
Turbidity (Field Parameters) [NTU]	4.63	20.1	21.8	10.98

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume				
Location	**TMW-34**	**MW-186**	**MW-199**	**TMW-16**
Sample Date	**10/20/2022**	**10/18/2022**	**10/20/2022**	**10/18/2022**
Comments				

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Southwest Plume			
Location	**TMW-26**	**TMW-27**	**TMW-30**	**TMW-30**
Sample Date	**10/18/2022**	**10/18/2022**	**10/19/2022**	**10/19/2022**
Comments				**Field Duplicate**
Volatile Organic Compounds				
Acetone	U (2.5)	U (2.5)	U (50.8)	U (50.8)
Benzene	U (0.14)	U (0.14)	U (2.7)	U (2.7)
Bromodichloromethane	U (0.16)	U (0.16)	U (3.1)	U (3.1)
Bromoform	U (0.68)	U (0.68)	U (13.5)	U (13.5)
Bromomethane	U (0.46)	U (0.46)	U (9.2)	U (9.2)
Carbon Tetrachloride	U (0.17)	U (0.17)	U (3.4)	U (3.4)
Chlorobenzene	U (0.089)	U (0.089)	U (1.8)	U (1.8)
Chloroethane	U (0.37)	U (0.37)	U (7.5)	U (7.5)
Chloroform	U (0.22)	U (0.22)	U (4.4)	U (4.4)
Chloromethane	U (0.28)	U (0.28)	U (5.7)	U (5.7)
Dibromochloromethane	U (0.30)	U (0.30)	U (6.1)	U (6.1)
1,1-Dichloroethane	U (0.12)	U (0.12)	U (2.4)	U (2.4)
1,2-Dichloroethane	U (0.21)	U (0.21)	U (4.2)	U (4.2)
1,1-Dichloroethene	U (0.22)	U (0.22)	U (4.4)	U (4.4)
cis-1,2-Dichloroethene	0.53 J (0.13)	U (0.13)	U (2.6)	U (2.6)
trans-1,2-Dichloroethene	U (0.10)	U (0.10)	U (2.0)	U (2.0)
1,3-Dichloropropene (total)	U (0.18)	U (0.18)	U (3.6)	U (3.6)
trans-1,3-Dichloropropene	U (0.18)	U (0.18)	U (3.6)	U (3.6)
Ethyl Benzene	U (0.12)	U (0.12)	U (2.4)	U (2.4)
4-Methyl-2-pentanone	U (0.74)	U (0.74)	U (14.7)	U (14.7)
1,1,2,2-Tetrachloroethane	U (0.15)	U (0.15)	U (3.1)	U (3.1)
Tetrachloroethene	U (0.33)	U (0.33)	U (6.6)	U (6.6)
Toluene	1.7 (0.25)	U (0.25)	U (5.1)	U (5.1)
1,1,1-Trichloroethane	U (0.11)	U (0.11)	U (2.2)	U (2.2)
1,1,2-Trichloroethane	U (0.14)	U (0.14)	U (2.8)	U (2.8)
Trichloroethene	1.8 (0.21)	U (0.21)	7.2 J (4.2)	8.8 J (4.2)
Vinyl Chloride	0.74 J (0.17)	U (0.17)	U (3.3)	U (3.3)
Xylenes (total)	U (0.28)	U (0.28)	U (5.6)	U (5.6)
Metals				
Iron	13400 (50.0)	--	--	--
Iron, Ferrous	160	U	5100	--
Monitored Natural Attenuation Parameters (Lab				
Acetic acid	2600 J (5000)	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Southwest Plume			
Location	**TMW-26**	**TMW-27**	**TMW-30**	**TMW-30**
Sample Date	**10/18/2022**	**10/18/2022**	**10/19/2022**	**10/19/2022**
Comments				**Field Duplicate**
Butyric acid	1500 J (5000)	--	--	--
Organic Carbon (total)	11600 (1000)	--	--	--
Organic Carbon (dissolved)	17500 (1000)	--	--	--
Chloride	281000 (20000)	--	--	--
Formic acid	59000 (5000)	--	--	--
Lactic Acid	3800 J (5000)	--	--	--
Nitrate/Nitrite	U (100)	--	--	--
Sodium Persulfate	--	--	--	--
Sulfide (total)	--	--	--	--
Sulfate	138000 (20000)	--	--	--

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Southwest Plume			
Location	TMW-26	TMW-27	TMW-30	TMW-30
Sample Date	10/18/2022	10/18/2022	10/19/2022	10/19/2022
Comments				Field Duplicate
Gasses				
Acetylene	--	--	--	--
Methane	15000 (5.0)	--	--	--
Ethane	1.8 (1.0)	--	--	--
Ethene	1.6 (1.0)	--	--	--
HYDROGEN (H2) [nM]	--	--	--	--
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	--	--	--	--
Dehalocaccoides (DHC) [cells/mL]	--	--	--	--
tceA Reductase [cells/mL]	--	--	--	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--	--	--	--
Field Parameters				
Dissolved Oxygen	1400	90	30	--
Depth to Water [ft BTOC]	16.1	11.18	13.7	--
Oxidation Reduction Potential [mV]	-134.6	297.3	-128.7	--
pH (Field Analysis) [SU]	6.85	5.44	7.11	--
Specific Conductivity (Field Analysis) [uS/cm]	1.87	355	2764	--
Temperature (Field) [C]	17.6	16.8	15.9	--
Turbidity (Field Parameters) [NTU]	15.6	9.61	718	--

Notes:

1 All concentrations are presented in ug/L (ppb), unless otherwise noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	Southwest Plume			
Location	TMW-26	TMW-27	TMW-30	TMW-30
Sample Date	10/18/2022	10/18/2022	10/19/2022	10/19/2022
Comments				Field Duplicate

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	
Location	**TMW-32**
Sample Date	**10/20/2022**
Comments	
Volatile Organic Compounds	
Acetone	U (2.5)
Benzene	U (0.14)
Bromodichloromethane	U (0.16)
Bromoform	U (0.68)
Bromomethane	U (0.46)
Carbon Tetrachloride	U (0.17)
Chlorobenzene	1.2 (0.089)
Chloroethane	U (0.37)
Chloroform	U (0.22)
Chloromethane	U (0.28)
Dibromochloromethane	U (0.30)
1,1-Dichloroethane	U (0.12)
1,2-Dichloroethane	UJ (0.21)
1,1-Dichloroethene	2.7 (0.22)
cis-1,2-Dichloroethene	6.1 (0.13)
trans-1,2-Dichloroethene	UJ (0.10)
1,3-Dichloropropene (total)	0.35 J (0.18)
trans-1,3-Dichloropropene	0.35 J (0.18)
Ethyl Benzene	U (0.12)
4-Methyl-2-pentanone	U (0.74)
1,1,2,2-Tetrachloroethane	U (0.15)
Tetrachloroethene	U (0.33)
Toluene	U (0.25)
1,1,1-Trichloroethane	U (0.11)
1,1,2-Trichloroethane	U (0.14)
Trichloroethene	17.0 (0.21)
Vinyl Chloride	0.28 J (0.17)
Xylenes (total)	U (0.28)
Metals	
Iron	5690 (50.0)
Iron, Ferrous	4900
Monitored Natural Attenuation Parameters (Lab	
Acetic acid	1800 J (5000)

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	
Location	**TMW-32**
Sample Date	**10/20/2022**
Comments	
Butyric acid	670 J (5000)
Organic Carbon (total)	770 J (1000)
Organic Carbon (dissolved)	1700 (1000)
Chloride	85000 (10000)
Formic acid	56000 (5000)
Lactic Acid	4100 J (5000)
Nitrate/Nitrite	U (100)
Sodium Persulfate	--
Sulfide (total)	--
Sulfate	37400 (10000)

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	
Location	**TMW-32**
Sample Date	**10/20/2022**
Comments	
Gasses	
Acetylene	--
Methane	3000 (5.0)
Ethane	0.57 J (1.0)
Ethene	0.36 J (1.0)
HYDROGEN (H2) [nM]	--
Molecular Analyses	
BAV1 Vinyl Chloride Reductase [cells/mL]	--
Dehalococcoides (DHC) [cells/mL]	--
tceA Reductase [cells/mL]	--
Vinyl Chloride Reductase (vrcA) [cells/mL]	--
Field Parameters	
Dissolved Oxygen	100
Depth to Water [ft BTOC]	11.4
Oxidation Reduction Potential [mV]	-30.7
pH (Field Analysis) [SU]	6.35
Specific Conductivity (Field Analysis) [uS/cm]	742
Temperature (Field) [C]	17.5
Turbidity (Field Parameters) [NTU]	3.79

Notes:

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Abbreviations:

µg = Micrograms per liter
ppb = Parts per billion
btoc = Below top of casing
VOC = Volatile organic compound
U = Not detected
J = Estimated concentration

TABLE 7
Summary of Groundwater Sampling Analytical Results
Whirlpool, Fort Smith, AR

Plume	
Location	**TMW-32**
Sample Date	**10/20/2022**
Comments	

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.
R = RPD value was outside control limits
RA = Remedial action decision document
AD = Arkansas Department of Environmental Quality
µg/L = Micrograms per Liter
NE = Not established
NM = Not measured

TABLE 8
SUMMARY OF TREND ANALYSIS (2009 - 2022)
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 Detects**	**P-value**	**Trend Result**	**Test Statistic (S)**	**Number of Detects**	**P-value**	**Trend Result**	**Test Statistic (S)**	**Number of Detects**	**P-value**	**Trend Result**
Northern Plume Wells															
IW-73	4/23/2009	10/21/2022	29	57	29	1.47E-01	No Trend	5	29	4.70E-01	No Trend	-101	18	2.36E-02	Decreasing
IW-77	4/23/2009	10/20/2022	41	-258	41	1.94E-03	Decreasing	-257	41	2.01E-03	Decreasing	-385	4	2.61E-06	Decreasing
IW-78	10/25/2011	10/20/2022	16	-45	16	2.37E-02	Decreasing	-44	10	2.54E-02	Decreasing	7	0	3.89E-01	No Trend
MW-194	8/5/2016	10/19/2022	15	-62	15	1.25E-03	Decreasing	55	13	3.69E-03	Increasing	33	0	4.55E-02	No Trend
MW-195	8/5/2016	10/18/2022	14	61	6	1.25E-04	Increasing	45	1	5.69E-03	Increasing	29	0	5.29E-02	No Trend
MW-196	8/5/2016	10/18/2022	14	34	2	2.18E-02	Increasing	35	0	2.48E-02	Increasing	29	0	5.29E-02	No Trend
MW-39/MW-39R	4/24/2009	10/17/2022	30	-224	3	1.75E-05	Decreasing	-182	0	4.17E-04	Decreasing	-122	0	1.27E-02	Decreasing
MW-40/MW-40R	4/24/2009	10/19/2022	34	-322	5	5.89E-07	Decreasing	-309	2	1.60E-06	Decreasing	-177	0	3.56E-03	Decreasing
MW-46R	4/25/2009	10/20/2022	37	-4	36	4.84E-01	No Trend	162	36	1.75E-02	Increasing	-170	24	1.03E-02	Decreasing
MW-50/MW-50R	4/24/2009	10/18/2022	31	-19	16	3.79E-01	No Trend	-179	1	9.02E-04	Decreasing	-139	0	7.65E-03	Decreasing
MW-55/MW-55R	4/24/2009	10/19/2022	25	170	24	3.89E-05	Increasing	-9	14	4.25E-01	No Trend	-50	8	1.23E-01	No Trend
MW-56/MW-56R	4/24/2009	10/20/2022	26	169	26	1.06E-04	Increasing	127	24	2.73E-03	Increasing	-45	14	1.65E-01	No Trend
MW-57/MW-57R	4/24/2009	10/20/2022	28	144	28	2.35E-03	Increasing	178	28	2.35E-04	Increasing	-23	14	3.31E-01	No Trend
MW-58/MW-58R	4/25/2009	10/20/2022	27	-248	26	1.28E-07	Decreasing	-120	27	6.54E-03	Decreasing	-253	22	6.99E-08	Decreasing
MW-60/MW-60R	4/24/2009	10/17/2022	31	-231	4	3.11E-05	Decreasing	-181	0	8.00E-04	Decreasing	-119	0	1.92E-02	Decreasing
MW-61/MW-61R	4/24/2009	10/19/2022	35	193	31	3.16E-03	Increasing	5	18	4.77E-01	No Trend	-90	3	9.24E-02	No Trend
MW-62/MW-62R	4/24/2009	10/17/2022	30	-219	4	3.02E-05	Decreasing	-166	1	1.26E-03	Decreasing	-94	0	4.31E-02	Decreasing
MW-63/MW-63R	4/24/2009	10/19/2022	31	-111	30	3.07E-02	Decreasing	-154	22	4.49E-03	Decreasing	-139	1	8.04E-03	Decreasing
MW-68	1/15/2009	10/18/2022	31	-214	5	9.70E-05	Decreasing	-189	0	4.88E-04	Decreasing	-139	0	7.65E-03	Decreasing
MW-82	5/28/2014	10/19/2022	16	4	15	4.46E-01	No Trend	-8	13	3.76E-01	No Trend	-36	1	4.75E-02	No Trend
RW-69	1/15/2009	10/19/2022	36	-297	36	2.75E-05	Decreasing	-34	35	3.26E-01	No Trend	-145	15	1.98E-02	Decreasing
TMW-10	9/18/2015	10/19/2022	20	-160	20	1.24E-07	Decreasing	-56	19	3.72E-02	Decreasing	112	12	1.10E-04	Increasing
TMW-11	9/18/2015	10/19/2022	19	-113	15	4.25E-05	Decreasing	-83	16	2.04E-03	Decreasing	39	7	8.53E-02	No Trend
TMW-12	4/27/2017	10/20/2022	11	-35	11	4.06E-03	Decreasing	-42	11	6.83E-04	Decreasing	-26	11	2.55E-02	Decreasing
TMW-14	4/27/2017	10/19/2022	9	-4	9	3.77E-01	No Trend	23	6	1.05E-02	Increasing	7	0	2.56E-01	No Trend
TMW-20	10/10/2017	10/18/2022	10	16	1	6.35E-02	No Trend	22	1	2.53E-02	Increasing	13	0	1.31E-01	No Trend
TMW-21	10/10/2017	10/18/2022	14	-65	14	2.29E-04	Decreasing	-40	14	1.62E-02	Decreasing	39	11	1.81E-02	Increasing
TMW-22/TMW-22R	10/13/2017	10/20/2022	13	-60	13	1.59E-04	Decreasing	26	13	6.36E-02	No Trend	43	9	4.94E-03	Increasing
TMW-23	10/13/2017	10/20/2022	12	22	12	7.49E-02	No Trend	52	12	2.21E-04	Increasing	17	0	1.26E-01	No Trend
TMW-24	10/10/2017	10/20/2022	12	-14	12	1.86E-01	No Trend	5	12	3.92E-01	No Trend	-18	7	1.20E-01	No Trend
TMW-29	10/12/2017	10/17/2022	12	29	1	1.84E-02	Increasing	19	0	1.01E-01	No Trend	21	0	7.78E-02	No Trend
TMW-35	10/22/2019	10/18/2022	5	3	0	3.07E-01	No Trend	-7	0	6.48E-02	No Trend	5	0	1.56E-01	No Trend
Northeast Plume Wells															
MW-183/MW-183R	10/6/2015	10/18/2022	16	-75	15	4.26E-04	Decreasing	-64	6	2.15E-03	Decreasing	40	0	2.81E-02	Increasing
MW-184	10/5/2015	10/18/2022	16	54	5	4.08E-03	Increasing	45	0	1.61E-02	Increasing	40	0	2.81E-02	Increasing
MW-87	6/25/2014	10/20/2022	17	-57	17	1.05E-02	Decreasing	-80	17	5.69E-04	Decreasing	-43	9	4.11E-02	Decreasing
MW-89	6/24/2014	10/18/2022	15	-68	15	4.51E-04	Decreasing	25	10	1.12E-01	No Trend	-29	0	6.84E-02	No Trend
MW-91	6/25/2014	10/18/2022	21	-47	21	8.23E-02	No Trend	98	21	1.70E-03	Increasing	17	17	3.14E-01	No Trend
MW-96	10/22/2014	10/17/2022	20	3	1	4.71E-01	No Trend	0	0	N/A	No Trend	-24	0	2.15E-01	No Trend
MW-97	10/22/2014	10/17/2022	20	-8	0	4.01E-01	No Trend	-4	1	4.60E-01	No Trend	-10	0	3.79E-01	No Trend
MW-98	10/29/2014	10/17/2022	20	-4	5	4.60E-01	No Trend	-6	1	4.33E-01	No Trend	-10	0	3.79E-01	No Trend
MW-99	10/22/2014	10/19/2022	19	44	10	6.38E-02	No Trend	73	10	5.09E-03	Increasing	-11	0	3.57E-01	No Trend
MW-200	7/14/2020	10/18/2022	6	13	4	1.21E-02	Increasing	2	2	4.24E-01	No Trend	-1	0	5.00E-01	No Trend
MW-202	7/15/2020	10/20/2022	6	15	6	4.27E-03	Increasing	15	6	4.27E-03	Increasing	-1	0	5.00E-01	No Trend
East Plume Wells															
MW-185	9/16/2015	10/20/2022	18	131	15	3.89E-07	Increasing	119	11	1.90E-06	Increasing	63	3	4.73E-03	Increasing
MW-205	10/21/2021	10/19/2022	3	--	3	--	Insufficient Data	--	3	--	Insufficient Data	--	3	--	Insufficient Data
TMW-34	11/14/2018	10/20/2022	9	28	9	2.44E-03	Increasing	22	9	1.43E-02	Increasing	9	0	1.95E-01	No Trend

TABLE 8
SUMMARY OF TREND ANALYSIS (2009 - 2022)
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 Detects	P-value	Trend Result	Test Statistic (S)	Number of Detects	P-value	Trend Result	Test Statistic (S)	Number of Detects	P-value	Trend Result
South Plume Wells															
ITMW-1/ITMW-1R	10/27/2011	10/19/2022	22	-5	22	4.55E-01	No Trend	5	22	4.55E-01	No Trend	6	1	4.41E-01	No Trend
ITMW-10	4/27/2009	10/21/2022	28	89	28	4.10E-02	Increasing	-273	28	3.83E-08	Decreasing	-298	28	2.14E-09	Decreasing
ITMW-16	11/6/2010	10/19/2021	22	-141	2	1.86E-05	Decreasing	-113	1	4.78E-04	Decreasing	-34	0	1.65E-01	No Trend
ITMW-18	4/27/2009	10/20/2022	26	-169	26	1.07E-04	Decreasing	-172	25	8.08E-05	Decreasing	-192	7	8.61E-06	Decreasing
ITMW-19	4/27/2009	10/20/2022	27	-167	27	2.68E-04	Decreasing	-175	23	1.39E-04	Decreasing	-205	7	7.95E-06	Decreasing
ITMW-2/ITMW-2R	11/3/2010	10/18/2022	23	-135	8	1.72E-04	Decreasing	-104	7	3.09E-03	Decreasing	-29	0	2.20E-01	No Trend
ITMW-20	10/29/2009	10/17/2022	31	-223	4	5.19E-05	Decreasing	-184	0	6.77E-04	Decreasing	-100	1	4.22E-02	Decreasing
ITMW-21	10/27/2009	10/19/2022	31	-250	31	1.15E-05	Decreasing	-64	16	1.41E-01	No Trend	-75	0	9.70E-02	No Trend
ITMW-5	4/27/2009	10/20/2022	22	146	22	2.15E-05	Increasing	-63	22	4.02E-02	Decreasing	-100	15	2.34E-03	Decreasing
ITMW-7	4/27/2009	10/19/2022	32	-398	32	6.06E-11	Decreasing	-381	32	3.45E-10	Decreasing	-283	13	2.17E-06	Decreasing
ITMW-9	4/27/2009	10/21/2022	30	185	30	5.10E-04	Increasing	55	30	1.68E-01	No Trend	-92	26	5.19E-02	No Trend
MW-182	7/23/2015	10/19/2022	14	-73	14	4.05E-05	Decreasing	-82	14	4.48E-06	Decreasing	-34	5	3.42E-02	Decreasing
MW-187	9/14/2015	10/19/2022	17	114	13	1.37E-06	Increasing	118	15	6.90E-07	Increasing	49	1	1.54E-02	Increasing
MW-188	9/17/2015	10/19/2022	17	82	8	1.41E-04	Increasing	82	7	1.41E-04	Increasing	41	0	3.56E-02	No Trend
MW-189	9/17/2015	10/20/2022	17	68	17	2.89E-03	Increasing	3	17	4.67E-01	No Trend	26	14	1.51E-01	No Trend
MW-190	9/14/2015	10/19/2022	17	83	7	7.08E-05	Increasing	94	7	1.52E-05	Increasing	54	2	8.62E-03	Increasing
MW-191	9/15/2015	10/17/2022	17	52	2	6.59E-03	Increasing	59	0	4.45E-03	Increasing	41	0	3.56E-02	No Trend
MW-192	9/16/2015	10/19/2022	17	38	3	4.24E-02	No Trend	59	0	4.45E-03	Increasing	41	0	3.56E-02	No Trend
MW-22	10/27/2009	10/18/2022	24	-132	2	3.35E-04	Decreasing	-136	0	2.58E-04	Decreasing	-49	0	1.08E-01	No Trend
MW-24	4/27/2009	10/20/2022	27	-194	27	2.84E-05	Decreasing	-203	20	1.23E-05	Decreasing	-155	1	4.23E-04	Decreasing
MW-24	4/27/2009	10/20/2022	27	-194	27	2.84E-05	Decreasing	-203	20	1.23E-05	Decreasing	-155	1	4.23E-04	Decreasing
MW-25/MW-25R	4/27/2009	10/20/2022	30	-109	30	2.70E-02	Decreasing	-48	29	2.01E-01	No Trend	-88	23	6.02E-02	No Trend
MW-26	10/29/2009	10/17/2022	31	-208	7	1.79E-04	Decreasing	-184	0	6.77E-04	Decreasing	-78	0	8.84E-02	No Trend
MW-27	5/12/2010	10/18/2022	24	-18	16	3.36E-01	No Trend	-33	9	2.11E-01	No Trend	-49	0	1.08E-01	No Trend
MW-28	10/29/2009	10/18/2022	26	-202	4	2.65E-06	Decreasing	-176	0	3.32E-05	Decreasing	-89	0	2.23E-02	Decreasing
MW-29	10/29/2009	10/17/2022	29	-207	2	3.21E-05	Decreasing	-148	1	2.32E-03	Decreasing	-23	0	3.34E-01	No Trend
MW-38	10/26/2011	10/20/2022	27	-27	27	2.94E-01	No Trend	-116	27	8.24E-03	Decreasing	-109	25	1.22E-02	Decreasing
MW-83	5/23/2014	10/19/2022	18	-51	18	2.91E-02	Decreasing	-48	12	3.46E-02	Decreasing	-27	0	1.36E-01	No Trend
MW-84	5/27/2014	10/19/2022	23	82	15	1.53E-02	Increasing	-30	1	2.13E-01	No Trend	-36	1	1.68E-01	No Trend
MW-93	10/22/2014	10/20/2022	20	-112	20	1.58E-04	Decreasing	-107	20	2.90E-04	Decreasing	-77	20	6.81E-03	Decreasing
MW-95	10/22/2014	10/21/2022	21	19	21	2.93E-01	No Trend	134	21	2.91E-05	Increasing	-86	19	5.13E-03	Decreasing
MW-198	10/8/2020	10/21/2022	5	-2	5	4.03E-01	No Trend	0	5	N/A	No Trend	4	5	2.31E-01	No Trend
MW-201	7/15/2020	10/19/2022	6	-1	0	5.00E-01	No Trend	-11	0	1.99E-02	Decreasing	-1	0	5.00E-01	No Trend
MW-203	9/25/2020	10/19/2022	5	8	5	4.32E-02	Increasing	8	4	4.32E-02	Increasing	-6	0	7.45E-02	No Trend
MW-204	9/25/2020	10/20/2022	6	-3	6	3.54E-01	No Trend	8	6	9.03E-02	No Trend	-9	0	4.04E-02	No Trend
MW-206	10/20/2021	10/18/2022	3	--	3	--	Insufficient Data	--	3	--	Insufficient Data	--	0	--	Insufficient Data
RW-1	10/22/2021	10/20/2022	2	--	2	--	Insufficient Data	--	2	--	Insufficient Data	--	1	--	Insufficient Data
TMW-19	4/25/2017	10/18/2022	12	54	11	1.39E-04	Increasing	49	10	4.85E-04	Increasing	21	0	7.78E-02	No Trend
TMW-25	10/11/2017	10/19/2022	12	-52	12	2.35E-04	Decreasing	-38	12	5.59E-03	Decreasing	15	9	1.68E-01	No Trend
TMW-36	10/24/2019	10/18/2022	7	-13	7	3.58E-02	Decreasing	11	7	6.66E-02	No Trend	-5	5	2.74E-01	No Trend
TMW-36B	7/15/2020	10/18/2022	6	-1	0	5.00E-01	No Trend	-11	0	1.99E-02	Decreasing	-1	0	5.00E-01	No Trend
Southern Plume Wells															
MW-186	9/14/2015	10/18/2022	19	-30	19	1.55E-01	No Trend	-14	18	3.25E-01	No Trend	97	12	3.45E-04	Increasing
MW-199	7/15/2020	10/20/2022	7	5	7	2.74E-01	No Trend	18	7	4.90E-03	Increasing	-17	4	5.54E-03	Decreasing
TMW-16	4/25/2017	10/18/2022	13	-56	13	3.96E-04	Decreasing	-25	13	7.12E-02	No Trend	1	12	5.00E-01	No Trend
TMW-26	10/11/2017	10/18/2022	14	-59	14	7.49E-04	Decreasing	-19	12	1.61E-01	No Trend	39	9	1.81E-02	Increasing
TMW-27	10/11/2017	10/18/2022	11	3	1	4.32E-01	No Trend	23	0	3.45E-02	Increasing	15	0	1.24E-01	No Trend
TMW-30	10/13/2017	10/19/2022	11	33	8	6.37E-03	Increasing	34	6	4.99E-03	Increasing	27	1	2.00E-02	Increasing
TMW-32	4/3/2018	10/20/2022	12	-26	12	4.32E-02	Decreasing	8	12	3.16E-01	No Trend	22	8	7.27E-02	No Trend

TABLE 9
INDOOR AND OUTDOOR AIR SAMPLING RESULTS
(October 2022)
Whirlpool Facility - Fort Smith, Arkansas

Location		Z1-1	Z2-1	Z3-1	Z3-2	Z4-1	Z4-2	Z5-1	Z5-2	Z5-OF	Z6-1	Z6-2	Z6-2	AA	AA
Field Sample ID	Industrial Air RSL	Z1-1-IA-11022022	Z2-1-IA-112022	Z3-1-IA-112022	Z3-2-IA-112022	Z4-1-IA-112022	Z4-2-IA-112022	Z5-1-IA-112022	Z5-2-IA-112022	Z5-OF-IA-112022	Z6-1-IA-112022	Z6-2-IA-112022	DUP-Z6-2-IA-112022	AA-1-IA-112022	AA-2-11022022
Lab Sample ID	TR = 1E-5,	10632583005	10632342004	10632342002	10632342003	10632342005	10632342001	10632342010	10632342006	10632342009	10632342011	10632342007	10632342008	10632342012	10632583001
Sample Date	THQ = 0.1	11/02/2022	11/01/2022	11/01/2022	11/01/2022	11/01/2022	11/01/2022	11/01/2022	11/01/2022	11/01/2022	11/01/2022	11/01/2022	11/01/2022	11/01/2022	11/02/2022
Comments													Field Duplicate		
VOC															
1,1-Dichloroethane	77	U (0.11)	U (0.13)	U (0.14)	U (0.13)	U (0.13)	U (0.13)	U (0.13)	U (0.12)	U (0.13)	U (0.13)	U (0.11)	U (0.11)	U (0.13)	U (0.14)
1,2-Dichloroethane	3.1	0.55 (0.11)	U (0.13)	0.42 (0.14)	U (0.13)	0.36 (0.13)	U (0.13)	U (0.13)	U (0.12)	0.28 (0.13)	U (0.13)	U (0.11)	U (0.11)	U (0.13)	U (0.14)
1,1-Dichloroethene	88	U (0.11)	U (0.13)	U (0.14)	U (0.12)	U (0.13)	U (0.13)	U (0.13)	U (0.11)	U (0.12)	U (0.13)	U (0.11)	U (0.11)	U (0.13)	U (0.14)
cis-1,2-Dichloroethene	18	U (0.11)	U (0.13)	U (0.14)	U (0.12)	U (0.13)	U (0.13)	0.2 (0.13)	0.13 (0.11)	0.34 (0.12)	0.21 (0.13)	U (0.11)	U (0.11)	U (0.13)	U (0.14)
trans-1,2-Dichloroethene	18	0.66 (0.11)	U (0.13)	0.52 (0.14)	U (0.12)	0.93 (0.13)	U (0.13)	0.35 (0.13)	1.2 (0.11)	0.86 (0.12)	0.33 (0.13)	1 (0.11)	1.1 (0.11)	0.98 (0.13)	0.18 (0.14)
Tetrachloroethene	18	1.1 (0.092)	1.1 (0.11)	0.73 (0.12)	0.93 (0.1)	0.7 (0.11)	1.1 (0.11)	0.91 (0.11)	0.51 (0.097)	0.34 (0.1)	0.95 (0.11)	0.53 (0.094)	0.39 (0.094)	U (0.11)	U (0.12)
1,1,1-Trichloroethane	2200	U (0.15)	U (0.18)	U (0.19)	U (0.17)	U (0.18)	U (0.18)	U (0.18)	U (0.16)	U (0.17)	U (0.18)	U (0.15)	U (0.15)	U (0.18)	U (0.19)
Trichloroethene	0.88	0.74 (0.073)	1 (0.086)	0.84 (0.093)	0.77 (0.083)	1.1 (0.086)	1 (0.088)	2.4 (0.086)	4.6 (0.086)	0.47 (0.083)	2.5 (0.086)	3.4 (0.077)	3.3 (0.074)	U (0.086)	U (0.092)
Vinyl Chloride	28	U (0.035)	U (0.041)	U (0.044)	U (0.04)	U (0.041)	U (0.042)	U (0.041)	U (0.037)	U (0.04)	U (0.041)	U (0.035)	U (0.035)	U (0.041)	U (0.044)

Notes:

1 All concentrations are presented in micrograms per cubic meter (µg/m^3).

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

Abbreviations:

U -- Not Detected.
( ) -- Reporting Detection Limit.
RSL -- Regional Screening Level.
Z5-OF - Z5 Office
AA -- Ambient Air

TABLE 10
SUB-SLAB SOIL VAPOR SAMPLING RESULTS (October 2022)
Whirlpool Facility - Fort Smith, Arkansas

Location	Industrial SSV RSL TR = 1E-5, THQ = 0.1	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		Z1-1-SS-11022022	Z2-1-SS-11022022	Z3-1-SS-11022022	Z3-2-SS-11022022	Z4-1-SS-11022022	Z4-2-SS-11022022	Z5-1-SS-11022022	Z5-2-SS-11022022	5-OF-SS-11022022	Z6-1-SS-11022022	Z6-2-SS-11022022	DUP-Z6-2-SS-11022022
Lab Sample ID		10632583010	10632583013	10632583009	10632583011	10632583014	10632583012	10632583016	10632583006	10632583017	10632583015	10632583007	10632583008
Sample Date		11/2/2022	11/2/2022	11/2/2022	11/2/2022	11/2/2022	11/2/2022	11/2/2022	11/2/2022	11/2/2022	11/2/2022	11/2/2022	11/2/2022
Comments													Field Duplicate
VOC													
1,1-Dichloroethane	2600	U (1.5)	U (356)	U (5910)	U (7.2)	U (46.2)	1.9 (1.5)	21.6 (3.2)	U (14.3)	U (1.6)	U (399)	U (1.6)	U (1.6)
1,2-Dichloroethane	100	U (1.5)	U (356)	U (5910)	U (7.2)	U (46.2)	U (1.5)	U (3.2)	U (14.3)	U (1.6)	U (399)	U (1.6)	U (1.6)
1,1-Dichloroethene	2900	U (1.5)	U (348)	U (5790)	U (7)	U (45.2)	U (1.5)	U (3.1)	U (14)	U (1.6)	U (391)	U (1.6)	U (1.6)
cis-1,2-Dichloroethene	600	U (1.5)	U (348)	U (5790)	U (7)	U (45.2)	U (1.5)	U (3.1)	U (14)	U (1.6)	U (391)	U (1.6)	U (1.6)
trans-1,2-Dichloroethene	600	U (1.5)	U (348)	U (5790)	U (7)	U (45.2)	U (1.5)	U (3.1)	U (14)	U (1.6)	U (391)	U (1.6)	U (1.6)
Tetrachloroethene	600	30.8 (1.2)	12300 (298)	7830 (4950)	546 (6)	1970 (38.7)	3.2 (1.2)	148 (2.7)	U (12)	5.7 (1.3)	U (334)	1.4 (1.3)	U (1.3)
1,1,1-Trichloroethane	73000	3.3 (2)	U (480)	U (7970)	U (9.7)	U (62.3)	4 (2)	274 (4.3)	U (19.3)	U (2.2)	3260 (538)	U (2.2)	U (2.2)
Trichloroethene	29	13.7 (0.98)	U (236)	U (3920)	200 (4.8)	64.7 (30.6)	4 (0.98)	46.3 (2.1)	184 (9.5)	48.9 (1.1)	U (265)	14.4 (1.1)	14 (1.1)
Vinyl Chloride	930	U (0.47)	U (112)	41200 (1870)	U (2.3)	U (14.6)	U (0.47)	U (1)	U (4.5)	U (0.5)	U (126)	U (0.5)	U (0.5)

Notes:

1 All concentrations presented in micrograms per cubic meter ($\mu g/m^3$).

2 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.
RSL -- Regional Screening Level.
SSV - Sub-slab Vapor.

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 May 2020

ug/mg = micrograms per milligram

mg/m^3 = milligrams per cubic meter

$\mu g/m^3$ = micrograms per cubic meter

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).

TABLE 13
INDOOR AIR HUMAN HEALTH RISKS (November 2022)
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 (0.11)	4.5E-06	1.3E-05	NA	2.5E-05
1,2-Dichloroethane	0.55 (0.11)	4.5E-05	1.3E-04	1.2E-06	1.8E-02
1,1-Dichloroethene	U (0.11)	4.5E-06	1.3E-05	NA	6.3E-05
cis-1,2-Dichloroethene	U (0.11)	4.5E-06	1.3E-05	NA	3.1E-04
trans-1,2-Dichloroethene	0.66 (0.11)	5.4E-05	1.5E-04	NA	NA
Tetrachloroethene	1.1 (0.092)	9.0E-05	2.5E-04	2.3E-08	6.3E-03
1,1,1-Trichloroethane	U (0.15)	6.1E-06	1.7E-05	NA	3.4E-06
Trichloroethene	0.74 (0.073)	6.0E-05	1.7E-04	2.5E-07	8.4E-02
Vinyl Chloride	U (0.035)	1.4E-06	4.0E-06	6.3E-09	4.0E-05
			Summed Risk	1E-06	1E-01

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 (0.13)	5.3E-06	1.5E-05	NA	3.0E-05
1,2-Dichloroethane	U (0.13)	5.3E-06	1.5E-05	1.4E-07	2.1E-03
1,1-Dichloroethene	U (0.13)	5.3E-06	1.5E-05	NA	7.4E-05
cis-1,2-Dichloroethene	U (0.13)	5.3E-06	1.5E-05	NA	3.7E-04
trans-1,2-Dichloroethene	U (0.13)	5.3E-06	1.5E-05	NA	NA
Tetrachloroethene	1.1 (0.11)	9.0E-05	2.5E-04	2.3E-08	6.3E-03
1,1,1-Trichloroethane	U (0.18)	7.3E-06	2.1E-05	NA	4.1E-06
Trichloroethene	1 (0.086)	8.2E-05	2.3E-04	3.3E-07	1.1E-01
Vinyl Chloride	U (0.041)	1.7E-06	4.7E-06	7.4E-09	4.7E-05
			Summed Risk	5E-07	1E-01

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 (0.14)	5.7E-06	1.6E-05	NA	3.2E-05
1,2-Dichloroethane	0.42 (0.14)	3.4E-05	9.6E-05	8.9E-07	1.4E-02
1,1-Dichloroethene	U (0.14)	5.7E-06	1.6E-05	NA	8.0E-05
cis-1,2-Dichloroethene	U (0.14)	5.7E-06	1.6E-05	NA	4.0E-04
trans-1,2-Dichloroethene	0.52 (0.14)	4.2E-05	1.2E-04	NA	NA
Tetrachloroethene	0.73 (0.12)	6.0E-05	1.7E-04	1.5E-08	4.2E-03
1,1,1-Trichloroethane	U (0.19)	7.7E-06	2.2E-05	NA	4.3E-06
Trichloroethene	0.84 (0.093)	6.8E-05	1.9E-04	2.8E-07	9.6E-02
Vinyl Chloride	U (0.044)	1.8E-06	5.0E-06	7.9E-09	5.0E-05
			Summed Risk	1E-06	1E-01

TABLE 13
INDOOR AIR HUMAN HEALTH RISKS (November 2022)
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 (0.13)	5.3E-06	1.5E-05	NA	3.0E-05
1,2-Dichloroethane	U (0.13)	5.3E-06	1.5E-05	1.4E-07	2.1E-03
1,1-Dichloroethene	U (0.12)	4.9E-06	1.4E-05	NA	6.8E-05
cis-1,2-Dichloroethene	U (0.12)	4.9E-06	1.4E-05	NA	3.4E-04
trans-1,2-Dichloroethene	U (0.12)	4.9E-06	1.4E-05	NA	NA
Tetrachloroethene	0.93 (0.1)	7.6E-05	2.1E-04	2.0E-08	5.3E-03
1,1,1-Trichloroethane	U (0.17)	6.9E-06	1.9E-05	NA	3.9E-06
Trichloroethene	0.77 (0.083)	6.3E-05	1.8E-04	2.6E-07	8.8E-02
Vinyl Chloride	U (0.04)	1.6E-06	4.6E-06	7.2E-09	4.6E-05
			Summed Risk	4E-07	1E-01

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 (0.13)	5.3E-06	1.5E-05	NA	3.0E-05
1,2-Dichloroethane	0.36 (0.13)	2.9E-05	8.2E-05	7.6E-07	1.2E-02
1,1-Dichloroethene	U (0.13)	5.3E-06	1.5E-05	NA	7.4E-05
cis-1,2-Dichloroethene	U (0.13)	5.3E-06	1.5E-05	NA	3.7E-04
trans-1,2-Dichloroethene	0.93 (0.13)	7.6E-05	2.1E-04	NA	NA
Tetrachloroethene	0.7 (0.11)	5.7E-05	1.6E-04	1.5E-08	4.0E-03
1,1,1-Trichloroethane	U (0.18)	7.3E-06	2.1E-05	NA	4.1E-06
Trichloroethene	1.1 (0.086)	9.0E-05	2.5E-04	3.7E-07	1.3E-01
Vinyl Chloride	U (0.041)	1.7E-06	4.7E-06	7.4E-09	4.7E-05
			Summed Risk	1E-06	1E-01

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 (0.13)	5.3E-06	1.5E-05	NA	3.0E-05
1,2-Dichloroethane	U (0.13)	5.3E-06	1.5E-05	1.4E-07	2.1E-03
1,1-Dichloroethene	U (0.13)	5.3E-06	1.5E-05	NA	7.4E-05
cis-1,2-Dichloroethene	U (0.13)	5.3E-06	1.5E-05	NA	3.7E-04
trans-1,2-Dichloroethene	U (0.13)	5.3E-06	1.5E-05	NA	NA
Tetrachloroethene	1.1 (0.11)	9.0E-05	2.5E-04	2.3E-08	6.3E-03
1,1,1-Trichloroethane	U (0.18)	7.3E-06	2.1E-05	NA	4.1E-06
Trichloroethene	1 (0.088)	8.2E-05	2.3E-04	3.3E-07	1.1E-01
Vinyl Chloride	U (0.042)	1.7E-06	4.8E-06	7.5E-09	4.8E-05
			Summed Risk	5E-07	1E-01

TABLE 13
INDOOR AIR HUMAN HEALTH RISKS (November 2022)
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 (0.13)	5.3E-06	1.5E-05	NA	3.0E-05
1,2-Dichloroethane	U (0.13)	5.3E-06	1.5E-05	1.4E-07	2.1E-03
1,1-Dichloroethene	U (0.13)	5.3E-06	1.5E-05	NA	7.4E-05
cis-1,2-Dichloroethene	0.2 (0.13)	1.6E-05	4.6E-05	NA	1.1E-03
trans-1,2-Dichloroethene	0.35 (0.13)	2.9E-05	8.0E-05	NA	NA
Tetrachloroethene	0.91 (0.11)	7.4E-05	2.1E-04	1.9E-08	5.2E-03
1,1,1-Trichloroethane	U (0.18)	7.3E-06	2.1E-05	NA	4.1E-06
Trichloroethene	2.4 (0.086)	2.0E-04	5.5E-04	8.0E-07	2.7E-01
Vinyl Chloride	U (0.041)	1.7E-06	4.7E-06	7.4E-09	4.7E-05
			Summed Risk	1E-06	3E-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 (0.12)	4.9E-06	1.4E-05	NA	2.7E-05
1,2-Dichloroethane	U (0.12)	4.9E-06	1.4E-05	1.3E-07	2.0E-03
1,1-Dichloroethene	U (0.11)	4.5E-06	1.3E-05	NA	6.3E-05
cis-1,2-Dichloroethene	0.13 (0.11)	1.1E-05	3.0E-05	NA	7.4E-04
trans-1,2-Dichloroethene	1.2 (0.11)	9.8E-05	2.7E-04	NA	NA
Tetrachloroethene	0.51 (0.097)	4.2E-05	1.2E-04	1.1E-08	2.9E-03
1,1,1-Trichloroethane	U (0.16)	6.5E-06	1.8E-05	NA	3.7E-06
Trichloroethene	4.6 (0.086)	3.8E-04	1.1E-03	1.5E-06	5.3E-01
Vinyl Chloride	U (0.037)	1.5E-06	4.2E-06	6.6E-09	4.2E-05
			Summed Risk	2E-06	5E-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 (0.13)	5.3E-06	1.5E-05	NA	3.0E-05
1,2-Dichloroethane	0.28 (0.13)	2.3E-05	6.4E-05	5.9E-07	9.1E-03
1,1-Dichloroethene	U (0.12)	4.9E-06	1.4E-05	NA	6.8E-05
cis-1,2-Dichloroethene	0.34 (0.12)	2.8E-05	7.8E-05	NA	1.9E-03
trans-1,2-Dichloroethene	0.86 (0.12)	7.0E-05	2.0E-04	NA	NA
Tetrachloroethene	0.34 (0.1)	2.8E-05	7.8E-05	7.2E-09	1.9E-03
1,1,1-Trichloroethane	U (0.17)	6.9E-06	1.9E-05	NA	3.9E-06
Trichloroethene	0.47 (0.083)	3.8E-05	1.1E-04	1.6E-07	5.4E-02
Vinyl Chloride	U (0.04)	1.6E-06	4.6E-06	7.2E-09	4.6E-05
			Summed Risk	8E-07	7E-02

TABLE 13
INDOOR AIR HUMAN HEALTH RISKS (November 2022)
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 (0.13)	5.3E-06	1.5E-05	NA	3.0E-05
1,2-Dichloroethane	U (0.13)	5.3E-06	1.5E-05	1.4E-07	2.1E-03
1,1-Dichloroethene	U (0.13)	5.3E-06	1.5E-05	NA	7.4E-05
cis-1,2-Dichloroethene	0.21 (0.13)	1.7E-05	4.8E-05	NA	1.2E-03
trans-1,2-Dichloroethene	0.33 (0.13)	2.7E-05	7.5E-05	NA	NA
Tetrachloroethene	0.95 (0.11)	7.7E-05	2.2E-04	2.0E-08	5.4E-03
1,1,1-Trichloroethane	U (0.18)	7.3E-06	2.1E-05	NA	4.1E-06
Trichloroethene	2.5 (0.086)	2.0E-04	5.7E-04	8.4E-07	2.9E-01
Vinyl Chloride	U (0.041)	1.7E-06	4.7E-06	7.4E-09	4.7E-05
			Summed Risk	1E-06	3E-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 (0.11)	4.5E-06	1.3E-05	NA	2.5E-05
1,2-Dichloroethane	U (0.11)	4.5E-06	1.3E-05	1.2E-07	1.8E-03
1,1-Dichloroethene	U (0.11)	4.5E-06	1.3E-05	NA	6.3E-05
cis-1,2-Dichloroethene	U (0.11)	4.5E-06	1.3E-05	NA	3.1E-04
trans-1,2-Dichloroethene	1 (0.11)	8.2E-05	2.3E-04	NA	NA
Tetrachloroethene	0.53 (0.094)	4.3E-05	1.2E-04	1.1E-08	3.0E-03
1,1,1-Trichloroethane	U (0.15)	6.1E-06	1.7E-05	NA	3.4E-06
Trichloroethene	3.4 (0.077)	2.8E-04	7.8E-04	1.1E-06	3.9E-01
Vinyl Chloride	U (0.035)	1.4E-06	4.0E-06	6.3E-09	4.0E-05
			Summed Risk	1E-06	4E-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 (0.11)	4.5E-06	1.3E-05	NA	2.5E-05
1,2-Dichloroethane	U (0.11)	4.5E-06	1.3E-05	1.2E-07	1.8E-03
1,1-Dichloroethene	U (0.11)	4.5E-06	1.3E-05	NA	6.3E-05
cis-1,2-Dichloroethene	U (0.11)	4.5E-06	1.3E-05	NA	3.1E-04
trans-1,2-Dichloroethene	1.1 (0.11)	9.0E-05	2.5E-04	NA	NA
Tetrachloroethene	0.39 (0.094)	3.2E-05	8.9E-05	8.3E-09	2.2E-03
1,1,1-Trichloroethane	U (0.15)	6.1E-06	1.7E-05	NA	3.4E-06
Trichloroethene	3.3 (0.074)	2.7E-04	7.5E-04	1.1E-06	3.8E-01
Vinyl Chloride	U (0.035)	1.4E-06	4.0E-06	6.3E-09	4.0E-05
			Summed Risk	1E-06	4E-01

TABLE 13
INDOOR AIR HUMAN HEALTH RISKS (November 2022)
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 (0.13)	5.3E-06	1.5E-05	NA	3.0E-05
1,2-Dichloroethane	U (0.13)	5.3E-06	1.5E-05	1.4E-07	2.1E-03
1,1-Dichloroethene	U (0.13)	5.3E-06	1.5E-05	NA	7.4E-05
cis-1,2-Dichloroethene	U (0.13)	5.3E-06	1.5E-05	NA	3.7E-04
trans-1,2-Dichloroethene	0.98 (0.13)	8.0E-05	2.2E-04	NA	NA
Tetrachloroethene	U (0.11)	4.5E-06	1.3E-05	1.2E-09	3.1E-04
1,1,1-Trichloroethane	U (0.18)	7.3E-06	2.1E-05	NA	4.1E-06
Trichloroethene	U (0.086)	3.5E-06	9.8E-06	1.4E-08	4.9E-03
Vinyl Chloride	U (0.041)	1.7E-06	4.7E-06	7.4E-09	4.7E-05
			Summed Risk	2E-07	8E-03

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**
	1E-04	1E+00
Location	**LCR**	**HI**
Z1-1	1E-06	1E-01
Z2-1	5E-07	1E-01
Z3-1	1E-06	1E-01
Z3-2	4E-07	1E-01
Z4-1	1E-06	1E-01
Z4-2	5E-07	1E-01
Z5-1	1E-06	3E-01
Z5-2	2E-06	5E-01
Z5-OF	8E-07	7E-02
Z6-1	1E-06	3E-01
Z6-2	1E-06	4E-01
Z6-2 (FD)	1E-06	4E-01
AA	2E-07	8E-03

TABLE 14
ANNUAL 2022 GROUNDWATER VOC DATA FOR SHALLOW MONITORING WELLS AND VAPOR POINTS
Whirlpool Facility - Fort Smith, Arkansas

Location	MW-175	MW-176	MW-179	VP-7	VP-8	VP-12
Field Sample ID	MW-175-202210	MW-176-202210	MW-179-202210	VP-7-202210	VP-8-202210	VP-12-202210
Lab Sample ID	60414073032	60413494026	60414073014	60414073033	60414073034	60414073013
Sample Date	10/20/2022	10/18/2022	10/20/2022	10/20/2022	10/20/2022	10/20/2022
Comments						
VOC						
Acetone	U (2.5)	U (2.5)	U (2.5)	31.2 (2.5)	37.0 (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	0.32 J (0.14)	0.55 J (0.14)	U (0.14)
Chloromethane	U (0.28)	U (0.28)	U (0.28)	U (0.28)	0.63 J (0.28)	U (0.28)
1,1-Dichloroethene	U (0.22)	2.2 (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)
cis-1,2-Dichloroethene	2.2 (0.13)	13.5 (0.13)	3.8 (0.13)	U (0.13)	0.15 J (0.13)	U (0.13)
trans-1,2-Dichloroethene	U (0.10)	0.34 J (0.10)	0.10 J (0.10)	U (0.10)	U (0.10)	UJ (0.10)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)	0.34 J (0.25)	U (0.25)
Trichloroethene	139 (0.21)	329 (2.1)	28.9 (0.21)	U (0.21)	5.6 (0.21)	U (0.21)
Vinyl Chloride	U (0.17)	18.9 (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)

Notes:

1 All concentrations are presented in µg/L (ppb).
2 Only chemicals with at least one detection in any water or soil vapor sample are shown.
U = Not detected
J = Estimated concentration
( ) = Detection limit
µg/L = Micrograms per liter

TABLE 15
UPPER-BOUND VAPOR INTRUSION RISK ESTIMATES
BASED ON ANNUAL 2022 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 VI	
					Risk	HQ
VOC	Acetone	67-64-1	2.70E-03	IW-78	NA	1.8E-08
VOC	Benzene	71-43-2	2.10E-04	TMW-21	9.3E-10	9.2E-06
VOC	Bromodichloromethane	75-27-4	2.00E-04	IW-78	NA	NA
VOC	Bromoform	75-25-2	2.18E-02	IW-78	2.3E-09	NA
VOC	Dibromochloromethane	124-48-1	9.10E-04	IW-78	NA	NA
VOC	1,1-Dichloroethene	75-35-4	3.60E-03	MW-57R	NA	4.6E-05
VOC	cis-1,2-Dichloroethene	156-59-2	1.35E-02	MW-176	NA	4.0E-04
VOC	trans-1,2-Dichloroethene	156-60-5	3.40E-04	MW-176	NA	NA
VOC	1,3-Dichloropropene (total)	542-75-6	3.20E-04	MW-57R	1.0E-09	2.9E-05
VOC	trans-1,3-Dichloropropene	0061-02-6	3.20E-04	MW-57R	NA	NA
VOC	Ethyl Benzene	100-41-4	2.10E-04	TMW-21	NA	2.5E-07
VOC	Toluene	108-88-3	8.90E-04	TMW-14	NA	2.3E-07
VOC	Vinyl Chloride	75-01-4	1.89E-02	MW-176	3.9E-07	6.0E-04

Cumulative Risk and HI:	3E-06	5E-01
ADEQ Target Cumulative Risk and HI:	1E-04	1E+00

Note:
Only COCs detected in monitoring wells in the neighborhood are shown.
Detected concentrations are from samples collected from groundwater monitoring wells in the 2022 Semi-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.

TABLE 16
EVALUATION OF VOCS IN WATER AT PARCELS IN AND SOUTH OF THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Chem Group	Chemical	CASRN	Parcel 2									Parcel 3			Parcel 4			Parcel 5		
			5.5 ft bgs			10.5 ft bgs			12 ft bgs			12 ft bgs			12.5 ft bgs			12 ft bgs		
			VP-7			VP-8			MW-175			MW-176			VP-12			MW-179		
			Perched Water			Perched Water			Groundwater			Groundwater			Groundwater			Groundwater		
			Conc	Risk	HQ	Conc	Risk	HQ	Conc	Risk	HQ	Conc	Risk	HQ	Conc	Risk	HQ	Conc	Risk	HQ
VOC	Acetone	67-64-1	3.12E-02	NC	4.7E-07	3.70E-02	NC	2.8E-07	ND	NC	NC	ND	NC	NC	ND	NC	NC	ND	NC	NC
VOC	Benzene	71-43-2	3.20E-04	1.6E-09	1.6E-05	5.50E-04	2.4E-09	2.4E-05	ND	NC	NC	ND	NC	NC	ND	NC	NC	ND	NC	NC
VOC	Chloromethane	74-87-3	ND	NC	NC	6.30E-04	NC	1.1E-05	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	ND	NC	NC	2.20E-03	NC	2.8E-05	ND	NC	NC	ND	NC	NC
VOC	cis-1,2-Dichloroethene	156-59-2	ND	NC	NC	1.50E-04	NC	4.5E-06	2.20E-03	NC	6.5E-05	1.35E-02	NC	4.0E-04	ND	NC	NC	3.80E-03	NC	1.1E-04
VOC	trans-1,2-Dichloroethene	156-60-5	ND	NC	NC	ND	NC	NC	ND	NC	NC	3.40E-04	NC	NC	ND	NC	NC	1.00E-04	NC	NC
VOC	Toluene	108-88-3	ND	NC	NC	3.40E-04	NC	8.8E-08	ND	NC	NC	ND	NC	NC	ND	NC	NC	ND	NC	NC
VOC	Trichloroethene	79-01-6	ND	NC	NC	5.60E-03	2.1E-08	4.3E-03	1.39E-01	5.2E-07	1.1E-01	3.29E-01	1.2E-06	2.5E-01	ND	NC	NC	2.89E-02	1.1E-07	2.2E-02
VOC	Vinyl Chloride	75-01-4	ND	NC	NC	ND	NC	NC	ND	NC	NC	1.89E-02	3.9E-07	6.0E-04	ND	NC	NC	ND	NC	NC
	Cumulative Risk and HI:			2E-09	2E-05		2E-08	4E-03		5E-07	1E-01		2E-06	3E-01		NC	NC		1E-07	2E-02

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 soil vapor data were calculated using USEPA's default attenuation factor for subslab gas to indoor air of 0.03, as discussed in Section 6.8.2 of the April 2013 Revised Risk Management Plan.

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

Risks based on concentrations measured in water from the soil vapor ports or shallow groundwater were calculated using the same approach used for groundwater, except the depth was assumed to be the depth of the port or the depth of the screen, respectively, as discussed in Section 3 of the Annual 2016 Vapor Intrusion Report.

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

Table 17: Summary of TCE Concentrations at Parcel 3 from 2015 to Present.
Whirlpool: Fort Smith, Fort Smith, AR.

Sampling Quarter	Sample Date	MW-176 Groundwater 13.5-14.5 ft bgs (ug/L)	VP-10 Groundwater 10.75-11.25 ft bgs (ug/L)	VP-9 Groundwater 5.25-5.75 ft bgs (ug/L)	VP-9 Soil Gas 5.25-5.75 ft bgs (ug/m^3)	Crawl Space (ug/m^3)	Indoor Air (ug/m^3)	Outdoor Air (ug/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)	--	--	--	--	--	--

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.

Abbreviations:

U -- Not Detected.
D -- Compound Quantitated on a Diluted Sample.
( ) -- Detection Limit.
-- -- Sample Not Collected.

Figures

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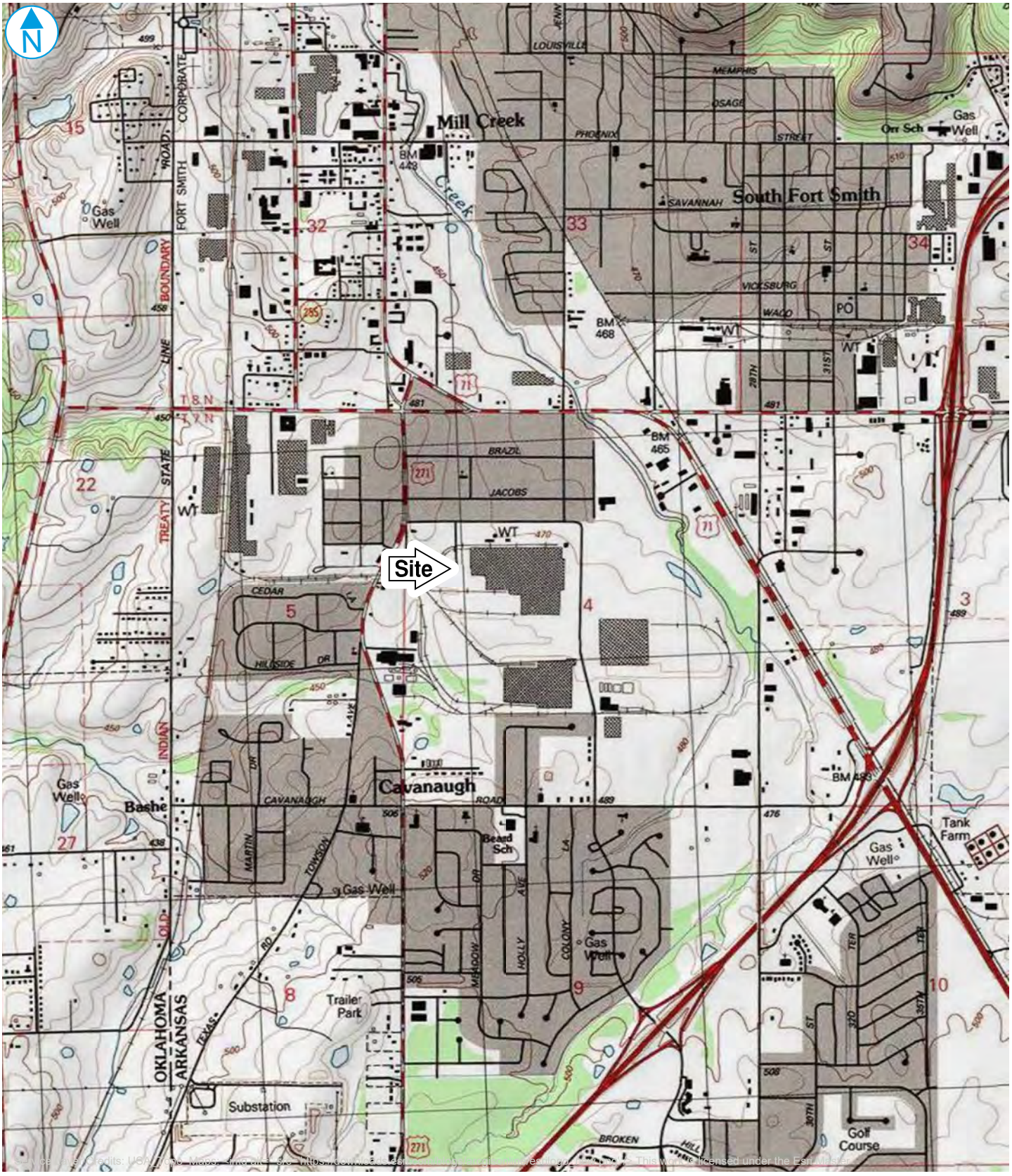
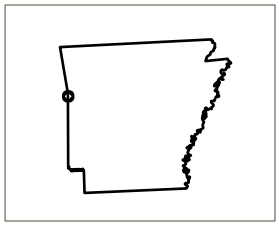


USA Topo Maps



KEY MAP

Map Scale: 1:24,000;
Map Center: 94°25'2"W 35°19'15"N

0 1,000 2,000 Feet

SITE LOCATION

FIGURE 01

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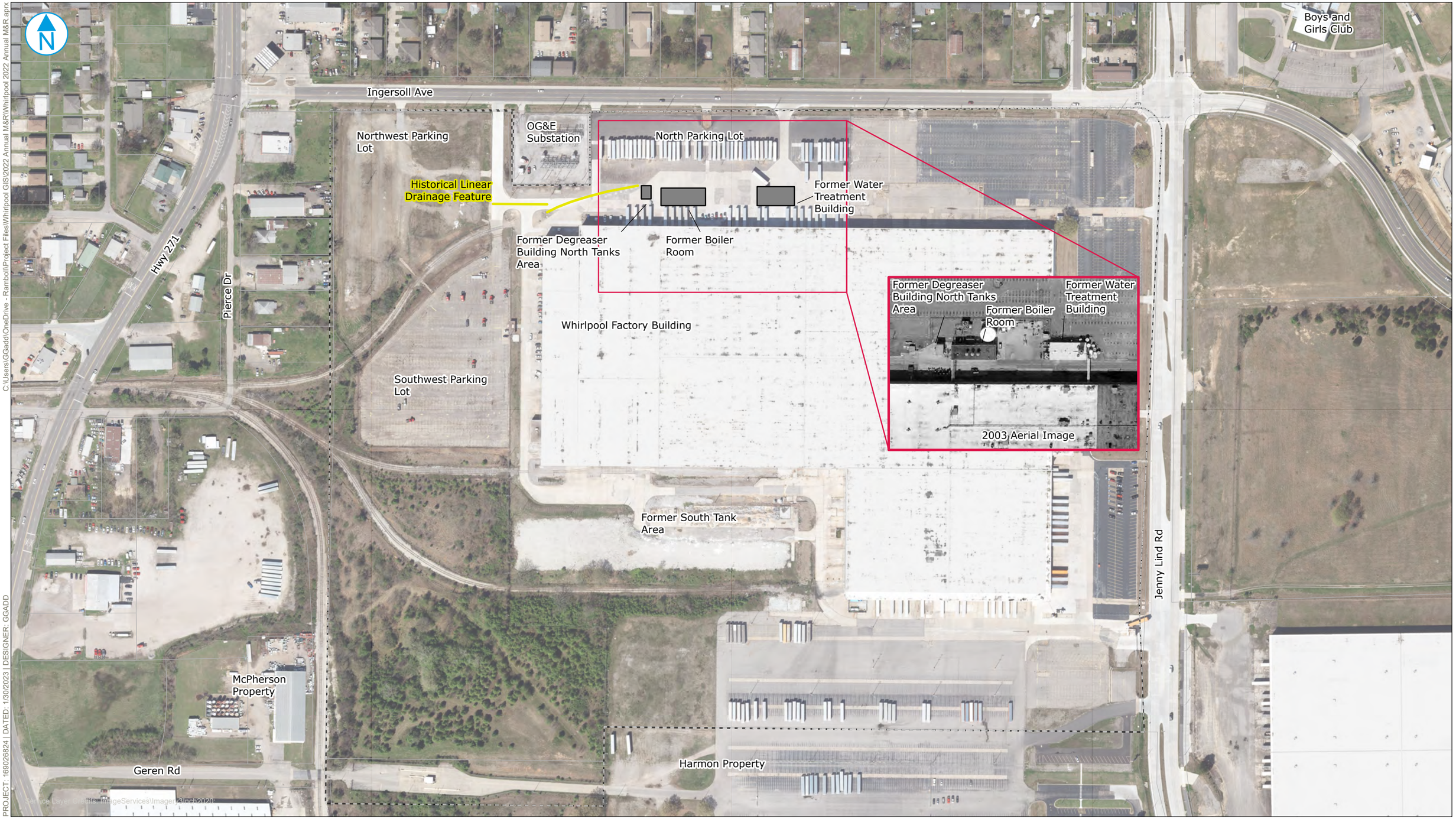
Whirlpool Fort Smith, Arkansas



Approximate Property Boundary

County Assessor Parcel

0 100 200 400 Feet

SITE LAYOUT

FIGURE 02

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Whirlpool Fort Smith, Arkansas

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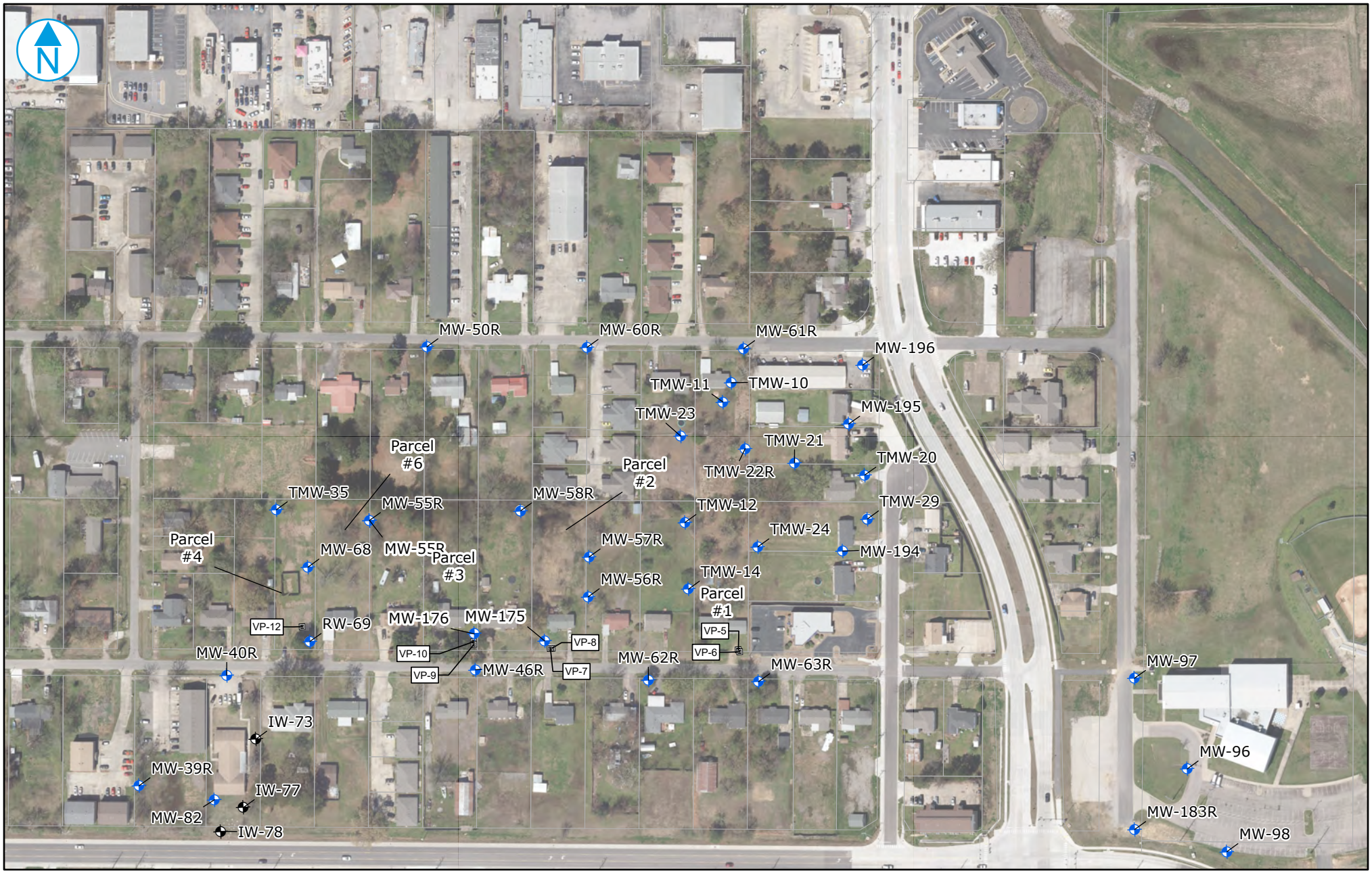

VP - Vapor Point
Injection Well
Monitoring Well

0 150 300 600 Feet

Notes
Aerial Imagery from City of Fort Smith, 2020

GROUNDWATER SAMPLING NETWORK

FIGURE 03A

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Whirlpool Fort Smith, Arkansas

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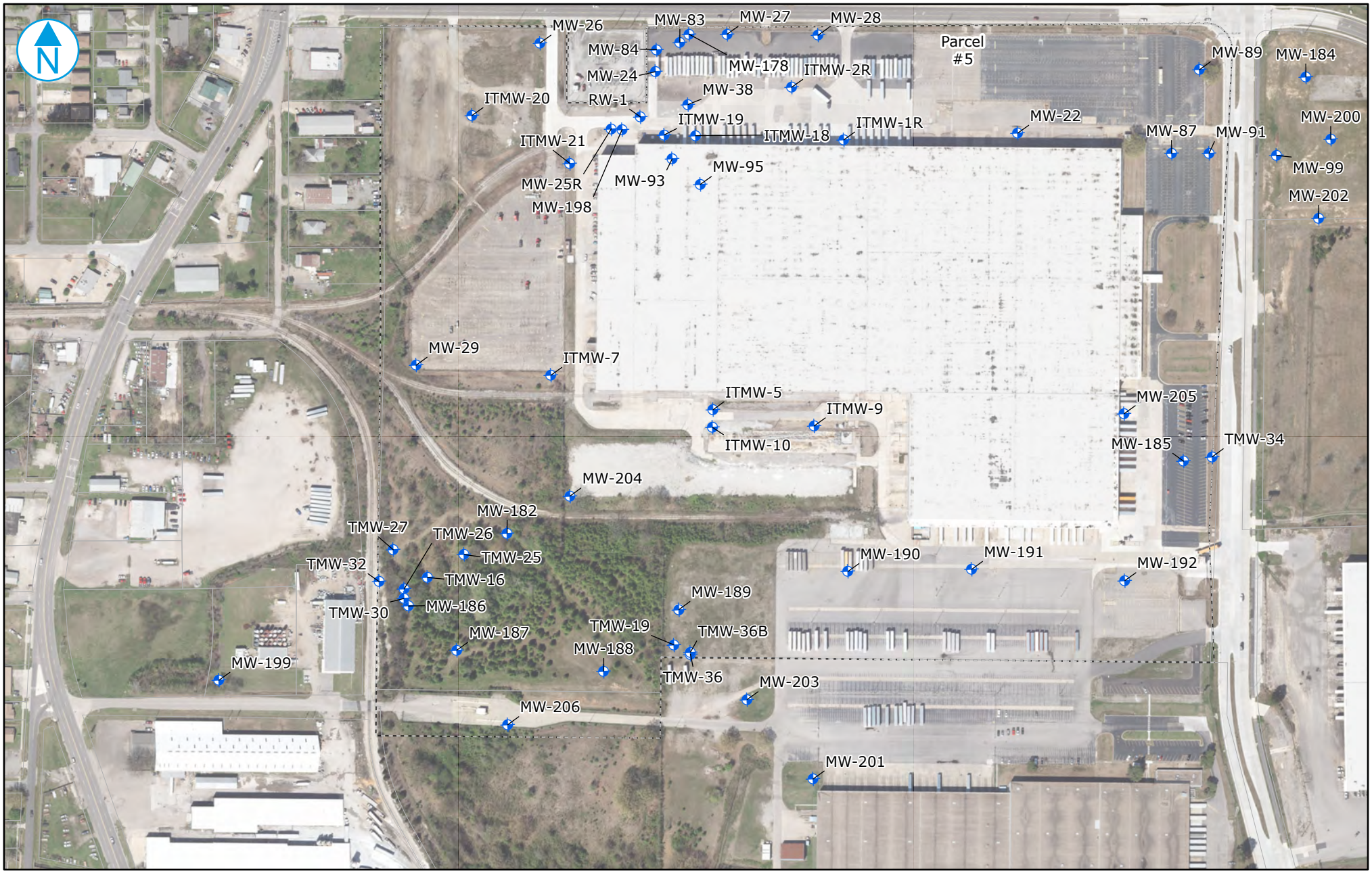

Monitoring Well

GROUNDWATER SAMPLING NETWORK

FIGURE 03B

RAMBOLL US CONSULTING
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0 200 400 800 Feet

Notes
Aerial Imagery from City of Fort Smith, 2020

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Whirlpool Fort Smith, Arkansas

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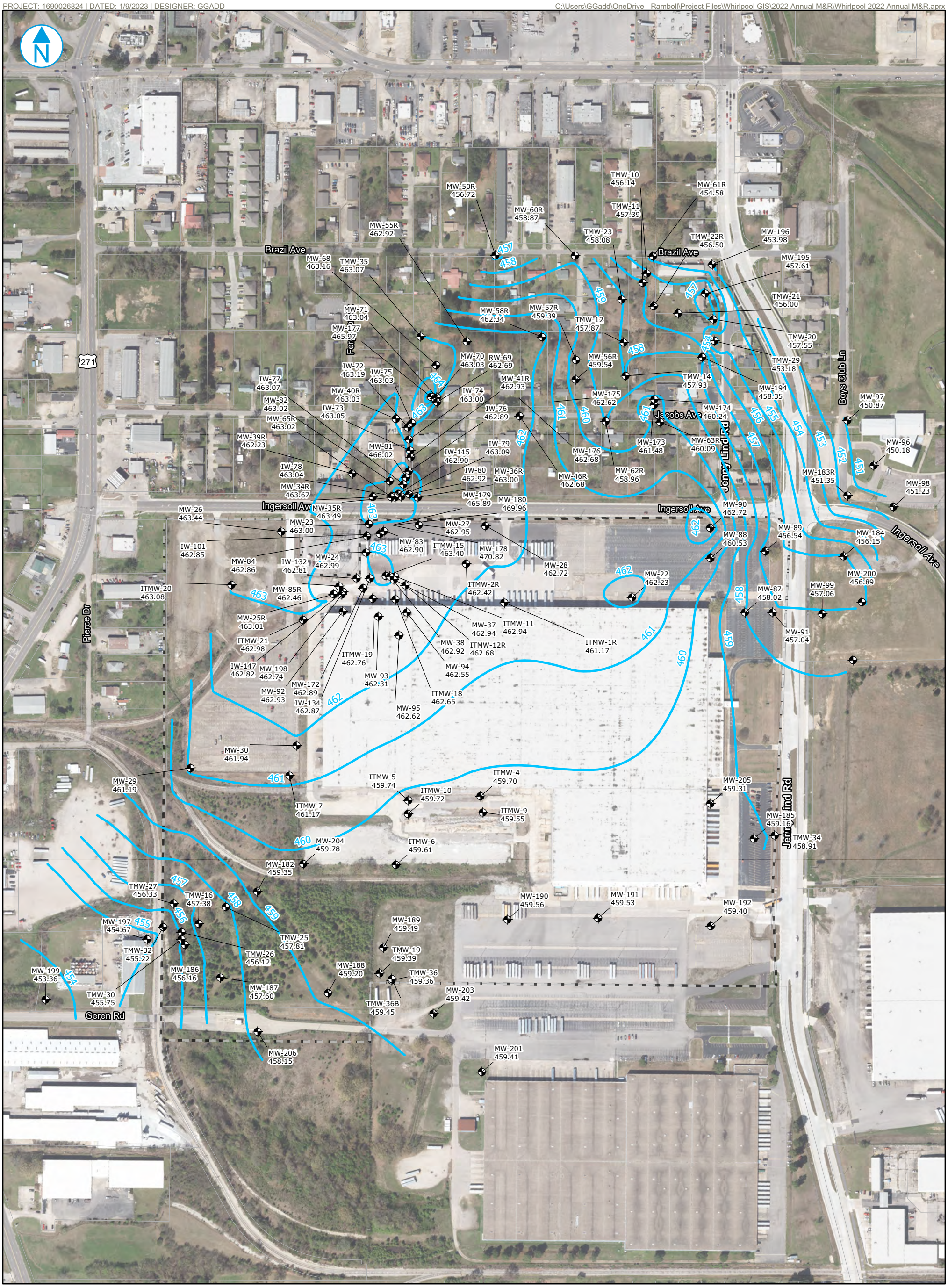

- Monitoring Wells
- Groundwater Contours (1-ft Interval)
- Approximate Property Boundary
- County Assessor Parcel

2022 ANNUAL SAMPLING POTENTIOMETRIC SURFACE

FIGURE 4

Notes
Aerial Imagery from City of Fort Smith, 2020

0 125 250 500 Feet

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Whirlpool Fort Smith, Arkansas

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A RAMBOLL COMPANY

Vertical Gradient Direction
- ↑ Upward
- ↓ Downward
- Flat
- Shallow Monitoring Well Location
- Deep Monitoring Well Location
- Approximate Property Boundary
- County Assessor Parcel

0 50 100 200 Feet

VERTICAL GROUNDWATER GRADIENTS OBSERVED IN NESTED WELLS
OCTOBER 2022

FIGURE 5

RAMBOLL US CONSULTING
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Whirlpool Fort Smith, Arkansas

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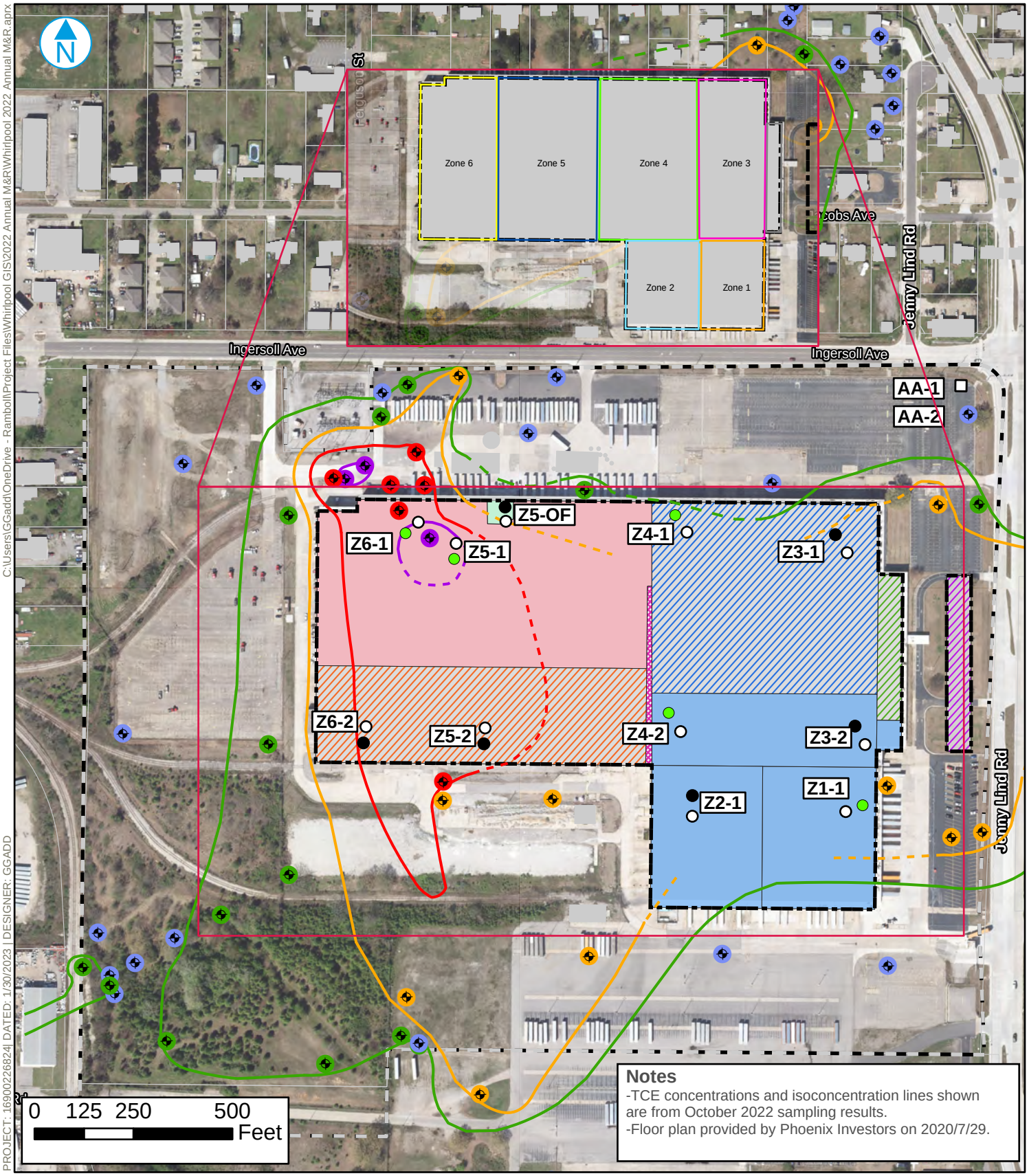

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Zones
- Office 1st Floor
- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5
- Zone 6

TCE Concentration (µg/L)
- < 5
- 5.1 to < 100
- 101 to <1000
- 1001 to <10,000
- > 10,000

- MP Warehouse
- Kane Logistics
- Stryten
- Qualserv
- Common Space
- Office Vacancy 1st Floor
- Office Vacancy 2nd Floor
- Zone 5 Office Space
- Approximate Property Boundary
- Building Boundary
- Ambient Air Background
- Indoor Air Sample Location
- Sub-Slab Sample Location
- Repaired sub-slab sample location

TCE Isoconcentration Line
- 5 µg/L
- 5 µg/L (inferred)
- 100 µg/L
- 100 µg/L (inferred)
- 1,000 µg/L
- 1,000 µg/L (inferred)
- 10,000 µg/L
- 10,000 µg/L (inferred)

INDOOR AIR AND SUBSLAB SAMPLING LOCATIONS

FIGURE 06

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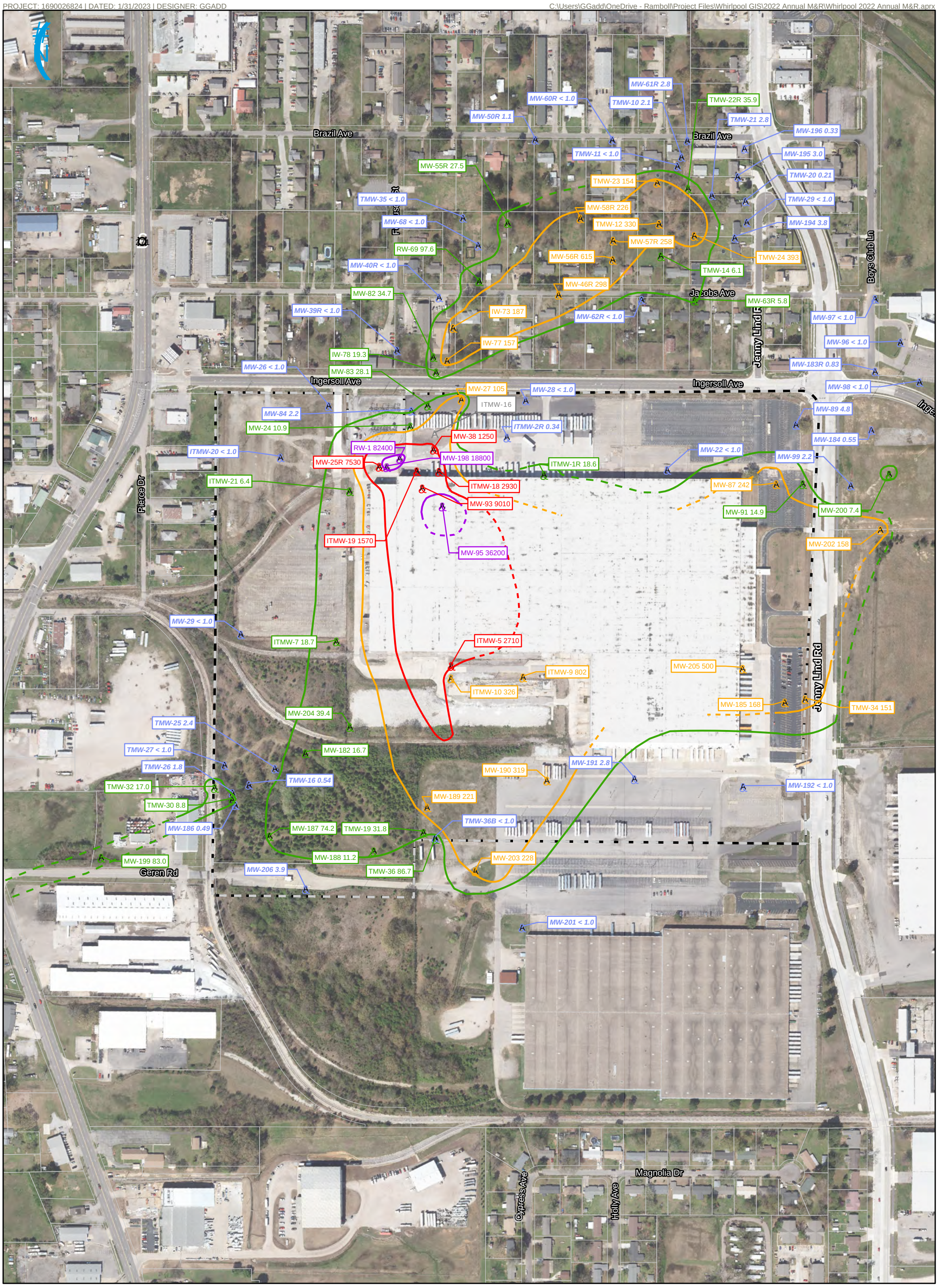

TCE Isoconcentration Line

- 5 µg/L (inferred)
- 5 µg/L
- 100 µg/L (inferred)
- 100 µg/L
- 1,000 µg/L (inferred)
- 1,000 µg/L
- 10,000 µg/L (inferred)
- 10,000 µg/L

TCE Concentration (µg/L)

- A < 5
- A 5.1 to < 100
- A 101 to <1000
- A 1001 to <10,000
- A > 10,000
- A Unsampled Well
- Approximate Property Boundary
- Conceptual Treatment Areas

0 125 250 500 Feet

Notes

-ITMW-16 was not sampled due to a damaged well housing-
Trichloroethene (TCE) in groundwater reported in µg/L
-TCE samples collected in October 2022

2022 ANNUAL TCE ISOCONCENTRATION MAP

FIGURE 07

RAMBOLL US CONSULTING
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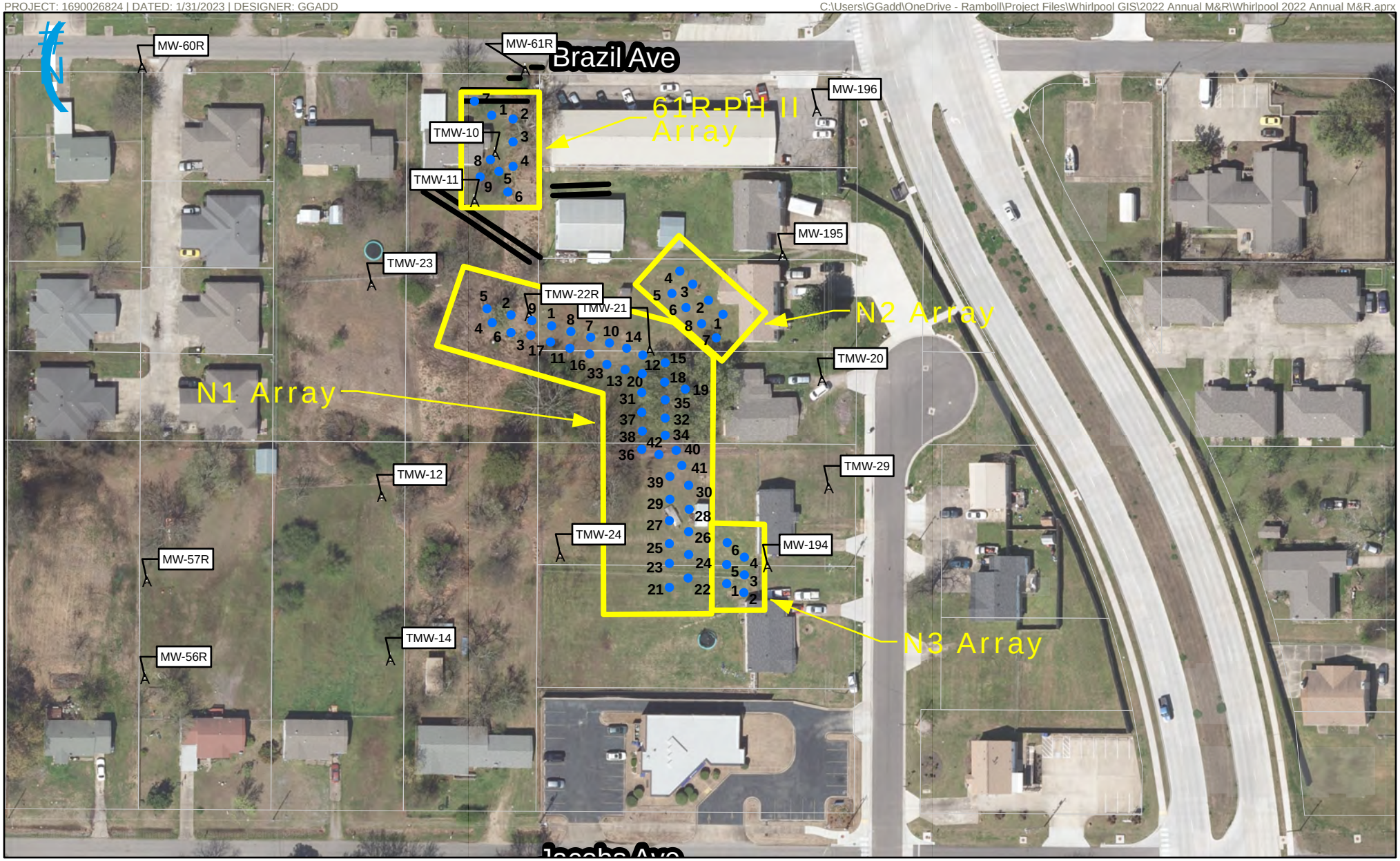

- Temporary Injection Points
- A Monitoring Well Location
- Treatment Zones
- 2015 ISCR Treatment Zones
- Approximate Property Boundary

0 50 100 200 Feet

2018 TREATMENT ZONE INJECTION POINTS NORTH PLUME

FIGURE 08

RAMBOLL US CONSULTING
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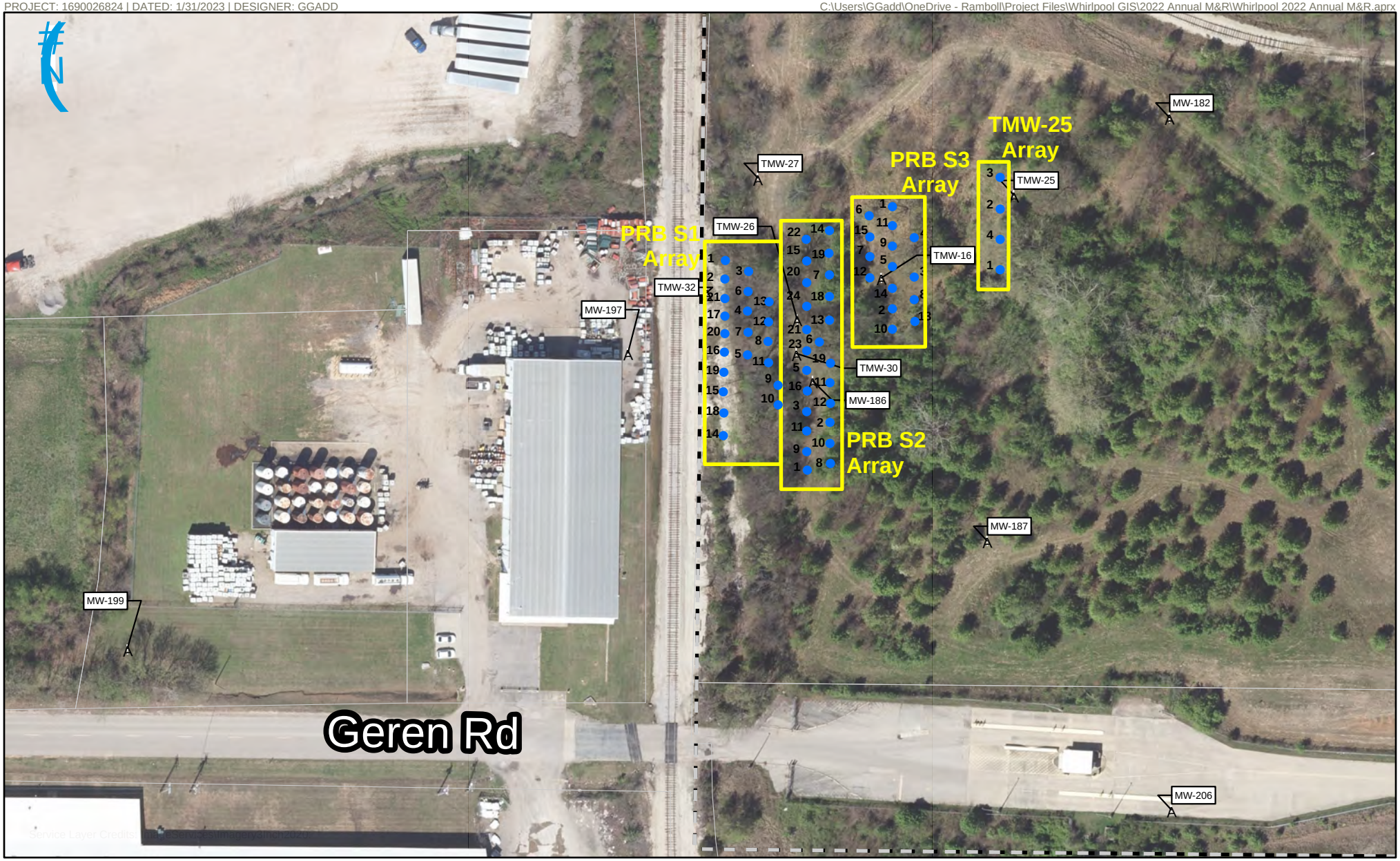

A Monitoring Well Location
● Temporary Injection Points
Treatment Zones
Approximate Property Boundary

2018 TREATMENT ZONE INJECTION POINTS SOUTHWEST PLUME

FIGURE 09

RAMBOLL US CONSULTING
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0 50 100 200 Feet

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Whirlpool Fort Smith, Arkansas

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A Monitoring Well Location
Temporary Injection Points
Treatment Zones
Approximate Property Boundary

0 62.5 125 250
Feet

2018 TREATMENT ZONE INJECTION POINTS SOUTHEAST PLUME

FIGURE 10

RAMBOLL US CONSULTING
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Whirlpool Fort Smith, Arkansas

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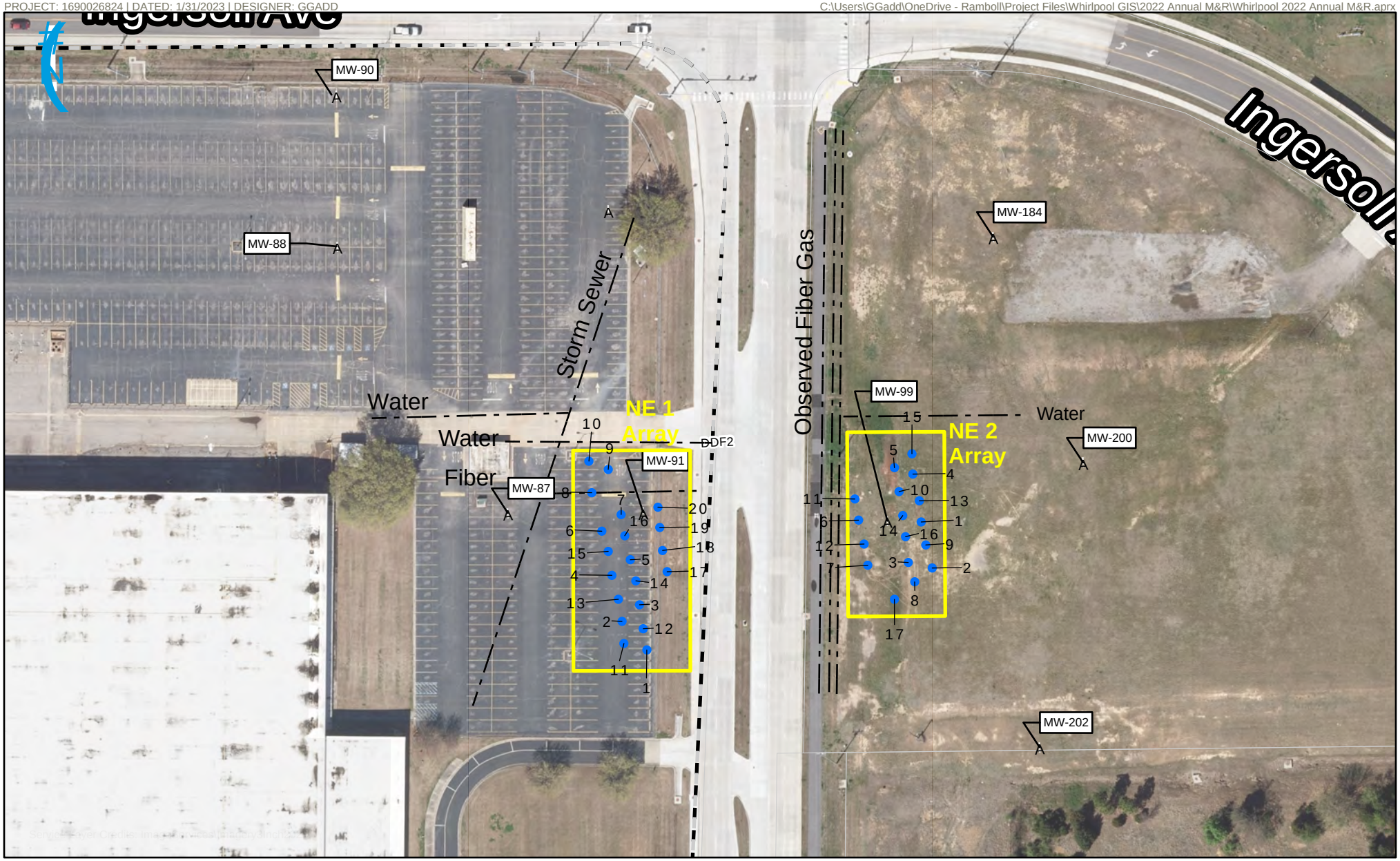

A Monitoring Well Location
● Temporary Injection Points
Treatment Zones
Approximate Property Boundary

2018 TREATMENT ZONE INJECTION POINTS NORTHEAST PLUME

FIGURE 11

RAMBOLL US CONSULTING
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0 50 100 200 Feet

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A Monitoring Well Location

● Temporary Injection Points

Treatment Zones

Approximate Property Boundary

2020 TREATMENT ZONE INJECTION POINTS SOUTH PLUME

FIGURE 12

RAMBOLL US CONSULTING
A RAMBOLL COMPANY

0 25 50 100 Feet

2022 Annual Report
Whirlpool Fort Smith, Arkansas

RAMBOLL

Appendix A

Calibration Logs

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/19/22

Calibrated by: Emma Perkins

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:* 0729 + 10min = 0739
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.)
   30.32 in. x 25.4 = 770.128 mmHg - 15.169 = ~~754.959~~ 754.959 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: 6965
2. ORP: 232.2
3. pH:
   - Point 1: 6.95
   - Point 2: 4.13
   - Point 3: ~~8.89~~ 9.92
4. DO: 99.5

Turbidity Meter Model/Serial Number: Same as yesterday

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10-18-2022

Calibrated by: JMK

Turn on YSI. Note time in DO section Line 1. 7:45 - 7:20

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 26F1061 **Exp:** 06.30.23

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): 908-910 818-915 **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.
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): ~~724-726~~ → 734-736

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 26F063 **Exp:** 6.30.24
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 #** 266933 **Exp:** 3.30.24 730- 737-739
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 #** 26D009 **Exp:** 4.30.24 740-743
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): 7.45- 7.55 → 7:58-

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:15 + 10min = 7:25
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.)
   30.29 in. x 25.4 = 769.366 mmHg - 15.169 = 754.197 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: 6.90 – 7.0 → 7023 → 7000 µS/
2. ORP: 254- 246
3. pH:
   - Point 1: 6.93 – 7.00
   - Point 2: 3.95 – 4.00
   - Point 3: ~~3.85~~ – 4.00
4. DO: ~~114.9~~ 10.35 – 10.0 826 109-100

Turbidity Meter Model/Serial Number: HACH 2100Q FA05296

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10-19-2022 Same as 10-18-2022

Calibrated by: 10-19-22 JMK

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.)
   30.32 in. x 25.4 = 770.128 mmHg - 15.169 = 754.959 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: 6983
2. ORP: 240
3. pH:
   - Point 1: 9.01
   - Point 2: 3.98
   - Point 3: 4.92
4. DO: 99.3

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10-20-2022 Same as 10-14-2022

Calibrated by: Jerome Nance

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.)
   30.07 in. x 25.4 = 763.778mmHg - 15.169 = 748.609 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: 6994
2. ORP: 240.1
3. pH:
   - Point 1: 7.02
   - Point 2: 4.04
   - Point 3: 10.06
4. DO: 12.06

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18

Calibrated by: CP

Turn on YSI. Note time in DO section Line 1. Same as 10/17/22

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: 0733 + 10min = 0743
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.)
   30.29 in. x 25.4 = 769.366 mmHg - 15.169 = 754.197 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: FA 01786

1. Specific Conductance: 7.00
2. ORP: 253.9
3. pH:
   - Point 1: 7.00
   - Point 2: 4.00
   - Point 3: 10.00
4. DO: 99.8%

4° → 253.87

Turbidity Meter Model/Serial Number: 2020WE

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/22

Calibrated by: GP

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

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 26F1061 **Exp:** 6/30/23

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 #:** 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 #** 26PP083 **Exp:** 6/30/24
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 #** 26C933 **Exp:** 3/30/24
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 #** 26D009 **Exp:** 4/30/24
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: 1349 + 10min = 1359
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 = _____ 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: FA03788

1. Specific Conductance: 7.00
2. ORP: 237.4
3. pH:
   - Point 1: 7.00
   - Point 2: 4.00
   - Point 3: 10.00
4. DO: 99.0%

ORP: 15°C → 234.7

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/22 1214

Calibrated by: GP

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

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 26F1061 **Exp:** 06/30/23

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 #:** 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 #** 26FF023 **Exp:** 6/30/24
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 #** 26C933 **Exp:** 3/30/24
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 #** 26D009 **Exp:** 4/30/24
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: 1254 + 10min = 1304
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: FA03972

1. Specific Conductance: 7000
2. ORP: 239.2
3. pH:
   - Point 1: 7.02
   - Point 2: 4.00
   - Point 3: 10.04
4. DO: OR

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/22

Calibrated by: GP

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

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 2GF1061 **Exp:** 6/30/23

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 #:** 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 #** 2GFF083 **Exp:** 6/30/24
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 #** 2GC933 **Exp:** 3/30/24
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 #** 2GD009 **Exp:** 4/30/24
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: 1345 + 10min = 1355
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.18 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: FA01763

1. Specific Conductance: 7.01
2. ORP: 238.4
3. pH:
   - Point 1: 7.00
   - Point 2: 4.00
   - Point 3: 10.00
4. DO: 98.6

Turbidity Meter Model/Serial Number:

15°C

223 + 1.47(25 - 15)

237.7

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/22

Calibrated by: CP

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

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 2GF1061 **Exp:** 6/30/23

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 #:** 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 #** 2GPP083 **Exp:** 6/30/24
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 #** 2GC933 **Exp:** 3/30/24
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 #** 2GD009 **Exp:** 4/30/24
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: 1253 + 10min = 1303
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: FA01786

1. Specific Conductance: 6.99
2. ORP: 239.2
3. pH:
   - Point 1: 7.02
   - Point 2: 4.00
   - Point 3: 10.00
4. DO: 98.8

14° C → 239.17

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/20

Calibrated by: GP

Same as 10/17

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: 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.)
   30.07 in. x 25.4 = _____ mmHg - 15.169 = 748.609 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: FA01786

1. Specific Conductance: 7000
2. ORP: 240.0 240
3. pH:
   - Point 1: 4.99
   - Point 2: 4.00
   - Point 3: 10.00
4. DO: 98.5

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18

Calibrated by: CP

Turn on YSI. Note time in DO section Line 1. same as 10/17

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 #:** 11 **Exp:** " 240.0

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: 0717 + 10min = 0727
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.32 in. x 25.4 = _____ mmHg - 15.169 = 754959 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: 7.61
2. ORP: 240.1
3. pH:
   - Point 1: 7.00
   - Point 2: 4.00
   - Point 3: 10.00
4. DO: 99.4

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/21/22

Calibrated by: CeP

Same as 10/17

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: 0730 + 10min = 0940
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.) 745.053
   29.93 in. x 25.4 = ~~531.622~~ mmHg - 15.169 = ~~516.453~~ 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: 17A01786

1. Specific Conductance: 7.00
2. ORP: 249.5
3. pH:
   - Point 1: 7.00
   - Point 2: 4.00
   - Point 3: 10.00
4. DO: 98.0

(25.7) 1.47 + 223 = 249.46

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/22

Calibrated by: JK

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

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 2GF1061 **Exp:** 6/30/23

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 #:** 22J100391 **Exp:** 9/27/27

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 #** 2GFF083 **Exp:** 6/30/24
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 #** 2GC933 **Exp:** 6/30/24
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 #** 2GD009 **Exp:** 4/30/24
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: 1250 + 10min = 1300
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: 16J104700

1. Specific Conductance: 7000
2. ORP: 245
3. pH:
   - Point 1: 7
   - Point 2: 4
   - Point 3: 10
4. DO: 93%

Turbidity Meter Model/Serial Number: Sub0979

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18/22

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: 0738 + 10min = 0748
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.)
   30.29 in. x 25.4 = 769.37 mmHg - 15.169 = 754.197 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: 6980
2. ORP: 237.7
3. pH:
   - Point 1: 6.90
   - Point 2: 3.97
   - Point 3: 10.10
4. DO: 98.6%

Turbidity Meter Model/Serial Number: same as yesterday

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10-19-20

Calibrated by: JB

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.)
   30.36 in. x 25.4 = 771.14 mmHg - 15.169 = 755.96 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: 6861
2. ORP: 231.6
3. pH:
   - Point 1: 6.98
   - Point 2: 4.10
   - Point 3: 10.01
4. DO: 99.5%

Turbidity Meter Model/Serial Number: same as yesterday

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10-20-22

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.)
   30.07 in. x 25.4 = 763.77 mmHg - 15.169 = 748.601 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: 7126
2. ORP: 253.6
3. pH:
   - Point 1: 6.99
   - Point 2: 4.00
   - Point 3: 10.14
4. DO: 101.6%

Turbidity Meter Model/Serial Number: Same

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10-21-22

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: 0726 + 10min = 0736
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.)
   29.93 in. x 25.4 = 760.22 mmHg - 15.169 = 745.05 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: 6853
2. ORP: 244.4
3. pH:
   - Point 1: 6.94
   - Point 2: 4.04
   - Point 3: 10.05
4. DO: 97.7%

Turbidity Meter Model/Serial Number: same

13. HEALTH & SAFETY PLAN FIELD TEAM SIGNATURES

Sign off sheet attesting that the HASP has been made available and reviewed by the individual prior to entry into the site.

Project Personnel List & Safety Plan Distribution Record

Ramboll Employees

All project staff must sign indicating they have read and understand the Site Health and Safety Plan. A copy of this Site Health and Safety Plan must be made available for their review and readily available at the job site.

Employee Name/ Job Title	Date Distributed	Signature
Emma Perkins / C2	10/21/22	
Joshua Kahley / C2	10/21/22	
Gabby Penaflor / C3	10/21/22	
Victoria Siegler / SC	10/21/22	
Jackie Kellner	10/21/22	

Contractors, Subcontractors

A copy of this safety plan shall be provided to contractors and subcontractors who may be affected by activities covered under the scope of this Site Health and Safety Plan for their information only, although the contractors and subcontractors remain responsible for the safety of their own employees. All contractors and subcontractors must comply with applicable country, state and local government rules and regulations.

Firm Name	Contact Person	Date Distributed

Health and Safety Meeting

All personnel participating in the project must receive initial Health and Safety Orientation. Thereafter, a brief tailgate safety meeting is required as deemed necessary by the Site Health and Safety Officer (or at least once every 10 working days).

Date	Topics	Name of Attendee	Employee Firm Name	Initials

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18/22

Calibrated by: Victoria Sieglen

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

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 26F1061 **Exp:** 6/30/23

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 #:** 22J1∅∅391 **Exp:** 9/27/27

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 #** 26FF083 ~~26F1061~~ **Exp:** 6/30/24
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 #** 26C933 **Exp:** 3/30/24
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 #** 26D009 **Exp:** 4/30/24
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: 705 + 10min = 715
2. Enter the local barometric pressure. 769.37
   (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.)
   30.29 in. x 25.4 = ~~769.37~~ mmHg - 15.169 = 754.2 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: 6852
2. ORP: 262.4
3. pH:
   - Point 1: 7.01
   - Point 2: 3.68
   - Point 3: 9.89
4. DO:

Turbidity Meter Model/Serial Number: LA ∅4601

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/19/2022

Calibrated by: Victoria Siegler

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

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 2GF1061 **Exp:** 6/30/23

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 #:** 225100391 **Exp:** 9/27/27

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 #** 2GFF083 **Exp:** 6/30/24
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 #** 2GC933 **Exp:** 3/30/24
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 #** 2GD009 **Exp:** 4/30/24
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: 706 + 10min = 716
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.)
   30.32 in. x 25.4 = 770.128 mmHg - 15.169 = 754.96 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: 0718
2. ORP:
3. pH:
   - Point 1: 4.83
   - Point 2: 4.0
   - Point 3: 10.05
4. DO: 756.0

Turbidity Meter Model/Serial Number: FA04601

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/2/2023

Calibrated by: Victoria Siegfried

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

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 23F1061 **Exp:** 4/30/23

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 #:** 225100391 **Exp:** 9/27/27

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 #** 23FF083 **Exp:** 6/30/24
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 #** 23C933 **Exp:** 6/30/24
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 #** 23D009 **Exp:** 4/30/24
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: 708 + 10min = 718
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.)
   30.07 in. x 25.4 = 763.78 mmHg - 15.169 = 748.61 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: 6509
2. ORP: 248.4
3. pH:
   - Point 1: 7.01
   - Point 2: 4.20
   - Point 3: 10.21
4. DO: 100.3%

Turbidity Meter Model/Serial Number: FA04601

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10121122

Calibrated by: Victoria Sieglen

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

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 2GF1061 **Exp:** 4130123

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 #:** 22510003391 **Exp:** 9/27/27

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 #** 2GFF083 **Exp:** 4130124
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 #** 2GC933 **Exp:** 3/30/24
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 #** 2GD009 **Exp:** 4/30/24
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: 0712 + 10min = 0722
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.)
   30.04 in. x 25.4 = 763.02 mmHg - 15.169 = 747.847 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: 2161
2. ORP: 312.4
3. pH:
   - Point 1: 7.01
   - Point 2: 4.08
   - Point 3: 10.15
4. DO: 92.7

Turbidity Meter Model/Serial Number: FA04601

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/22

Calibrated by: JK

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

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 26F1016 **Exp:** 6/30/23

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 #:** 225100391 **Exp:** 9/27/27

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 #** 2GFF083 **Exp:** 6/30/24
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 #** 266933 **Exp:** 3/30/24
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 #** 2GD009 **Exp:** 4/30/24
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: 1339 + 10min = 1349
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: 15C10132B

1. Specific Conductance: 7,134 µS/cm
2. ORP: 269.8
3. pH:
   - Point 1: 7.14
   - Point 2: 3.72
   - Point 3: 9.86
4. DO: 104.8%

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18/22

Calibrated by: JK

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

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 2GF1016 **Exp:** 6/30/23

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 #:** 22J100391 **Exp:** 9/27/27

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 #** 2GFF083 **Exp:** 6/30/24
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 #** 2GC933 **Exp:** 3/30/24
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 #** 2GD009 **Exp:** 4/30/24
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: 732 + 10min = 742
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.)
   30.29 in. x 25.4 = 769.366 mmHg - 15.169 = 754.197 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: 15C101325

1. Specific Conductance: 7027 µS/cm
2. ORP: 274.4
3. pH:
   - Point 1: 7.09
   - Point 2: 3.86
   - Point 3: 9.97
4. DO: 109.67

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/19/22

Calibrated by: JK

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

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 2GF1016 **Exp:** 6/30/23

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 #:** 22J100391 **Exp:** 9/27/27

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 #** 2GFF083 **Exp:** 6/30/24
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 #** 2GC933 **Exp:** 4/30/24
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 #** 2GD009 **Exp:** 4/30/24
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: 732 + 10min = 742
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.)
   30.32 in. x 25.4 = 770.128 mmHg - 15.169 = 754.959 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: 15C101328

1. Specific Conductance: 6,850 µS/cm
2. ORP: 229.1 mV
3. pH:
   - Point 1: 7.12
   - Point 2: 4.08
   - Point 3: 9.96
4. DO: 81.7%

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/20/22

Calibrated by: JK

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

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 2GF1016 **Exp:** 6/30/23

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 #:** 22J100391 **Exp:** 9/27/27

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 #** 2GFF083 **Exp:** 6/30/24
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 #** 2GC993 **Exp:** 4/30/24
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 #** 2GD009 **Exp:** 4/30/24
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: 726 + 10min = 736
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.)
   30.07 in. x 25.4 = 763.778 mmHg - 15.169 = 748.609 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: 15C101328

1. Specific Conductance: 6,870 µS/cm
2. ORP: 253.0 mV
3. pH:
   - Point 1: 7.25
   - Point 2: 4.04
   - Point 3: 10.25
4. DO: 114.9%

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/21/22

Calibrated by: JK

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

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 2GF1016 **Exp:** 6/30/23

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 #:** 225100391 **Exp:** 9/27/27

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 #** 26FF083 **Exp:** 6/30/24
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 #** 2GC933 **Exp:** 3/30/24
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 #** 2GD009 **Exp:** 4/30/24
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: 730 + 10min = 740
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.)
   29.92 in. x 25.4 = 759.968 mmHg - 15.169 = 744.799 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: 6,914 µs/cm
2. ORP: 223.2 mV
3. pH:
   - Point 1: 7.17
   - Point 2: 4.15
   - Point 3: 10.01
4. DO: 90.4%

Turbidity Meter Model/Serial Number:

249.46

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/20/22

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 #:** same as yesterday **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: 0730 + 10min = 0746
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.)
   30.04 in. x 25.4 = ~~763.272~~ mmHg - 15.169 = ~~748.607~~ 747.847 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: 6876
2. ORP: 260.5
3. pH:
   - Point 1: ~~9~~ 6.93
   - Point 2: 3.95
   - Point 3: 10.16
4. DO: 115.3 %

Turbidity Meter Model/Serial Number: same as before

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18/2022

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 #:** 26F1061 **Exp:** 06/30/23

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 #:** 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 #** 26FF03 **Exp:** 06/30/24
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 #** 26C933 **Exp:** 03/30/24
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 #** 26D009 **Exp:** 4/30/24
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: 0744 + 10min = 0754
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.)
   30.29 in. x 25.4 = 769.37 mmHg - 15.169 = 754.197 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: 6821
2. ORP: 251.4
3. pH:
   - Point 1: 6.65
   - Point 2: 3.39
   - Point 3: 10.15
4. DO: 102.2

Turbidity Meter Model/Serial Number: FA05341

RAMBOLL ENVIRON

Appendix B

Laboratory Analytical Data

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

November 04, 2022

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 18, 2022. 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 Gulf Coast
- 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.

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

CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 22-031-0
Illinois Certification #: 2000302021-3
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 #: T104704407-21-15
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Gulf Coast
7979 Innovation Park Drive, Baton Rouge, LA 70820
Arkansas Certification #: 88-0655
DoD ELAP Certification #: 6429-01
Florida Certification #: E87854
Illinois Certification #: 004585
Kansas Certification #: E-10354
Louisiana/LELAP Certification #: 01955
North Carolina Certification #: 618
North Dakota Certification #: R-195
Oklahoma Certification #: 2019-101
South Carolina Certification #: 73006001
Texas Certification #: T104704178-19-11
USDA Soil Permit # P330-19-00209
Virginia Certification #: 460215
Washington Certification #: C929

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SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60413461001	**MW-50R-202210**	Water	10/18/22 11:40	10/18/22 23:21

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60413461001	**MW-50R-202210**	AM20GAX	LMB	1	GCLA
		AM20GAX	LMB	4	GCLA
		EPA 6010	MA1	1	PASI-K
		SM 4500-S-2 D	KLM	1	PASI-K
		EPA 300.0	RKA	1	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K

GCLA = Pace Analytical Gulf Coast
PASI-K = Pace Analytical Services - Kansas City

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

Method: **AM20GAX**
Description: Indicator Gases Bubblestrip H2
Client: Ramboll_AR
Date: November 04, 2022

General Information:
1 sample was analyzed for AM20GAX by Pace Analytical Gulf Coast. 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.

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: 752794

R1: RPD value was outside control limits.

- LCSD (Lab ID: 2413834)
  - Hydrogen

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.: 60413461

Method: **AM20GAX**
Description: Indicator Gases Water LHC
Client: Ramboll_AR
Date: November 04, 2022

General Information:
1 sample was analyzed for AM20GAX by Pace Analytical Gulf Coast. 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.

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: 752797

R1: RPD value was outside control limits.

- LCSD (Lab ID: 2413843)
  - Acetylene
  - Methane

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.: 60413461

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Ramboll_AR
Date: November 04, 2022

General Information:
1 sample was 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.: 60413461

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Ramboll_AR
Date: November 04, 2022

General Information:
1 sample was 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: 814318

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413568001

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

- MS (Lab ID: 3238600)
  - Sulfide, Total
- MSD (Lab ID: 3238601)
  - 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.: 60413461

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Ramboll_AR
Date: November 04, 2022

General Information:
1 sample was 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: 814886

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413568001

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

- MS (Lab ID: 3241199)
  - Sulfate

R1: RPD value was outside control limits.

- MSD (Lab ID: 3241200)
  - 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.: 60413461

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 pres.
Client: Ramboll_AR
Date: November 04, 2022

General Information:
1 sample was 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: 815583

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413165001,60413219001

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

- MS (Lab ID: 3243706)
  - Nitrogen, NO2 plus NO3
- MS (Lab ID: 3243708)
  - Nitrogen, NO2 plus NO3

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

Method: **SM 5310C**
Description: 5310C TOC
Client: Ramboll_AR
Date: November 04, 2022

General Information:
1 sample was 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.: 60413461

Sample: MW-50R-202210 **Lab ID: 60413461001** Collected: 10/18/22 11:40 Received: 10/18/22 23:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Bubblestrip H2	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Hydrogen	**0.84J**	nM	1.9	0.49	1		10/27/22 12:48	1333-74-0	
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**31**	ug/L	5.0	2.0	1		10/28/22 06:59	74-82-8	
Ethane	ND	ug/L	1.0	0.17	1		10/28/22 06:59	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/28/22 06:59	74-85-1	
Acetylene	ND	ug/L	0.50	0.13	1		10/28/22 06:59	74-86-2	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**232**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 10:55	7439-89-6	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.021	1		10/24/22 14:56	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Sulfate	**106**	mg/L	20.0	11.0	20		10/27/22 09:31	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		10/31/22 11:51		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.37J**	mg/L	1.0	0.30	1		10/26/22 10:54	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

QC Batch: 752794
QC Batch Method: AM20GAX
Analysis Method: AM20GAX
Analysis Description: Indicator Gases Bubble Strip H2
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413461001

METHOD BLANK: 2413832 Matrix: Air
Associated Lab Samples: 60413461001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Hydrogen	nM	ND	1.9	0.49	10/27/22 12:35	

LABORATORY CONTROL SAMPLE & LCSD: 2413833 2413834

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Hydrogen	nM	12	11	14	95	119	70-130	23	20	R1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

QC Batch: 752797
QC Batch Method: AM20GAX
Analysis Method: AM20GAX
Analysis Description: Indicator Gases Water LHC
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413461001

METHOD BLANK: 2413841 Matrix: Water
Associated Lab Samples: 60413461001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Methane	ug/L	ND	5.0	2.0	10/28/22 06:44	
Ethane	ug/L	ND	1.0	0.17	10/28/22 06:44	
Ethene	ug/L	ND	1.0	0.24	10/28/22 06:44	
Acetylene	ug/L	ND	0.50	0.13	10/28/22 06:44	

LABORATORY CONTROL SAMPLE & LCSD: 2413842 2413843

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	750	560	840	75	113	70-130	41	20	R1
Ethane	ug/L	38	49	45	130	120	70-130	8	20	
Ethene	ug/L	35	46	43	130	121	70-130	8	20	
Acetylene	ug/L	33	34	26	105	80	70-130	27	20	R1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

QC Batch: 814323
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60413461001

METHOD BLANK: 3238614 Matrix: Water
Associated Lab Samples: 60413461001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	8.7J	50.0	7.4	11/01/22 10:50	

LABORATORY CONTROL SAMPLE: 3238615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9580	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3238617 3238657

Parameter	Units	60413474001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	3610	10000	10000	12800	12800	92	92	75-125	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

QC Batch: 814318
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: 60413461001

METHOD BLANK: 3238598 Matrix: Water
Associated Lab Samples: 60413461001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	0.021	10/24/22 14:51	

LABORATORY CONTROL SAMPLE: 3238599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.55	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3238600 3238601

Parameter	Units	60413568001 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	0.68	0.68	135	135	75-125	0	20	M1

SAMPLE DUPLICATE: 3238602

Parameter	Units	60413568001 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

SAMPLE DUPLICATE: 3238603

Parameter	Units	60413568003 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

QC Batch: 814886
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: 60413461001

METHOD BLANK: 3240849 Matrix: Water
Associated Lab Samples: 60413461001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	0.55	10/27/22 07:40	

METHOD BLANK: 3244778 Matrix: Water
Associated Lab Samples: 60413461001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	0.55	10/31/22 08:43	

LABORATORY CONTROL SAMPLE: 3240850

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

LABORATORY CONTROL SAMPLE: 3244779

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	5.0	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3241199 3241200

Parameter	Units	60413568001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	548	500	500	1420	1090	174	109	80-120	26	15	M1,R1

SAMPLE DUPLICATE: 3241201

Parameter	Units	60413568001 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfate	mg/L	548	541	1	15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

QC Batch: 815583
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413461001

METHOD BLANK: 3243704 Matrix: Water
Associated Lab Samples: 60413461001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.078	10/31/22 11:16	

LABORATORY CONTROL SAMPLE: 3243705

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.1	104	90-110	

MATRIX SPIKE SAMPLE: 3243706

Parameter	Units	60413165001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	2	1.4	68	90-110	M1

MATRIX SPIKE SAMPLE: 3243708

Parameter	Units	60413219001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.4	2	3.9	75	90-110	M1

SAMPLE DUPLICATE: 3243707

Parameter	Units	60413168002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

QC Batch: 814742
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413461001

METHOD BLANK: 3240216 Matrix: Water
Associated Lab Samples: 60413461001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.30	10/26/22 09:56	

LABORATORY CONTROL SAMPLE: 3240217

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.0	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3240219 3240220

Parameter	Units	60413574002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	ND	5	5	5.8	6.1	105	111	80-120	5	25	

SAMPLE DUPLICATE: 3240218

Parameter	Units	60413574002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	0.63J		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

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

QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

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

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413461

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60413461001	**MW-50R-202210**	AM20GAX	752794		
60413461001	**MW-50R-202210**	AM20GAX	752797		
60413461001	**MW-50R-202210**	EPA 3010	814323	EPA 6010	814397
60413461001	**MW-50R-202210**	SM 4500-S-2 D	814318		
60413461001	**MW-50R-202210**	EPA 300.0	814886		
60413461001	**MW-50R-202210**	EPA 353.2	815583		
60413461001	**MW-50R-202210**	SM 5310C	814742		

WO# : 60413461

60413461

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_S		
	Revision: 2	Effective Date: 01/12/2022	Issued By: Lenexa

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 ☑ epic

Thermometer Used: T299 **Type of Ice:** Wet Blue None

Cooler Temperature (°C): **As-read** 2-3 **Corr. Factor** 0-0 **Corrected** 2-3

Date and initials of person examining contents: 10/20/22 JA

Temperature should be above freezing to 6°C 2-6, 1.8 2-6, 1.8

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	
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#: 55192, 55193	☑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: _____

Qualtrax Document ID: 30468

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:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
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 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	Sulfate	Sulfide	Nitrate+Nitrite	TOC	Methane/Ethane/Ethene+Acetylene	Dissolved Hydrogen	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-50R-202210	WT	G	10-18-22	1140				7									/	X	X	X	X	X	X	X		6041346 /
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
M/E/E+A and Dissolved Hydrogen to Face Gulf Coast	Ramboll	10-18-22	1804		10/18/22	2321	2-3	Y	N	Y
							2-6			
							1-4			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jacki Fulmer

SIGNATURE of SAMPLER: 10/18/22 DATE Signed (MM/DD/YY):

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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

Client: Ramboll

Profile # 7444, line 1

OthR = Dissolved Hydrogen

Site: Whirlpool Fort Smith, AR

Notes Container sheet is correct

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									1								1		1				1			4		
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: 60413461

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

November 04, 2022

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 18, 2022. 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 Gulf Coast
- 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.

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

CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 22-031-0
Illinois Certification #: 2000302021-3
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 #: T104704407-21-15
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Gulf Coast

7979 Innovation Park Drive, Baton Rouge, LA 70820
Arkansas Certification #: 88-0655
DoD ELAP Certification #: 6429-01
Florida Certification #: E87854
Illinois Certification #: 004585
Kansas Certification #: E-10354
Louisiana/LELAP Certification #: 01955
North Carolina Certification #: 618
North Dakota Certification #: R-195
Oklahoma Certification #: 2019-101
South Carolina Certification #: 73006001
Texas Certification #: T104704178-19-11
USDA Soil Permit # P330-19-00209
Virginia Certification #: 460215
Washington Certification #: C929

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

SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60413474001	**TMW-36B-202210**	Water	10/18/22 09:55	10/18/22 23:21
60413474002	**TMW-36-202210**	Water	10/18/22 11:55	10/18/22 23:21
60413474003	**TMW-16-202210**	Water	10/18/22 12:22	10/18/22 23:21
60413474004	**MW-186-202210**	Water	10/18/22 14:30	10/18/22 23:21
60413474005	**TMW-26-202210**	Water	10/18/22 15:53	10/18/22 23:21
60413474006	**TMW-21-202210**	Water	10/18/22 17:15	10/18/22 23:21
60413474007	**MW-89-202210**	Water	10/18/22 17:27	10/18/22 23:21
60413474008	**MW-91-202210**	Water	10/18/22 14:47	10/18/22 23:21

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60413474001	**TMW-36B-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	CRN2, RKA	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413474002	**TMW-36-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	RKA	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413474003	**TMW-16-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	RKA	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413474004	**MW-186-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	RKA	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413474005	**TMW-26-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	RKA	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413474006	**TMW-21-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K

Pace Analytical Services, LLC
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(913)599-5665

SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 300.0	CRN2, RKA	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413474007	**MW-89-202210**	AM20GAX	LMB	4	GCLA
		EPA 6010	MA1	1	PASI-K
		SM 4500-S-2 D	KLM	1	PASI-K
		EPA 300.0	CRN2	1	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
60413474008	**MW-91-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	CRN2, RKA	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA

GCLA = Pace Analytical Gulf Coast
PASI-K = Pace Analytical Services - Kansas City

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Method: **AM20GAX**
Description: Indicator Gases Water LHC
Client: Ramboll_AR
Date: November 04, 2022

General Information:
8 samples were analyzed for AM20GAX by Pace Analytical Gulf Coast. 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.

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: 752797

R1: RPD value was outside control limits.

- LCSD (Lab ID: 2413843)
  - Acetylene
  - Methane

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.: 60413474

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Ramboll_AR
Date: November 04, 2022

General Information:
8 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.: 60413474

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Ramboll_AR
Date: November 04, 2022

General Information:
1 sample was 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: 814318

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413568001

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

- MS (Lab ID: 3238600)
  - Sulfide, Total
- MSD (Lab ID: 3238601)
  - 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.: 60413474

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Ramboll_AR
Date: November 04, 2022

General Information:
8 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: 814886

B: Analyte was detected in the associated method blank.

- BLANK for HBN 814886 [WETA/925 (Lab ID: 3240849)
  - Chloride
- BLANK for HBN 814886 [WETA/925 (Lab ID: 3244778)
  - 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: 814886

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413568001

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

- MS (Lab ID: 3241199)
  - Sulfate

R1: RPD value was outside control limits.

- MSD (Lab ID: 3241200)
  - 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.: 60413474

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 pres.
Client: Ramboll_AR
Date: November 04, 2022

General Information:
8 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: 815583

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413165001,60413219001

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

- MS (Lab ID: 3243706)
  - Nitrogen, NO2 plus NO3
- MS (Lab ID: 3243708)
  - Nitrogen, NO2 plus NO3

QC Batch: 815751

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413312003,60413474006,60413568001

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

- MS (Lab ID: 3244183)
  - Nitrogen, NO2 plus NO3
- MS (Lab ID: 3244185)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 3244188)
  - Nitrogen, NO2 plus NO3

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

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Method: **SM 5310C**
Description: 5310C TOC
Client: Ramboll_AR
Date: November 04, 2022

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.: 60413474

Method: **SM 5310C**
Description: 5310C Diss. Organic Carbon LF
Client: Ramboll_AR
Date: November 04, 2022

General Information:
7 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.: 60413474

Method: **AM23G**
Description: Low Level Volatile Fatty Acids
Client: Ramboll_AR
Date: November 04, 2022

General Information:
7 samples were analyzed for AM23G by Pace Analytical Gulf Coast. 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:

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.: 60413474

Sample: TMW-36B-202210 **Lab ID: 60413474001** Collected: 10/18/22 09:55 Received: 10/18/22 23:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**72**	ug/L	5.0	2.0	1		10/25/22 17:00	74-82-8	
Ethane	ND	ug/L	1.0	0.17	1		10/25/22 17:00	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/25/22 17:00	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**3610**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 10:57	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**467**	mg/L	50.0	26.4	50		10/31/22 14:16	16887-00-6	
Sulfate	**106**	mg/L	20.0	11.0	20		10/27/22 09:45	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**0.86**	mg/L	0.10	0.078	1		10/31/22 11:38		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.38J**	mg/L	1.0	0.30	1		10/26/22 11:08	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**0.91J**	mg/L	1.0	0.38	1		10/26/22 14:08		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**2.4J**	mg/L	10	1.1	20		10/26/22 18:12	50-21-5	
Acetic Acid	**4.2J**	mg/L	10	2.5	20		10/26/22 18:12	64-19-7	
Propionic Acid	ND	mg/L	10	1.1	20		10/26/22 18:12	79-09-4	
Formic acid	**110**	mg/L	10	1.1	20		10/26/22 18:12	64-18-6	
Butyric Acid	ND	mg/L	10	1.2	20		10/26/22 18:12	107-92-6	
Pyruvic Acid	ND	mg/L	10	1.2	20		10/26/22 18:12	127-17-3	
i-Pentanoic Acid	ND	mg/L	10	1.2	20		10/26/22 18:12	503-74-2	
Pentanoic Acid	ND	mg/L	10	1.1	20		10/26/22 18:12	109-52-4	
i-Hexanoic Acid	ND	mg/L	10	1.1	20		10/26/22 18:12	646-07-1	
Hexanoic Acid	ND	mg/L	10	1.2	20		10/26/22 18:12	142-62-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Sample: TMW-36-202210 **Lab ID: 60413474002** Collected: 10/18/22 11:55 Received: 10/18/22 23:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**4700**	ug/L	5.0	2.0	1		10/25/22 17:12	74-82-8	
Ethane	**0.69J**	ug/L	1.0	0.17	1		10/25/22 17:12	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/25/22 17:12	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**5510**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:03	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**132**	mg/L	20.0	10.5	20		10/27/22 10:00	16887-00-6	
Sulfate	**94.1**	mg/L	20.0	11.0	20		10/27/22 10:00	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**0.75**	mg/L	0.10	0.078	1		10/31/22 11:39		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.99J**	mg/L	1.0	0.30	1		10/26/22 11:22	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**1.5**	mg/L	1.0	0.38	1		10/26/22 14:24		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**2.3J**	mg/L	5.0	0.53	10		10/26/22 18:33	50-21-5	
Acetic Acid	**2.6J**	mg/L	5.0	1.2	10		10/26/22 18:33	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/26/22 18:33	79-09-4	
Formic acid	**60**	mg/L	5.0	0.55	10		10/26/22 18:33	64-18-6	
Butyric Acid	**0.63J**	mg/L	5.0	0.58	10		10/26/22 18:33	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/26/22 18:33	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/26/22 18:33	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/26/22 18:33	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/26/22 18:33	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/26/22 18:33	142-62-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Sample: TMW-16-202210 **Lab ID: 60413474003** Collected: 10/18/22 12:22 Received: 10/18/22 23:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**16000**	ug/L	5.0	2.0	1		10/25/22 17:25	74-82-8	
Ethane	**3.9**	ug/L	1.0	0.17	1		10/25/22 17:25	74-84-0	
Ethene	**2.2**	ug/L	1.0	0.24	1		10/25/22 17:25	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**6060**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:05	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**309**	mg/L	20.0	10.5	20		10/27/22 10:14	16887-00-6	
Sulfate	**85.1**	mg/L	20.0	11.0	20		10/27/22 10:14	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		10/31/22 11:40		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**7.6**	mg/L	1.0	0.30	1		10/26/22 11:37	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**11.6**	mg/L	1.0	0.38	1		10/26/22 14:39		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**5.0J**	mg/L	5.0	0.53	10		10/26/22 18:55	50-21-5	
Acetic Acid	**2.9J**	mg/L	5.0	1.2	10		10/26/22 18:55	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/26/22 18:55	79-09-4	
Formic acid	**55**	mg/L	5.0	0.55	10		10/26/22 18:55	64-18-6	
Butyric Acid	**1.4J**	mg/L	5.0	0.58	10		10/26/22 18:55	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/26/22 18:55	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/26/22 18:55	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/26/22 18:55	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/26/22 18:55	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/26/22 18:55	142-62-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Sample: MW-186-202210 **Lab ID: 60413474004** Collected: 10/18/22 14:30 Received: 10/18/22 23:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**16000**	ug/L	5.0	2.0	1		10/25/22 17:37	74-82-8	
Ethane	**0.91J**	ug/L	1.0	0.17	1		10/25/22 17:37	74-84-0	
Ethene	**1.3**	ug/L	1.0	0.24	1		10/25/22 17:37	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**12000**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:07	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**172**	mg/L	20.0	10.5	20		10/27/22 10:29	16887-00-6	
Sulfate	**80.2**	mg/L	20.0	11.0	20		10/27/22 10:29	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		10/31/22 11:41		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**7.8**	mg/L	1.0	0.30	1		10/26/22 11:51	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**11.4**	mg/L	1.0	0.38	1		10/26/22 14:54		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**4.6J**	mg/L	5.0	0.53	10		10/26/22 19:16	50-21-5	
Acetic Acid	**2.4J**	mg/L	5.0	1.2	10		10/26/22 19:16	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/26/22 19:16	79-09-4	
Formic acid	**57**	mg/L	5.0	0.55	10		10/26/22 19:16	64-18-6	
Butyric Acid	**0.59J**	mg/L	5.0	0.58	10		10/26/22 19:16	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/26/22 19:16	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/26/22 19:16	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/26/22 19:16	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/26/22 19:16	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/26/22 19:16	142-62-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Sample: TMW-26-202210 **Lab ID: 60413474005** Collected: 10/18/22 15:53 Received: 10/18/22 23:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**15000**	ug/L	5.0	2.0	1		10/25/22 17:49	74-82-8	
Ethane	**1.8**	ug/L	1.0	0.17	1		10/25/22 17:49	74-84-0	
Ethene	**1.6**	ug/L	1.0	0.24	1		10/25/22 17:49	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**13400**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:16	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**281**	mg/L	20.0	10.5	20		10/27/22 10:44	16887-00-6	
Sulfate	**138**	mg/L	20.0	11.0	20		10/27/22 10:44	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		10/31/22 11:42		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**11.6**	mg/L	1.0	0.30	1		10/26/22 12:05	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**17.5**	mg/L	1.0	0.38	1		10/26/22 15:10		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**3.8J**	mg/L	5.0	0.53	10		10/26/22 19:38	50-21-5	
Acetic Acid	**2.6J**	mg/L	5.0	1.2	10		10/26/22 19:38	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/26/22 19:38	79-09-4	
Formic acid	**59**	mg/L	5.0	0.55	10		10/26/22 19:38	64-18-6	
Butyric Acid	**1.5J**	mg/L	5.0	0.58	10		10/26/22 19:38	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/26/22 19:38	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/26/22 19:38	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/26/22 19:38	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/26/22 19:38	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/26/22 19:38	142-62-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Sample: TMW-21-202210 **Lab ID: 60413474006** Collected: 10/18/22 17:15 Received: 10/18/22 23:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**10000**	ug/L	5.0	2.0	1		10/25/22 18:02	74-82-8	
Ethane	**1.2**	ug/L	1.0	0.17	1		10/25/22 18:02	74-84-0	
Ethene	**1.8**	ug/L	1.0	0.24	1		10/25/22 18:02	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**12300**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:18	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**241**	mg/L	20.0	10.5	20		10/27/22 10:58	16887-00-6	
Sulfate	**6.3**	mg/L	1.0	0.55	1		10/31/22 15:03	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		11/01/22 14:51		M1
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.90J**	mg/L	1.0	0.30	1		10/26/22 12:48	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**2.2**	mg/L	1.0	0.38	1		10/26/22 15:25		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**3.7J**	mg/L	5.0	0.53	10		10/26/22 20:43	50-21-5	
Acetic Acid	**2.2J**	mg/L	5.0	1.2	10		10/26/22 20:43	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/26/22 20:43	79-09-4	
Formic acid	**54**	mg/L	5.0	0.55	10		10/26/22 20:43	64-18-6	
Butyric Acid	ND	mg/L	5.0	0.58	10		10/26/22 20:43	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/26/22 20:43	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/26/22 20:43	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/26/22 20:43	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/26/22 20:43	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/26/22 20:43	142-62-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Sample: MW-89-202210 **Lab ID: 60413474007** Collected: 10/18/22 17:27 Received: 10/18/22 23:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**9.7**	ug/L	5.0	2.0	1		10/28/22 10:07	74-82-8	
Ethane	ND	ug/L	1.0	0.17	1		10/28/22 10:07	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/28/22 10:07	74-85-1	
Acetylene	ND	ug/L	0.50	0.13	1		10/28/22 10:07	74-86-2	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**138**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:20	7439-89-6	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.021	1		10/24/22 14:56	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Sulfate	**3.2**	mg/L	1.0	0.55	1		10/31/22 15:19	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**93.2**	mg/L	5.0	3.9	50		11/01/22 15:23		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.91J**	mg/L	1.0	0.30	1		10/26/22 13:02	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Sample: MW-91-202210 **Lab ID: 60413474008** Collected: 10/18/22 14:47 Received: 10/18/22 23:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	ND	ug/L	5.0	2.0	1		10/28/22 10:20	74-82-8	
Ethane	ND	ug/L	1.0	0.17	1		10/28/22 10:20	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/28/22 10:20	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**11800**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:22	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**78.7**	mg/L	20.0	10.5	20		10/27/22 11:57	16887-00-6	B
Sulfate	**5.0**	mg/L	1.0	0.55	1		10/31/22 15:35	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		11/01/22 15:18		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**5.3**	mg/L	1.0	0.30	1		10/26/22 13:17	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**7.1**	mg/L	1.0	0.38	1		10/26/22 15:41		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**5.7**	mg/L	5.0	0.53	10		10/26/22 21:04	50-21-5	
Acetic Acid	**2.1J**	mg/L	5.0	1.2	10		10/26/22 21:04	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/26/22 21:04	79-09-4	
Formic acid	**55**	mg/L	5.0	0.55	10		10/26/22 21:04	64-18-6	
Butyric Acid	ND	mg/L	5.0	0.58	10		10/26/22 21:04	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/26/22 21:04	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/26/22 21:04	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/26/22 21:04	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/26/22 21:04	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/26/22 21:04	142-62-1	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

QC Batch: 752622
QC Batch Method: AM20GAX
Analysis Method: AM20GAX
Analysis Description: Indicator Gases Water LHC
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005, 60413474006

METHOD BLANK: 2412649 Matrix: Water
Associated Lab Samples: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005, 60413474006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Methane	ug/L	ND	5.0	2.0	10/25/22 13:40	
Ethane	ug/L	ND	1.0	0.17	10/25/22 13:40	
Ethene	ug/L	ND	1.0	0.24	10/25/22 13:40	
Acetylene	ug/L	ND	0.50	0.13	10/25/22 13:40	

LABORATORY CONTROL SAMPLE & LCSD: 2412650 2412651

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	380	340	360	89	93	70-130	4	20	
Ethane	ug/L	97	83	86	86	88	70-130	3	20	
Ethene	ug/L	120	99	100	83	85	70-130	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

QC Batch: 752797
QC Batch Method: AM20GAX
Analysis Method: AM20GAX
Analysis Description: Indicator Gases Water LHC
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413474007, 60413474008

METHOD BLANK: 2413841 Matrix: Water
Associated Lab Samples: 60413474007, 60413474008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Methane	ug/L	ND	5.0	2.0	10/28/22 06:44	
Ethane	ug/L	ND	1.0	0.17	10/28/22 06:44	
Ethene	ug/L	ND	1.0	0.24	10/28/22 06:44	
Acetylene	ug/L	ND	0.50	0.13	10/28/22 06:44	

LABORATORY CONTROL SAMPLE & LCSD: 2413842 2413843

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	750	560	840	75	113	70-130	41	20	R1
Ethane	ug/L	38	49	45	130	120	70-130	8	20	
Ethene	ug/L	35	46	43	130	121	70-130	8	20	
Acetylene	ug/L	33	34	26	105	80	70-130	27	20	R1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

QC Batch: 814323
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005, 60413474006, 60413474007, 60413474008

METHOD BLANK: 3238614 Matrix: Water
Associated Lab Samples: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005, 60413474006, 60413474007, 60413474008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	8.7J	50.0	7.4	11/01/22 10:50	

LABORATORY CONTROL SAMPLE: 3238615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9580	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3238617 3238657

Parameter	Units	60413474001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	3610	10000	10000	12800	12800	92	92	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

QC Batch: 814318
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: 60413474007

METHOD BLANK: 3238598 Matrix: Water
Associated Lab Samples: 60413474007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	0.021	10/24/22 14:51	

LABORATORY CONTROL SAMPLE: 3238599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.55	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3238600 3238601

Parameter	Units	60413568001 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	0.68	0.68	135	135	75-125	0	20	M1

SAMPLE DUPLICATE: 3238602

Parameter	Units	60413568001 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

SAMPLE DUPLICATE: 3238603

Parameter	Units	60413568003 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.: 60413474

QC Batch: 814886
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: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005, 60413474006, 60413474007, 60413474008

METHOD BLANK: 3240849 Matrix: Water
Associated Lab Samples: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005, 60413474006, 60413474007, 60413474008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.58J	1.0	0.53	10/27/22 07:40	
Sulfate	mg/L	ND	1.0	0.55	10/27/22 07:40	

METHOD BLANK: 3244778 Matrix: Water
Associated Lab Samples: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005, 60413474006, 60413474007, 60413474008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.60J	1.0	0.53	10/31/22 08:43	
Sulfate	mg/L	ND	1.0	0.55	10/31/22 08:43	

LABORATORY CONTROL SAMPLE: 3240850

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	93	90-110	
Sulfate	mg/L	5	4.6	93	90-110	

LABORATORY CONTROL SAMPLE: 3244779

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	95	90-110	
Sulfate	mg/L	5	5.0	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3241199 3241200

Parameter	Units	60413568001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.1	5	5	6.3	6.4	103	105	80-120	2	15	
Sulfate	mg/L	548	500	500	1420	1090	174	109	80-120	26	15	M1,R1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

SAMPLE DUPLICATE: 3241201

Parameter	Units	60413568001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	1.1	1.2	9	15	
Sulfate	mg/L	548	541	1	15	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

QC Batch: 815583
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005

METHOD BLANK: 3243704 Matrix: Water
Associated Lab Samples: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.078	10/31/22 11:16	

LABORATORY CONTROL SAMPLE: 3243705

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.1	104	90-110	

MATRIX SPIKE SAMPLE: 3243706

Parameter	Units	60413165001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	2	1.4	68	90-110	M1

MATRIX SPIKE SAMPLE: 3243708

Parameter	Units	60413219001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.4	2	3.9	75	90-110	M1

SAMPLE DUPLICATE: 3243707

Parameter	Units	60413168002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

QC Batch: 815751
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413474006, 60413474007, 60413474008

METHOD BLANK: 3244181 Matrix: Water
Associated Lab Samples: 60413474006, 60413474007, 60413474008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.078	11/01/22 14:49	

LABORATORY CONTROL SAMPLE: 3244182

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 3244183

Parameter	Units	60413474006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	2	1.1	54	90-110	M1

MATRIX SPIKE SAMPLE: 3244185

Parameter	Units	60413312003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.078	2	1.6	81	90-110	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3244187 3244188

Parameter	Units	60413568001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.18	2	2	2.2	2.0	99	89	90-110	10	20	M1

SAMPLE DUPLICATE: 3244184

Parameter	Units	60413474008 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

SAMPLE DUPLICATE: 3244186

Parameter	Units	60413568001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.18	0.20	11	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

QC Batch: 814742
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005, 60413474006, 60413474007, 60413474008

METHOD BLANK: 3240216 Matrix: Water
Associated Lab Samples: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005, 60413474006, 60413474007, 60413474008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.30	10/26/22 09:56	

LABORATORY CONTROL SAMPLE: 3240217

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.0	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3240219 3240220

Parameter	Units	60413574002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	ND	5	5	5.8	6.1	105	111	80-120	5	25	

SAMPLE DUPLICATE: 3240218

Parameter	Units	60413574002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	0.63J		25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

QC Batch: 814740
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Dissolved Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005, 60413474006, 60413474008

METHOD BLANK: 3240204 Matrix: Water
Associated Lab Samples: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005, 60413474006, 60413474008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.38	10/26/22 10:17	

LABORATORY CONTROL SAMPLE: 3240205

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	5	5.1	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3240207 3240208

Parameter	Units	10630402001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dissolved Organic Carbon	mg/L	1.4	5	5	6.8	7.0	107	111	80-120	3	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3240210 3240211

Parameter	Units	60413574002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dissolved Organic Carbon	mg/L	0.74J	5	5	5.7	5.4	99	94	80-120	4	25	

SAMPLE DUPLICATE: 3240206

Parameter	Units	10630402001 Result	Dup Result	RPD	Max RPD	Qualifiers
Dissolved Organic Carbon	mg/L	1.4	1.4	1	25	

SAMPLE DUPLICATE: 3240209

Parameter	Units	60413574002 Result	Dup Result	RPD	Max RPD	Qualifiers
Dissolved Organic Carbon	mg/L	0.74J	0.72J		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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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

QC Batch: 752719 | Analysis Method: AM23G
QC Batch Method: AM23G | Analysis Description: Low Level Volatile Fatty Acids
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005, 60413474006, 60413474008

METHOD BLANK: 2413262 Matrix: Water
Associated Lab Samples: 60413474001, 60413474002, 60413474003, 60413474004, 60413474005, 60413474006, 60413474008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lactic Acid	mg/L	ND	0.50	0.053	10/26/22 16:02	
Acetic Acid	mg/L	ND	0.50	0.12	10/26/22 16:02	
Propionic Acid	mg/L	ND	0.50	0.053	10/26/22 16:02	
Formic acid	mg/L	ND	0.50	0.055	10/26/22 16:02	
Butyric Acid	mg/L	ND	0.50	0.058	10/26/22 16:02	
Pyruvic Acid	mg/L	ND	0.50	0.060	10/26/22 16:02	
i-Pentanoic Acid	mg/L	ND	0.50	0.061	10/26/22 16:02	
Pentanoic Acid	mg/L	ND	0.50	0.056	10/26/22 16:02	
i-Hexanoic Acid	mg/L	ND	0.50	0.056	10/26/22 16:02	
Hexanoic Acid	mg/L	ND	0.50	0.058	10/26/22 16:02	

LABORATORY CONTROL SAMPLE & LCSD: 2413263 2413264

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Lactic Acid	mg/L	2	1.8	1.8	88	89	70-130	0	20	
Acetic Acid	mg/L	2	1.7	1.7	83	83	70-130	0	20	
Propionic Acid	mg/L	2	1.7	1.7	85	83	70-130	2	20	
Formic acid	mg/L	2	1.7	1.7	83	84	70-130	2	20	
Butyric Acid	mg/L	2	1.7	1.7	85	83	70-130	3	20	
Pyruvic Acid	mg/L	2	1.6	1.6	81	79	70-130	3	20	
i-Pentanoic Acid	mg/L	2	1.7	1.8	86	89	70-130	4	20	
Pentanoic Acid	mg/L	2	1.6	1.6	79	78	70-130	1	20	
i-Hexanoic Acid	mg/L	2	1.6	1.5	80	77	70-130	4	20	
Hexanoic Acid	mg/L	2	1.6	1.6	78	80	70-130	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

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.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413474

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60413474001	**TMW-36B-202210**	AM20GAX	752622		
60413474002	**TMW-36-202210**	AM20GAX	752622		
60413474003	**TMW-16-202210**	AM20GAX	752622		
60413474004	**MW-186-202210**	AM20GAX	752622		
60413474005	**TMW-26-202210**	AM20GAX	752622		
60413474006	**TMW-21-202210**	AM20GAX	752622		
60413474007	**MW-89-202210**	AM20GAX	752797		
60413474008	**MW-91-202210**	AM20GAX	752797		
60413474001	**TMW-36B-202210**	EPA 3010	814323	EPA 6010	814397
60413474002	**TMW-36-202210**	EPA 3010	814323	EPA 6010	814397
60413474003	**TMW-16-202210**	EPA 3010	814323	EPA 6010	814397
60413474004	**MW-186-202210**	EPA 3010	814323	EPA 6010	814397
60413474005	**TMW-26-202210**	EPA 3010	814323	EPA 6010	814397
60413474006	**TMW-21-202210**	EPA 3010	814323	EPA 6010	814397
60413474007	**MW-89-202210**	EPA 3010	814323	EPA 6010	814397
60413474008	**MW-91-202210**	EPA 3010	814323	EPA 6010	814397
60413474007	**MW-89-202210**	SM 4500-S-2 D	814318		
60413474001	**TMW-36B-202210**	EPA 300.0	814886		
60413474002	**TMW-36-202210**	EPA 300.0	814886		
60413474003	**TMW-16-202210**	EPA 300.0	814886		
60413474004	**MW-186-202210**	EPA 300.0	814886		
60413474005	**TMW-26-202210**	EPA 300.0	814886		
60413474006	**TMW-21-202210**	EPA 300.0	814886		
60413474007	**MW-89-202210**	EPA 300.0	814886		
60413474008	**MW-91-202210**	EPA 300.0	814886		
60413474001	**TMW-36B-202210**	EPA 353.2	815583		
60413474002	**TMW-36-202210**	EPA 353.2	815583		
60413474003	**TMW-16-202210**	EPA 353.2	815583		
60413474004	**MW-186-202210**	EPA 353.2	815583		
60413474005	**TMW-26-202210**	EPA 353.2	815583		
60413474006	**TMW-21-202210**	EPA 353.2	815751		
60413474007	**MW-89-202210**	EPA 353.2	815751		
60413474008	**MW-91-202210**	EPA 353.2	815751		
60413474001	**TMW-36B-202210**	SM 5310C	814742		
60413474002	**TMW-36-202210**	SM 5310C	814742		
60413474003	**TMW-16-202210**	SM 5310C	814742		
60413474004	**MW-186-202210**	SM 5310C	814742		
60413474005	**TMW-26-202210**	SM 5310C	814742		
60413474006	**TMW-21-202210**	SM 5310C	814742		
60413474007	**MW-89-202210**	SM 5310C	814742		
60413474008	**MW-91-202210**	SM 5310C	814742		
60413474001	**TMW-36B-202210**	SM 5310C	814740		
60413474002	**TMW-36-202210**	SM 5310C	814740		
60413474003	**TMW-16-202210**	SM 5310C	814740		
60413474004	**MW-186-202210**	SM 5310C	814740		

REPORT OF LABORATORY ANALYSIS

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.: 60413474

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60413474005	**TMW-26-202210**	SM 5310C	814740		
60413474006	**TMW-21-202210**	SM 5310C	814740		
60413474008	**MW-91-202210**	SM 5310C	814740		
60413474001	**TMW-36B-202210**	AM23G	752719		
60413474002	**TMW-36-202210**	AM23G	752719		
60413474003	**TMW-16-202210**	AM23G	752719		
60413474004	**MW-186-202210**	AM23G	752719		
60413474005	**TMW-26-202210**	AM23G	752719		
60413474006	**TMW-21-202210**	AM23G	752719		
60413474008	**MW-91-202210**	AM23G	752719		

WO# : 60413474

60413474

Pace	DC#_Title: ENV-FRM-LENE-0009_Sample		
	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 ☑ ziplc

Thermometer Used: T299 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 2.3 **Corr. Factor** 0.0 **Corrected** 2.3

Date and initials of person examining contents: 10/20/22 JA

Temperature should be above freezing to 6°C 2-6, 1-8 2-6, 1-8

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	Missing containers for Fatty Acids
Samples arrived within holding time:	☑Yes ☐No ☐N/A	for sample MW-89 and DOC
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	
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#: 55192, 55193	☑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: Per David Meyer, MW-89 should be analyzed for MNA parameters not ISCR parameters.

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 1

Section A — **Required** Client Information:

Company:	Ramboll
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B — **Required** Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
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	Sulfate	Chloride	Nitrate+Nitrite	TOC	DOC (Lab Filtered)	Methane/Ethane/Ethene	Volatile Fatty Acids				Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TMW-36B-202210	WT	G	10-18-22	~~1355~~ 1155				9									X	X	X	X	X	X	X	X				6041347
2	TMW-36-202210	WT	G	10-18-22	1155				9									X	X	X	X	X	X	X	X				
3	~~MW-94-202210~~	WT	G						9									X	X	X	X	X	X	X	X				
4	TMW-16-202210	WT	G	10-18-22	1222				9									X	X	X	X	X	X	X	X				
5	MW-18B-202210	WT	G	10-18-22	1430				9									X	X	X	X	X	X	X	X				
6	TMW-26-202210	WT	G	10-18-22	1553				9									X	X	X	X	X	X	X	X				
7	TMW-21-202210	WT	G	10-18-22	1715				9									X	X	X	X	X	X	X	X				
8	MW-89-202210	WT	G	10-18-22	1727				9									X	X	X	X	X	X	X	X				
9	MW-91-202210	WT	G	10-18-22	1447				9									X	X	X	X	X	X	X	X				
10																													
11																													
12																													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
M/E/E and VFAs to Pace Gulf Coast	Ramboll	10-18-22	1804		10/18/22	2321

SAMPLE CONDITIONS	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	2-3	Y	N	Y
	2-6			
	1.8			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Fullmer

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 10/18/22

*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 # 74444 line 1

Site: whirlpool | Fort Smith, AR

Notes OthR = Fatty Acids

Log BP3Z for hold for sample mw 89

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								1	1								1		1							2		
2	WT			3								1	1								1		1							2		
3																																
4	WT			3								1	1								1		1							2		
5	↓			↓								↓	↓								↓		↓							↓		
6																																
7												↓																		↓		
8																											1					
9	↓			↓								1	↓								↓		↓							2		
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: 60413474

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

November 02, 2022

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 18, 2022. 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 Gulf Coast
- 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.

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

CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 22-031-0
Illinois Certification #: 2000302021-3
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 #: T104704407-21-15
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Gulf Coast

7979 Innovation Park Drive, Baton Rouge, LA 70820
Arkansas Certification #: 88-0655
DoD ELAP Certification #: 6429-01
Florida Certification #: E87854
Illinois Certification #: 004585
Kansas Certification #: E-10354
Louisiana/LELAP Certification #: 01955
North Carolina Certification #: 618
North Dakota Certification #: R-195
Oklahoma Certification #: 2019-101
South Carolina Certification #: 73006001
Texas Certification #: T104704178-19-11
USDA Soil Permit # P330-19-00209
Virginia Certification #: 460215
Washington Certification #: C929

Pace Analytical Services, LLC
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Lenexa, KS 66219
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SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60413494001	MW-29-202210	Water	10/17/22 15:48	10/18/22 23:21
60413494002	ITMW-20-202210	Water	10/17/22 16:03	10/18/22 23:21
60413494003	DUP-03-202210	Water	10/17/22 16:05	10/18/22 23:21
60413494004	MW-62R-202210	Water	10/17/22 15:50	10/18/22 23:21
60413494005	MW-60R-202210	Water	10/17/22 16:28	10/18/22 23:21
60413494006	MW-191-202210	Water	10/17/22 17:19	10/18/22 23:21
60413494007	MW-39R-202210	Water	10/17/22 17:15	10/18/22 23:21
60413494008	TMW-29-202210	Water	10/17/22 18:00	10/18/22 23:21
60413494009	MW-26-202210	Water	10/17/22 17:15	10/18/22 23:21
60413494010	MW-98-202210	Water	10/17/22 17:45	10/18/22 23:21
60413494011	MW-96-202210	Water	10/17/22 16:20	10/18/22 23:21
60413494012	DUP-08-202210	Water	10/17/22 16:20	10/18/22 23:21
60413494013	MW-97-202210	Water	10/17/22 18:00	10/18/22 23:21
60413494014	MW-68-202210	Water	10/18/22 09:19	10/18/22 23:21
60413494015	MW-22-202210	Water	10/18/22 08:55	10/18/22 23:21
60413494016	MW-184-202210	Water	10/18/22 09:50	10/18/22 23:21
60413494017	DUP-10-202210	Water	10/18/22 09:50	10/18/22 23:21
60413494018	TMW-36B-202210	Water	10/18/22 09:55	10/18/22 23:21
60413494019	MW-27-202210	Water	10/18/22 10:32	10/18/22 23:21
60413494020	TMW-36-202210	Water	10/18/22 11:55	10/18/22 23:21
60413494021	MW-196-202210	Water	10/18/22 09:51	10/18/22 23:21
60413494022	MW-195-202210	Water	10/18/22 11:32	10/18/22 23:21
60413494023	DUP-06-202210	Water	10/18/22 11:32	10/18/22 23:21
60413494024	TMW-35-202210	Water	10/18/22 12:10	10/18/22 23:21
60413494025	DUP-11-202210	Water	10/18/22 12:10	10/18/22 23:21
60413494026	MW-176-202210	Water	10/18/22 14:26	10/18/22 23:21
60413494027	MW-200-202210	Water	10/18/22 14:35	10/18/22 23:21
60413494028	TMW-27-202210	Water	10/18/22 14:31	10/18/22 23:21
60413494029	MW-91-202210	Water	10/18/22 14:47	10/18/22 23:21
60413494030	TMW-16-202210	Water	10/18/22 12:22	10/18/22 23:21
60413494031	MW-186-202210	Water	10/18/22 14:30	10/18/22 23:21
60413494032	MW-206-202210	Water	10/18/22 10:00	10/18/22 23:21
60413494033	MW-50R-202210	Water	10/18/22 11:40	10/18/22 23:21
60413494034	MW-28-202210	Water	10/18/22 14:55	10/18/22 23:21
60413494035	TMW-26-202210	Water	10/18/22 15:53	10/18/22 23:21
60413494036	ITMW-2R-202210	Water	10/18/22 16:15	10/18/22 23:21
60413494037	TMW-21-202210	Water	10/18/22 17:15	10/18/22 23:21

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60413494038	**TMW-20-202210**	Water	10/18/22 13:00	10/18/22 23:21
60413494039	**TMW-19-202210**	Water	10/18/22 16:10	10/18/22 23:21
60413494040	**MW-89-202210**	Water	10/18/22 17:27	10/18/22 23:21
60413494041	**MW-183R-202210**	Water	10/18/22 16:05	10/18/22 23:21
60413494042	**EB-02-202210**	Water	10/17/22 16:00	10/18/22 23:21
60413494043	**EB-01-202210**	Water	10/18/22 17:05	10/18/22 23:21
60413494044	**TB-02-202210**	Water	10/18/22 08:00	10/18/22 23:21
60413494045	**TB-01-202210**	Water	10/18/22 08:00	10/18/22 23:21

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60413494001	MW-29-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494002	ITMW-20-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494003	DUP-03-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494004	MW-62R-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494005	MW-60R-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494006	MW-191-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494007	MW-39R-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494008	TMW-29-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494009	MW-26-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494010	MW-98-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494011	MW-96-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494012	DUP-08-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494013	MW-97-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494014	MW-68-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494015	MW-22-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494016	MW-184-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494017	DUP-10-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494018	TMW-36B-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494019	MW-27-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494020	TMW-36-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494021	MW-196-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494022	MW-195-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494023	DUP-06-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494024	TMW-35-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494025	DUP-11-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494026	MW-176-202210	EPA 5030B/8260	HM1, PGH	38	PASI-K
60413494027	MW-200-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494028	TMW-27-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494029	MW-91-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494030	TMW-16-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494031	MW-186-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494032	MW-206-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494033	MW-50R-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494034	MW-28-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494035	TMW-26-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494036	ITMW-2R-202210	EPA 5030B/8260	PGH	38	PASI-K
60413494037	TMW-21-202210	EPA 5030B/8260	PGH	38	PASI-K

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60413494038	**TMW-20-202210**	EPA 5030B/8260	PGH	38	PASI-K
60413494039	**TMW-19-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	CRN2, RKA	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413494040	**MW-89-202210**	EPA 5030B/8260	PGH	38	PASI-K
60413494041	**MW-183R-202210**	EPA 5030B/8260	PGH	38	PASI-K
60413494042	**EB-02-202210**	EPA 5030B/8260	PGH	38	PASI-K
60413494043	**EB-01-202210**	EPA 5030B/8260	PGH	38	PASI-K
60413494044	**TB-02-202210**	EPA 5030B/8260	PGH	38	PASI-K
60413494045	**TB-01-202210**	EPA 5030B/8260	PGH	38	PASI-K

GCLA = Pace Analytical Gulf Coast
PASI-K = Pace Analytical Services - Kansas City

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Method: **AM20GAX**
Description: Indicator Gases Water LHC
Client: Ramboll_AR
Date: November 02, 2022

General Information:
1 sample was analyzed for AM20GAX by Pace Analytical Gulf Coast. 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.

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:

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Ramboll_AR
Date: November 02, 2022

General Information:
1 sample was 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.

QC Batch: 814323

B: Analyte was detected in the associated method blank.

- BLANK for HBN 814323 [MPRP/738 (Lab ID: 3238614)
  - Iron

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

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

Additional Comments:

Pace Analytical Services, LLC
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(913)599-5665

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: November 02, 2022

General Information:
45 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: 814322

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413494001,60413494005

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

- MS (Lab ID: 3238610)
  - Methylene Chloride
  - Styrene
- MS (Lab ID: 3238612)
  - Styrene
- MSD (Lab ID: 3238611)
  - 1,1,2-Trichloroethane
  - Dibromochloromethane
  - Styrene
  - trans-1,3-Dichloropropene
- MSD (Lab ID: 3238613)
  - Styrene

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(913)599-5665

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: November 02, 2022

QC Batch: 814322

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413494001,60413494005

R1: RPD value was outside control limits.

- MSD (Lab ID: 3238611)
  - 1,1,2-Trichloroethane
  - 2-Hexanone
  - Acetone
  - Bromoform
  - Chloroethane
  - Dibromochloromethane
  - Methylene Chloride
  - trans-1,3-Dichloropropene

QC Batch: 814494

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413494041

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

- MS (Lab ID: 3239176)
  - Bromomethane
- MSD (Lab ID: 3239177)
  - Dibromochloromethane
  - Methylene Chloride

Additional Comments:

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Ramboll_AR
Date: November 02, 2022

General Information:
1 sample was 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: 814886

B: Analyte was detected in the associated method blank.

- BLANK for HBN 814886 [WETA/925 (Lab ID: 3240849)
  - Chloride
- BLANK for HBN 814886 [WETA/925 (Lab ID: 3244778)
  - 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: 814886

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413568001

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

- MS (Lab ID: 3241199)
  - Sulfate

R1: RPD value was outside control limits.

- MSD (Lab ID: 3241200)
  - Sulfate

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

Additional Comments:

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 pres.
Client: Ramboll_AR
Date: November 02, 2022

General Information:
1 sample was 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: 815751

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s):
60413312003,60413474006,60413568001

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

- MS (Lab ID: 3244183)
  - Nitrogen, NO2 plus NO3
- MS (Lab ID: 3244185)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 3244188)
  - Nitrogen, NO2 plus NO3

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

Additional Comments:

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Method: **SM 5310C**
Description: 5310C TOC
Client: Ramboll_AR
Date: November 02, 2022

General Information:
1 sample was 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:

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Method: **SM 5310C**
Description: 5310C Diss. Organic Carbon LF
Client: Ramboll_AR
Date: November 02, 2022

General Information:
1 sample was 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:

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Method: **AM23G**
Description: Low Level Volatile Fatty Acids
Client: Ramboll_AR
Date: November 02, 2022

General Information:
1 sample was analyzed for AM23G by Pace Analytical Gulf Coast. 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:

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.: 60413494

Sample: MW-29-202210 **Lab ID: 60413494001** Collected: 10/17/22 15:48 Received: 10/18/22 23:21 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		10/25/22 01:06	67-64-1	R1
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 01:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 01:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 01:06	75-25-2	R1
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 01:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 01:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 01:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 01:06	56-23-5	
Chlorobenzene	**5.5**	ug/L	1.0	0.089	1		10/25/22 01:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 01:06	75-00-3	R1
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 01:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 01:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 01:06	124-48-1	M1,R1
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 01:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 01:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 01:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 01:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 01:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 01:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 01:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 01:06	10061-02-6	M1,R1
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 01:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 01:06	591-78-6	R1
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 01:06	75-09-2	M1,R1
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 01:06	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 01:06	100-42-5	M1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 01:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 01:06	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 01:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 01:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 01:06	79-00-5	M1,R1
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 01:06	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 01:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 01:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		10/25/22 01:06	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/25/22 01:06	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		1		10/25/22 01:06	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 01:06		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: ITMW-20-202210 **Lab ID: 60413494002** Collected: 10/17/22 16:03 Received: 10/18/22 23:21 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		10/25/22 01:20	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 01:20	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 01:20	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 01:20	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 01:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 01:20	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 01:20	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 01:20	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 01:20	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 01:20	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 01:20	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 01:20	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 01:20	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 01:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 01:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 01:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 01:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 01:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 01:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 01:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 01:20	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 01:20	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 01:20	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 01:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 01:20	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 01:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 01:20	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 01:20	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 01:20	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 01:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 01:20	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 01:20	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 01:20	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 01:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/25/22 01:20	460-00-4	
Toluene-d8 (S)	95	%	80-120		1		10/25/22 01:20	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/25/22 01:20	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 01:20		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: DUP-03-202210 **Lab ID: 60413494003** Collected: 10/17/22 16:05 Received: 10/18/22 23:21 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		10/25/22 03:49	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 03:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 03:49	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 03:49	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 03:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 03:49	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 03:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 03:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 03:49	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 03:49	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 03:49	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 03:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 03:49	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 03:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 03:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 03:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 03:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 03:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 03:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 03:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 03:49	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 03:49	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 03:49	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 03:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 03:49	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 03:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 03:49	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 03:49	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 03:49	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 03:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 03:49	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 03:49	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 03:49	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 03:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/25/22 03:49	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 03:49	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 03:49	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 03:49		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-62R-202210 **Lab ID: 60413494004** Collected: 10/17/22 15:50 Received: 10/18/22 23:21 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		10/25/22 01:34	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 01:34	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 01:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 01:34	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 01:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 01:34	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 01:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 01:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 01:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 01:34	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 01:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 01:34	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 01:34	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 01:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 01:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 01:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 01:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 01:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 01:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 01:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 01:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 01:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 01:34	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 01:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 01:34	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 01:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 01:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 01:34	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 01:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 01:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 01:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 01:34	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 01:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 01:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/25/22 01:34	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 01:34	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		10/25/22 01:34	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 01:34		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-60R-202210 **Lab ID: 60413494005** Collected: 10/17/22 16:28 Received: 10/18/22 23:21 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		10/25/22 01:47	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 01:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 01:47	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 01:47	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 01:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 01:47	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 01:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 01:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 01:47	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 01:47	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 01:47	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 01:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 01:47	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 01:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 01:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 01:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 01:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 01:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 01:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 01:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 01:47	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 01:47	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 01:47	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 01:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 01:47	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 01:47	100-42-5	M1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 01:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 01:47	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 01:47	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 01:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 01:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 01:47	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 01:47	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 01:47	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		10/25/22 01:47	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/25/22 01:47	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 01:47	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 01:47		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-191-202210 **Lab ID: 60413494006** Collected: 10/17/22 17:19 Received: 10/18/22 23:21 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		10/25/22 02:01	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 02:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 02:01	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 02:01	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 02:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 02:01	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 02:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 02:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 02:01	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 02:01	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 02:01	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 02:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 02:01	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 02:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 02:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 02:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 02:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 02:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 02:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 02:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 02:01	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 02:01	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 02:01	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 02:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 02:01	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 02:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 02:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 02:01	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 02:01	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 02:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 02:01	79-00-5	
Trichloroethene	**2.8**	ug/L	1.0	0.21	1		10/25/22 02:01	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 02:01	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 02:01	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/25/22 02:01	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 02:01	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/25/22 02:01	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 02:01		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-39R-202210 **Lab ID: 60413494007** Collected: 10/17/22 17:15 Received: 10/18/22 23:21 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		10/25/22 02:14	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 02:14	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 02:14	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 02:14	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 02:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 02:14	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 02:14	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 02:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 02:14	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 02:14	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 02:14	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 02:14	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 02:14	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 02:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 02:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 02:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 02:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 02:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 02:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 02:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 02:14	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 02:14	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 02:14	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 02:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 02:14	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 02:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 02:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 02:14	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 02:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 02:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 02:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 02:14	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 02:14	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 02:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/25/22 02:14	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 02:14	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 02:14	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 02:14		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: TMW-29-202210 **Lab ID: 60413494008** Collected: 10/17/22 18:00 Received: 10/18/22 23:21 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		10/25/22 02:28	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 02:28	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 02:28	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 02:28	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 02:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 02:28	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 02:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 02:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 02:28	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 02:28	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 02:28	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 02:28	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 02:28	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 02:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 02:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 02:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 02:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 02:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 02:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 02:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 02:28	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 02:28	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 02:28	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 02:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 02:28	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 02:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 02:28	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 02:28	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 02:28	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 02:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 02:28	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 02:28	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 02:28	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 02:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/25/22 02:28	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/25/22 02:28	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/25/22 02:28	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 02:28		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-26-202210 **Lab ID: 60413494009** Collected: 10/17/22 17:15 Received: 10/18/22 23:21 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		10/25/22 02:41	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 02:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 02:41	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 02:41	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 02:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 02:41	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 02:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 02:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 02:41	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 02:41	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 02:41	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 02:41	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 02:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 02:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 02:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 02:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 02:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 02:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 02:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 02:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 02:41	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 02:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 02:41	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 02:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 02:41	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 02:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 02:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 02:41	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 02:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 02:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 02:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 02:41	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 02:41	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 02:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/25/22 02:41	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/25/22 02:41	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/25/22 02:41	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 02:41		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-98-202210 **Lab ID: 60413494010** Collected: 10/17/22 17:45 Received: 10/18/22 23:21 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		10/25/22 02:55	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 02:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 02:55	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 02:55	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 02:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 02:55	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 02:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 02:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 02:55	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 02:55	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 02:55	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 02:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 02:55	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 02:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 02:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 02:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 02:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 02:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 02:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 02:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 02:55	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 02:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 02:55	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 02:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 02:55	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 02:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 02:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 02:55	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 02:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 02:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 02:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 02:55	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 02:55	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 02:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/25/22 02:55	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 02:55	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/25/22 02:55	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 02:55		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-96-202210 **Lab ID: 60413494011** Collected: 10/17/22 16:20 Received: 10/18/22 23:21 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		10/25/22 03:22	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 03:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 03:22	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 03:22	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 03:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 03:22	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 03:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 03:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 03:22	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 03:22	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 03:22	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 03:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 03:22	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 03:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 03:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 03:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 03:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 03:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 03:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 03:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 03:22	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 03:22	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 03:22	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 03:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 03:22	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 03:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 03:22	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 03:22	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 03:22	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 03:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 03:22	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 03:22	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 03:22	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 03:22	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/25/22 03:22	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/25/22 03:22	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 03:22	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 03:22		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: DUP-08-202210 **Lab ID: 60413494012** Collected: 10/17/22 16:20 Received: 10/18/22 23:21 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		10/25/22 03:09	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 03:09	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 03:09	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 03:09	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 03:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 03:09	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 03:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 03:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 03:09	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 03:09	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 03:09	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 03:09	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 03:09	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 03:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 03:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 03:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 03:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 03:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 03:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 03:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 03:09	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 03:09	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 03:09	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 03:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 03:09	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 03:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 03:09	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 03:09	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 03:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 03:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 03:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 03:09	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 03:09	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 03:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/25/22 03:09	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/25/22 03:09	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 03:09	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 03:09		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-97-202210 **Lab ID: 60413494013** Collected: 10/17/22 18:00 Received: 10/18/22 23:21 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		10/25/22 03:36	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 03:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 03:36	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 03:36	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 03:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 03:36	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 03:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 03:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 03:36	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 03:36	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 03:36	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 03:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 03:36	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 03:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 03:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 03:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 03:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 03:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 03:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 03:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 03:36	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 03:36	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 03:36	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 03:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 03:36	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 03:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 03:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 03:36	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 03:36	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 03:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 03:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 03:36	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 03:36	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 03:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/25/22 03:36	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/25/22 03:36	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/25/22 03:36	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 03:36		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-68-202210 **Lab ID: 60413494014** Collected: 10/18/22 09:19 Received: 10/18/22 23:21 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		10/25/22 08:25	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 08:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 08:25	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 08:25	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 08:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 08:25	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 08:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 08:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 08:25	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 08:25	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 08:25	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 08:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 08:25	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 08:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 08:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 08:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 08:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 08:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 08:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 08:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 08:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 08:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 08:25	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 08:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 08:25	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 08:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 08:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 08:25	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 08:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 08:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 08:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 08:25	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 08:25	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 08:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/25/22 08:25	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 08:25	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/25/22 08:25	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 08:25		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-22-202210 **Lab ID: 60413494015** Collected: 10/18/22 08:55 Received: 10/18/22 23:21 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		10/25/22 08:39	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 08:39	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 08:39	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 08:39	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 08:39	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 08:39	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 08:39	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 08:39	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 08:39	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 08:39	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 08:39	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 08:39	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 08:39	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 08:39	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 08:39	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 08:39	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 08:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 08:39	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 08:39	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 08:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 08:39	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 08:39	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 08:39	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 08:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 08:39	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 08:39	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 08:39	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 08:39	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 08:39	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 08:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 08:39	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 08:39	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 08:39	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 08:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/25/22 08:39	460-00-4	
Toluene-d8 (S)	96	%	80-120		1		10/25/22 08:39	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	106	%	80-120		1		10/25/22 08:39	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 08:39		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-184-202210 **Lab ID: 60413494016** Collected: 10/18/22 09:50 Received: 10/18/22 23:21 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		10/25/22 09:06	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 09:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 09:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 09:06	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 09:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 09:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 09:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 09:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 09:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 09:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 09:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 09:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 09:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 09:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 09:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 09:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 09:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 09:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 09:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 09:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 09:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 09:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 09:06	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 09:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 09:06	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 09:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 09:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 09:06	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 09:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 09:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 09:06	79-00-5	
Trichloroethene	**0.49J**	ug/L	1.0	0.21	1		10/25/22 09:06	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 09:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 09:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/25/22 09:06	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 09:06	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		10/25/22 09:06	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 09:06		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: DUP-10-202210 **Lab ID: 60413494017** Collected: 10/18/22 09:50 Received: 10/18/22 23:21 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		10/25/22 08:52	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 08:52	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 08:52	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 08:52	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 08:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 08:52	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 08:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 08:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 08:52	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 08:52	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 08:52	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 08:52	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 08:52	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 08:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 08:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 08:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 08:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 08:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 08:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 08:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 08:52	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 08:52	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 08:52	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 08:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 08:52	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 08:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 08:52	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 08:52	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 08:52	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 08:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 08:52	79-00-5	
Trichloroethene	**0.55J**	ug/L	1.0	0.21	1		10/25/22 08:52	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 08:52	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 08:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/25/22 08:52	460-00-4	
Toluene-d8 (S)	104	%	80-120		1		10/25/22 08:52	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 08:52	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 08:52		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: TMW-36B-202210 **Lab ID: 60413494018** Collected: 10/18/22 09:55 Received: 10/18/22 23:21 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		10/25/22 12:29	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 12:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 12:29	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 12:29	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 12:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 12:29	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 12:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 12:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 12:29	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 12:29	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 12:29	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 12:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 12:29	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 12:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 12:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 12:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 12:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 12:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 12:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 12:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 12:29	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 12:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 12:29	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 12:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 12:29	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 12:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 12:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 12:29	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 12:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 12:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 12:29	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 12:29	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 12:29	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 12:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/25/22 12:29	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 12:29	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		1		10/25/22 12:29	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 12:29		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-27-202210 **Lab ID: 60413494019** Collected: 10/18/22 10:32 Received: 10/18/22 23:21 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		10/25/22 09:19	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 09:19	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 09:19	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 09:19	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 09:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 09:19	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 09:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 09:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 09:19	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 09:19	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 09:19	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 09:19	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 09:19	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 09:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 09:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 09:19	75-35-4	
cis-1,2-Dichloroethene	**1.8**	ug/L	1.0	0.13	1		10/25/22 09:19	156-59-2	
trans-1,2-Dichloroethene	**0.33J**	ug/L	1.0	0.10	1		10/25/22 09:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 09:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 09:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 09:19	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 09:19	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 09:19	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 09:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 09:19	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 09:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 09:19	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 09:19	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 09:19	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 09:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 09:19	79-00-5	
Trichloroethene	**105**	ug/L	1.0	0.21	1		10/25/22 09:19	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 09:19	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 09:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		10/25/22 09:19	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/25/22 09:19	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/25/22 09:19	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 09:19		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: TMW-36-202210 **Lab ID: 60413494020** Collected: 10/18/22 11:55 Received: 10/18/22 23:21 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		10/25/22 09:33	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 09:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 09:33	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 09:33	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 09:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 09:33	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 09:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 09:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 09:33	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 09:33	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 09:33	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 09:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 09:33	124-48-1	
1,1-Dichloroethane	**0.54J**	ug/L	1.0	0.12	1		10/25/22 09:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 09:33	107-06-2	
1,1-Dichloroethene	**1.1**	ug/L	1.0	0.22	1		10/25/22 09:33	75-35-4	
cis-1,2-Dichloroethene	**81.5**	ug/L	1.0	0.13	1		10/25/22 09:33	156-59-2	
trans-1,2-Dichloroethene	**0.14J**	ug/L	1.0	0.10	1		10/25/22 09:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 09:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 09:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 09:33	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 09:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 09:33	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 09:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 09:33	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 09:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 09:33	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 09:33	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 09:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 09:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 09:33	79-00-5	
Trichloroethene	**86.7**	ug/L	1.0	0.21	1		10/25/22 09:33	79-01-6	
Vinyl chloride	**0.37J**	ug/L	1.0	0.17	1		10/25/22 09:33	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 09:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		10/25/22 09:33	460-00-4	
Toluene-d8 (S)	97	%	80-120		1		10/25/22 09:33	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	93	%	80-120		1		10/25/22 09:33	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 09:33		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-196-202210 **Lab ID: 60413494021** Collected: 10/18/22 09:51 Received: 10/18/22 23:21 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		10/25/22 09:47	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 09:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 09:47	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 09:47	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 09:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 09:47	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 09:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 09:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 09:47	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 09:47	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 09:47	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 09:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 09:47	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 09:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 09:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 09:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 09:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 09:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 09:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 09:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 09:47	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 09:47	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 09:47	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 09:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 09:47	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 09:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 09:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 09:47	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 09:47	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 09:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 09:47	79-00-5	
Trichloroethene	**0.33J**	ug/L	1.0	0.21	1		10/25/22 09:47	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 09:47	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 09:47	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/25/22 09:47	460-00-4	
Toluene-d8 (S)	97	%	80-120		1		10/25/22 09:47	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/25/22 09:47	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 09:47		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-195-202210 **Lab ID: 60413494022** Collected: 10/18/22 11:32 Received: 10/18/22 23:21 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		10/25/22 10:14	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 10:14	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 10:14	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 10:14	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 10:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 10:14	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 10:14	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 10:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 10:14	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 10:14	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 10:14	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 10:14	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 10:14	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 10:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 10:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 10:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 10:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 10:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 10:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 10:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 10:14	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 10:14	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 10:14	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 10:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 10:14	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 10:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 10:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 10:14	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 10:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 10:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 10:14	79-00-5	
Trichloroethene	**3.0**	ug/L	1.0	0.21	1		10/25/22 10:14	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 10:14	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 10:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/25/22 10:14	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 10:14	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 10:14	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 10:14		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: DUP-06-202210 **Lab ID: 60413494023** Collected: 10/18/22 11:32 Received: 10/18/22 23:21 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		10/25/22 10:00	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 10:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 10:00	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 10:00	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 10:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 10:00	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 10:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 10:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 10:00	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 10:00	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 10:00	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 10:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 10:00	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 10:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 10:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 10:00	75-35-4	
cis-1,2-Dichloroethene	**0.20J**	ug/L	1.0	0.13	1		10/25/22 10:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 10:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 10:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 10:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 10:00	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 10:00	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 10:00	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 10:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 10:00	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 10:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 10:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 10:00	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 10:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 10:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 10:00	79-00-5	
Trichloroethene	**3.0**	ug/L	1.0	0.21	1		10/25/22 10:00	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 10:00	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 10:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/25/22 10:00	460-00-4	
Toluene-d8 (S)	94	%	80-120		1		10/25/22 10:00	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/25/22 10:00	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 10:00		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: TMW-35-202210 **Lab ID: 60413494024** Collected: 10/18/22 12:10 Received: 10/18/22 23:21 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		10/25/22 10:41	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 10:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 10:41	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 10:41	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 10:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 10:41	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 10:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 10:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 10:41	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 10:41	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 10:41	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 10:41	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 10:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 10:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 10:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 10:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 10:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 10:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 10:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 10:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 10:41	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 10:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 10:41	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 10:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 10:41	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 10:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 10:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 10:41	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 10:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 10:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 10:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 10:41	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 10:41	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 10:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/25/22 10:41	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 10:41	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		10/25/22 10:41	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 10:41		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: DUP-11-202210 **Lab ID: 60413494025** Collected: 10/18/22 12:10 Received: 10/18/22 23:21 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		10/25/22 10:27	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 10:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 10:27	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 10:27	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 10:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 10:27	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 10:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 10:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 10:27	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 10:27	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 10:27	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 10:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 10:27	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 10:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 10:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 10:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 10:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 10:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 10:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 10:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 10:27	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 10:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 10:27	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 10:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 10:27	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 10:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 10:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 10:27	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 10:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 10:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 10:27	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 10:27	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 10:27	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 10:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/25/22 10:27	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 10:27	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/25/22 10:27	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 10:27		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-176-202210 **Lab ID: 60413494026** Collected: 10/18/22 14:26 Received: 10/18/22 23:21 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		10/25/22 12:43	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 12:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 12:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 12:43	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 12:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 12:43	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 12:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 12:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 12:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 12:43	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 12:43	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 12:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 12:43	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 12:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 12:43	107-06-2	
1,1-Dichloroethene	**2.2**	ug/L	1.0	0.22	1		10/25/22 12:43	75-35-4	
cis-1,2-Dichloroethene	**13.5**	ug/L	1.0	0.13	1		10/25/22 12:43	156-59-2	
trans-1,2-Dichloroethene	**0.34J**	ug/L	1.0	0.10	1		10/25/22 12:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 12:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 12:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 12:43	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 12:43	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 12:43	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 12:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 12:43	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 12:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 12:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 12:43	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 12:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 12:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 12:43	79-00-5	
Trichloroethene	**329**	ug/L	10.0	2.1	10		10/31/22 16:09	79-01-6	
Vinyl chloride	**18.9**	ug/L	1.0	0.17	1		10/25/22 12:43	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 12:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		10/25/22 12:43	460-00-4	
Toluene-d8 (S)	105	%	80-120		1		10/25/22 12:43	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/25/22 12:43	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 12:43		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-200-202210 **Lab ID: 60413494027** Collected: 10/18/22 14:35 Received: 10/18/22 23:21 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		10/25/22 10:54	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 10:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 10:54	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 10:54	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 10:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 10:54	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 10:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 10:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 10:54	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 10:54	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 10:54	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 10:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 10:54	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 10:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 10:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 10:54	75-35-4	
cis-1,2-Dichloroethene	**0.59J**	ug/L	1.0	0.13	1		10/25/22 10:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 10:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 10:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 10:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 10:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 10:54	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 10:54	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 10:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 10:54	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 10:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 10:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 10:54	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 10:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 10:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 10:54	79-00-5	
Trichloroethene	**7.4**	ug/L	1.0	0.21	1		10/25/22 10:54	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 10:54	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 10:54	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/25/22 10:54	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 10:54	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 10:54	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 10:54		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: TMW-27-202210 **Lab ID: 60413494028** Collected: 10/18/22 14:31 Received: 10/18/22 23:21 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		10/25/22 11:08	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 11:08	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 11:08	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 11:08	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 11:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 11:08	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 11:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 11:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 11:08	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 11:08	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 11:08	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 11:08	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 11:08	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 11:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 11:08	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 11:08	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 11:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 11:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 11:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 11:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 11:08	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 11:08	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 11:08	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 11:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 11:08	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 11:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 11:08	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 11:08	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 11:08	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 11:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 11:08	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 11:08	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 11:08	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 11:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/25/22 11:08	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/25/22 11:08	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	96	%	80-120		1		10/25/22 11:08	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 11:08		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-91-202210 **Lab ID: 60413494029** Collected: 10/18/22 14:47 Received: 10/18/22 23:21 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		10/25/22 12:02	67-64-1	
Benzene	**0.35J**	ug/L	1.0	0.14	1		10/25/22 12:02	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 12:02	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 12:02	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 12:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 12:02	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 12:02	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 12:02	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 12:02	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 12:02	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 12:02	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 12:02	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 12:02	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 12:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 12:02	107-06-2	
1,1-Dichloroethene	**0.48J**	ug/L	1.0	0.22	1		10/25/22 12:02	75-35-4	
cis-1,2-Dichloroethene	**41.2**	ug/L	1.0	0.13	1		10/25/22 12:02	156-59-2	
trans-1,2-Dichloroethene	**0.19J**	ug/L	1.0	0.10	1		10/25/22 12:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 12:02	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 12:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 12:02	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 12:02	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 12:02	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 12:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 12:02	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 12:02	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 12:02	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 12:02	127-18-4	
Toluene	**0.76J**	ug/L	1.0	0.25	1		10/25/22 12:02	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 12:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 12:02	79-00-5	
Trichloroethene	**14.9**	ug/L	1.0	0.21	1		10/25/22 12:02	79-01-6	
Vinyl chloride	**0.20J**	ug/L	1.0	0.17	1		10/25/22 12:02	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 12:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/25/22 12:02	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/25/22 12:02	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/25/22 12:02	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 12:02		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: TMW-16-202210 **Lab ID: 60413494030** Collected: 10/18/22 12:22 Received: 10/18/22 23:21 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		10/25/22 11:49	67-64-1	
Benzene	**0.25J**	ug/L	1.0	0.14	1		10/25/22 11:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 11:49	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 11:49	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 11:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 11:49	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 11:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 11:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 11:49	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 11:49	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 11:49	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 11:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 11:49	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 11:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 11:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 11:49	75-35-4	
cis-1,2-Dichloroethene	**0.57J**	ug/L	1.0	0.13	1		10/25/22 11:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 11:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 11:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 11:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 11:49	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 11:49	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 11:49	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 11:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 11:49	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 11:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 11:49	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 11:49	127-18-4	
Toluene	**0.52J**	ug/L	1.0	0.25	1		10/25/22 11:49	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 11:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 11:49	79-00-5	
Trichloroethene	**0.54J**	ug/L	1.0	0.21	1		10/25/22 11:49	79-01-6	
Vinyl chloride	**0.62J**	ug/L	1.0	0.17	1		10/25/22 11:49	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 11:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/25/22 11:49	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/25/22 11:49	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/25/22 11:49	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 11:49		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-186-202210 **Lab ID: 60413494031** Collected: 10/18/22 14:30 Received: 10/18/22 23:21 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		10/25/22 12:16	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 12:16	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 12:16	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 12:16	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 12:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 12:16	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 12:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 12:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 12:16	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 12:16	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 12:16	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 12:16	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 12:16	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 12:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 12:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 12:16	75-35-4	
cis-1,2-Dichloroethene	**0.76J**	ug/L	1.0	0.13	1		10/25/22 12:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 12:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 12:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 12:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 12:16	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 12:16	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 12:16	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 12:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 12:16	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 12:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 12:16	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 12:16	127-18-4	
Toluene	**0.62J**	ug/L	1.0	0.25	1		10/25/22 12:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 12:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 12:16	79-00-5	
Trichloroethene	**0.49J**	ug/L	1.0	0.21	1		10/25/22 12:16	79-01-6	
Vinyl chloride	**0.43J**	ug/L	1.0	0.17	1		10/25/22 12:16	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 12:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		10/25/22 12:16	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/25/22 12:16	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/25/22 12:16	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 12:16		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-206-202210 **Lab ID: 60413494032** Collected: 10/18/22 10:00 Received: 10/18/22 23:21 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		10/25/22 11:21	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 11:21	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 11:21	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 11:21	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 11:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 11:21	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 11:21	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 11:21	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 11:21	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 11:21	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 11:21	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 11:21	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 11:21	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 11:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 11:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 11:21	75-35-4	
cis-1,2-Dichloroethene	**0.58J**	ug/L	1.0	0.13	1		10/25/22 11:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 11:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 11:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 11:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 11:21	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 11:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 11:21	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 11:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 11:21	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 11:21	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 11:21	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 11:21	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 11:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 11:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 11:21	79-00-5	
Trichloroethene	**3.9**	ug/L	1.0	0.21	1		10/25/22 11:21	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 11:21	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 11:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/25/22 11:21	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 11:21	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		10/25/22 11:21	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 11:21		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-50R-202210 **Lab ID: 60413494033** Collected: 10/18/22 11:40 Received: 10/18/22 23:21 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		10/25/22 11:35	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 11:35	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 11:35	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 11:35	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 11:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 11:35	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 11:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 11:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 11:35	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 11:35	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 11:35	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 11:35	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 11:35	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 11:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 11:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 11:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 11:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 11:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 11:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 11:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 11:35	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 11:35	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 11:35	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 11:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 11:35	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 11:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 11:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 11:35	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 11:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 11:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 11:35	79-00-5	
Trichloroethene	**1.1**	ug/L	1.0	0.21	1		10/25/22 11:35	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 11:35	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 11:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/25/22 11:35	460-00-4	
Toluene-d8 (S)	96	%	80-120		1		10/25/22 11:35	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 11:35	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 11:35		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-28-202210 **Lab ID: 60413494034** Collected: 10/18/22 14:55 Received: 10/18/22 23:21 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		10/25/22 14:58	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 14:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 14:58	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 14:58	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 14:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 14:58	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 14:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 14:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 14:58	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 14:58	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 14:58	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 14:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 14:58	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 14:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 14:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 14:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 14:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 14:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 14:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 14:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 14:58	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 14:58	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 14:58	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 14:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 14:58	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 14:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 14:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 14:58	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 14:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 14:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 14:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 14:58	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 14:58	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 14:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/25/22 14:58	460-00-4	
Toluene-d8 (S)	97	%	80-120		1		10/25/22 14:58	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 14:58	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 14:58		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: TMW-26-202210 **Lab ID: 60413494035** Collected: 10/18/22 15:53 Received: 10/18/22 23:21 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		10/25/22 16:20	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 16:20	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 16:20	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 16:20	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 16:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 16:20	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 16:20	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 16:20	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 16:20	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 16:20	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 16:20	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 16:20	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 16:20	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 16:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 16:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 16:20	75-35-4	
cis-1,2-Dichloroethene	**0.53J**	ug/L	1.0	0.13	1		10/25/22 16:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 16:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 16:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 16:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 16:20	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 16:20	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 16:20	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 16:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 16:20	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 16:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 16:20	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 16:20	127-18-4	
Toluene	**1.7**	ug/L	1.0	0.25	1		10/25/22 16:20	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 16:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 16:20	79-00-5	
Trichloroethene	**1.8**	ug/L	1.0	0.21	1		10/25/22 16:20	79-01-6	
Vinyl chloride	**0.74J**	ug/L	1.0	0.17	1		10/25/22 16:20	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 16:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/25/22 16:20	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/25/22 16:20	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		1		10/25/22 16:20	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 16:20		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: ITMW-2R-202210 **Lab ID: 60413494036** Collected: 10/18/22 16:15 Received: 10/18/22 23:21 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		10/25/22 15:12	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 15:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 15:12	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 15:12	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 15:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 15:12	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 15:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 15:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 15:12	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 15:12	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 15:12	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 15:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 15:12	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 15:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 15:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 15:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 15:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 15:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 15:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 15:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 15:12	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 15:12	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 15:12	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 15:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 15:12	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 15:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 15:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 15:12	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 15:12	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 15:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 15:12	79-00-5	
Trichloroethene	**0.34J**	ug/L	1.0	0.21	1		10/25/22 15:12	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 15:12	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 15:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	91	%	80-120		1		10/25/22 15:12	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/25/22 15:12	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	109	%	80-120		1		10/25/22 15:12	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 15:12		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: TMW-21-202210 **Lab ID: 60413494037** Collected: 10/18/22 17:15 Received: 10/18/22 23:21 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		10/25/22 16:34	67-64-1	
Benzene	**0.21J**	ug/L	1.0	0.14	1		10/25/22 16:34	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 16:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 16:34	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 16:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 16:34	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 16:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 16:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 16:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 16:34	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 16:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 16:34	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 16:34	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 16:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 16:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 16:34	75-35-4	
cis-1,2-Dichloroethene	**1.3**	ug/L	1.0	0.13	1		10/25/22 16:34	156-59-2	
trans-1,2-Dichloroethene	**0.27J**	ug/L	1.0	0.10	1		10/25/22 16:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 16:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 16:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 16:34	10061-02-6	
Ethylbenzene	**0.21J**	ug/L	1.0	0.12	1		10/25/22 16:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 16:34	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 16:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 16:34	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 16:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 16:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 16:34	127-18-4	
Toluene	**0.88J**	ug/L	1.0	0.25	1		10/25/22 16:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 16:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 16:34	79-00-5	
Trichloroethene	**2.8**	ug/L	1.0	0.21	1		10/25/22 16:34	79-01-6	
Vinyl chloride	**2.0**	ug/L	1.0	0.17	1		10/25/22 16:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 16:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/25/22 16:34	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		10/25/22 16:34	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 16:34	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 16:34		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: TMW-20-202210 **Lab ID: 60413494038** Collected: 10/18/22 13:00 Received: 10/18/22 23:21 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		10/25/22 15:25	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 15:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 15:25	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 15:25	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 15:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 15:25	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 15:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 15:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 15:25	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 15:25	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 15:25	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 15:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 15:25	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 15:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 15:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 15:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 15:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 15:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 15:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 15:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 15:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 15:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 15:25	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 15:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 15:25	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 15:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 15:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 15:25	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 15:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 15:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 15:25	79-00-5	
Trichloroethene	**0.21J**	ug/L	1.0	0.21	1		10/25/22 15:25	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 15:25	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 15:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/25/22 15:25	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/25/22 15:25	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		10/25/22 15:25	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 15:25		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: TMW-19-202210 **Lab ID: 60413494039** Collected: 10/18/22 16:10 Received: 10/18/22 23:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**8.0**	ug/L	5.0	2.0	1		10/26/22 13:46	74-82-8	
Ethane	ND	ug/L	1.0	0.17	1		10/26/22 13:46	74-84-0	
Ethene	**0.27J**	ug/L	1.0	0.24	1		10/26/22 13:46	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**59.3**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:24	7439-89-6	B
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/25/22 15:39	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 15:39	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 15:39	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 15:39	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 15:39	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 15:39	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 15:39	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 15:39	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 15:39	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 15:39	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 15:39	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 15:39	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 15:39	124-48-1	
1,1-Dichloroethane	**0.35J**	ug/L	1.0	0.12	1		10/25/22 15:39	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 15:39	107-06-2	
1,1-Dichloroethene	**0.33J**	ug/L	1.0	0.22	1		10/25/22 15:39	75-35-4	
cis-1,2-Dichloroethene	**2.7**	ug/L	1.0	0.13	1		10/25/22 15:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 15:39	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 15:39	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 15:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 15:39	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 15:39	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 15:39	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 15:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 15:39	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 15:39	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 15:39	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 15:39	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 15:39	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 15:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 15:39	79-00-5	
Trichloroethene	**31.8**	ug/L	1.0	0.21	1		10/25/22 15:39	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 15:39	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 15:39	1330-20-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: TMW-19-202210 **Lab ID: 60413494039** Collected: 10/18/22 16:10 Received: 10/18/22 23:21 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								
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/25/22 15:39	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/25/22 15:39	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 15:39	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 15:39		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**104**	mg/L	20.0	10.5	20		10/27/22 12:11	16887-00-6	B
Sulfate	**16.0**	mg/L	1.0	0.55	1		10/31/22 15:51	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**4.6**	mg/L	0.10	0.078	1		11/01/22 14:55		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.96J**	mg/L	1.0	0.30	1		10/26/22 13:31	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**1.2**	mg/L	1.0	0.38	1		10/26/22 16:27		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**1.7J**	mg/L	5.0	0.53	10		10/26/22 22:09	50-21-5	
Acetic Acid	**2.7J**	mg/L	5.0	1.2	10		10/26/22 22:09	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/26/22 22:09	79-09-4	
Formic acid	**57**	mg/L	5.0	0.55	10		10/26/22 22:09	64-18-6	
Butyric Acid	ND	mg/L	5.0	0.58	10		10/26/22 22:09	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/26/22 22:09	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/26/22 22:09	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/26/22 22:09	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/26/22 22:09	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/26/22 22:09	142-62-1	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-89-202210 **Lab ID: 60413494040** Collected: 10/18/22 17:27 Received: 10/18/22 23:21 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		10/25/22 15:53	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 15:53	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 15:53	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 15:53	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 15:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 15:53	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 15:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 15:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 15:53	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 15:53	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 15:53	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 15:53	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 15:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 15:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 15:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 15:53	75-35-4	
cis-1,2-Dichloroethene	**0.25J**	ug/L	1.0	0.13	1		10/25/22 15:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 15:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 15:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 15:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 15:53	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 15:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 15:53	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 15:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 15:53	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 15:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 15:53	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 15:53	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 15:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 15:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 15:53	79-00-5	
Trichloroethene	**4.8**	ug/L	1.0	0.21	1		10/25/22 15:53	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 15:53	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 15:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/25/22 15:53	460-00-4	
Toluene-d8 (S)	104	%	80-120		1		10/25/22 15:53	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/25/22 15:53	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 15:53		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: MW-183R-202210 **Lab ID: 60413494041** Collected: 10/18/22 16:05 Received: 10/18/22 23:21 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		10/25/22 16:06	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 16:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 16:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 16:06	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 16:06	74-83-9	M1
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 16:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 16:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 16:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 16:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 16:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 16:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 16:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 16:06	124-48-1	M1
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 16:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 16:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 16:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 16:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 16:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 16:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 16:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 16:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 16:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 16:06	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 16:06	75-09-2	M1
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 16:06	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 16:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 16:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 16:06	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 16:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 16:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 16:06	79-00-5	
Trichloroethene	**0.83J**	ug/L	1.0	0.21	1		10/25/22 16:06	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 16:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 16:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/25/22 16:06	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 16:06	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/25/22 16:06	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 16:06		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: EB-02-202210 **Lab ID: 60413494042** Collected: 10/17/22 16:00 Received: 10/18/22 23:21 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		10/25/22 00:53	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 00:53	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 00:53	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 00:53	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 00:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 00:53	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 00:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 00:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 00:53	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 00:53	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 00:53	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 00:53	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 00:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 00:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 00:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 00:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 00:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 00:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 00:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 00:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 00:53	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 00:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 00:53	591-78-6	
Methylene Chloride	**1.6**	ug/L	1.0	0.39	1		10/25/22 00:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 00:53	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 00:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 00:53	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 00:53	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 00:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 00:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 00:53	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 00:53	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 00:53	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 00:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/25/22 00:53	460-00-4	
Toluene-d8 (S)	97	%	80-120		1		10/25/22 00:53	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/25/22 00:53	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 00:53		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: EB-01-202210 **Lab ID: 60413494043** Collected: 10/18/22 17:05 Received: 10/18/22 23:21 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		10/25/22 14:44	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 14:44	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 14:44	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 14:44	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 14:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 14:44	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 14:44	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 14:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 14:44	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 14:44	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 14:44	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 14:44	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 14:44	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 14:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 14:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 14:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 14:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 14:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 14:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 14:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 14:44	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 14:44	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 14:44	591-78-6	
Methylene Chloride	**1.2**	ug/L	1.0	0.39	1		10/25/22 14:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 14:44	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 14:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 14:44	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 14:44	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 14:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 14:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 14:44	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 14:44	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 14:44	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 14:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/25/22 14:44	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/25/22 14:44	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 14:44	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 14:44		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: TB-02-202210 **Lab ID: 60413494044** Collected: 10/18/22 08:00 Received: 10/18/22 23:21 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		10/25/22 14:17	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 14:17	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 14:17	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 14:17	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 14:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 14:17	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 14:17	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 14:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 14:17	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 14:17	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 14:17	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 14:17	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 14:17	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 14:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 14:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 14:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 14:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 14:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 14:17	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 14:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 14:17	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 14:17	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 14:17	591-78-6	
Methylene Chloride	**0.98J**	ug/L	1.0	0.39	1		10/25/22 14:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 14:17	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 14:17	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 14:17	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 14:17	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 14:17	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 14:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 14:17	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 14:17	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 14:17	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 14:17	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/25/22 14:17	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/25/22 14:17	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/25/22 14:17	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 14:17		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Sample: TB-01-202210 **Lab ID: 60413494045** Collected: 10/18/22 08:00 Received: 10/18/22 23:21 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		10/25/22 14:31	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 14:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 14:31	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 14:31	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 14:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 14:31	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 14:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 14:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 14:31	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 14:31	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 14:31	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 14:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 14:31	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 14:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 14:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 14:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 14:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 14:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 14:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 14:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 14:31	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 14:31	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 14:31	591-78-6	
Methylene Chloride	**1.1**	ug/L	1.0	0.39	1		10/25/22 14:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 14:31	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 14:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 14:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 14:31	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 14:31	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 14:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 14:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 14:31	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 14:31	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 14:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/25/22 14:31	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/25/22 14:31	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		10/25/22 14:31	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 14:31		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

QC Batch: 752722
QC Batch Method: AM20GAX
Analysis Method: AM20GAX
Analysis Description: Indicator Gases Water LHC
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413494039

METHOD BLANK: 2413279 Matrix: Water
Associated Lab Samples: 60413494039

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Methane	ug/L	ND	5.0	2.0	10/26/22 13:04	
Ethane	ug/L	ND	1.0	0.17	10/26/22 13:04	
Ethene	ug/L	ND	1.0	0.24	10/26/22 13:04	

LABORATORY CONTROL SAMPLE & LCSD: 2413280 2413281

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	380	330	370	86	96	70-130	11	20	
Ethane	ug/L	97	78	89	80	92	70-130	14	20	
Ethene	ug/L	120	97	110	81	90	70-130	11	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

QC Batch: 814323
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413494039

METHOD BLANK: 3238614 Matrix: Water
Associated Lab Samples: 60413494039

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	8.7J	50.0	7.4	11/01/22 10:50	

LABORATORY CONTROL SAMPLE: 3238615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9580	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3238617 3238657

Parameter	Units	60413474001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	3610	10000	10000	12800	12800	92	92	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

QC Batch: 814322
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: 60413494001, 60413494002, 60413494003, 60413494004, 60413494005, 60413494006, 60413494007, 60413494008, 60413494009, 60413494010, 60413494011, 60413494012, 60413494013, 60413494042

METHOD BLANK: 3238608
Matrix: Water
Associated Lab Samples: 60413494001, 60413494002, 60413494003, 60413494004, 60413494005, 60413494006, 60413494007, 60413494008, 60413494009, 60413494010, 60413494011, 60413494012, 60413494013, 60413494042

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/25/22 00:39	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/25/22 00:39	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/25/22 00:39	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/25/22 00:39	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/25/22 00:39	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/25/22 00:39	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/25/22 00:39	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/25/22 00:39	
2-Hexanone	ug/L	ND	10.0	1.1	10/25/22 00:39	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/25/22 00:39	
Acetone	ug/L	ND	10.0	2.5	10/25/22 00:39	
Benzene	ug/L	ND	1.0	0.14	10/25/22 00:39	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/25/22 00:39	
Bromoform	ug/L	ND	1.0	0.68	10/25/22 00:39	
Bromomethane	ug/L	ND	5.0	0.46	10/25/22 00:39	
Carbon disulfide	ug/L	ND	5.0	0.98	10/25/22 00:39	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/25/22 00:39	
Chlorobenzene	ug/L	ND	1.0	0.089	10/25/22 00:39	
Chloroethane	ug/L	ND	1.0	0.37	10/25/22 00:39	
Chloroform	ug/L	ND	1.0	0.22	10/25/22 00:39	
Chloromethane	ug/L	ND	1.0	0.28	10/25/22 00:39	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/25/22 00:39	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/25/22 00:39	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/25/22 00:39	
Ethylbenzene	ug/L	ND	1.0	0.12	10/25/22 00:39	
Methylene Chloride	ug/L	ND	1.0	0.39	10/25/22 00:39	
Styrene	ug/L	ND	1.0	0.12	10/25/22 00:39	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/25/22 00:39	
Toluene	ug/L	ND	1.0	0.25	10/25/22 00:39	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/25/22 00:39	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/25/22 00:39	
Trichloroethene	ug/L	ND	1.0	0.21	10/25/22 00:39	
Vinyl chloride	ug/L	ND	1.0	0.17	10/25/22 00:39	
Xylene (Total)	ug/L	ND	3.0	0.28	10/25/22 00:39	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120		10/25/22 00:39	
4-Bromofluorobenzene (S)	%	99	80-120		10/25/22 00:39	
Toluene-d8 (S)	%	96	80-120		10/25/22 00:39	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

LABORATORY CONTROL SAMPLE: 3238609

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.8	94	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	20.8	104	80-120	
1,1,2-Trichloroethane	ug/L	20	19.4	97	80-120	
1,1-Dichloroethane	ug/L	20	20.7	103	75-120	
1,1-Dichloroethene	ug/L	20	17.6	88	75-120	
1,2-Dichloroethane	ug/L	20	19.5	97	80-120	
1,2-Dichloropropane	ug/L	20	22.0	110	80-120	
2-Butanone (MEK)	ug/L	100	108	108	50-155	
2-Hexanone	ug/L	100	104	104	55-145	
4-Methyl-2-pentanone (MIBK)	ug/L	100	122	122	70-130	
Acetone	ug/L	100	72.4	72	35-160	
Benzene	ug/L	20	20.3	102	80-120	
Bromodichloromethane	ug/L	20	20.0	100	80-120	
Bromoform	ug/L	20	18.0	90	60-130	
Bromomethane	ug/L	20	15.1	76	50-140	
Carbon disulfide	ug/L	20	16.0	80	75-125	
Carbon tetrachloride	ug/L	20	17.4	87	70-130	
Chlorobenzene	ug/L	20	19.2	96	80-120	
Chloroethane	ug/L	20	19.0	95	70-130	
Chloroform	ug/L	20	18.5	92	75-120	
Chloromethane	ug/L	20	17.2	86	45-145	
cis-1,2-Dichloroethene	ug/L	20	17.4	87	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.9	100	75-125	
Dibromochloromethane	ug/L	20	17.6	88	75-125	
Ethylbenzene	ug/L	20	17.9	90	80-120	
Methylene Chloride	ug/L	20	16.3	82	70-140	
Styrene	ug/L	20	18.6	93	80-120	
Tetrachloroethene	ug/L	20	17.6	88	80-125	
Toluene	ug/L	20	18.9	94	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.6	93	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.5	93	75-125	
Trichloroethene	ug/L	20	20.4	102	80-125	
Vinyl chloride	ug/L	20	17.1	86	65-140	
Xylene (Total)	ug/L	60	56.2	94	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: 3238610 3238611

Parameter	Units	60413494001 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	19.7	95	98	75-125	3	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.4	18.0	97	90	80-120	7	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.1	14.7	95	74	80-120	26	20	M1,R1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3238610 3238611

Parameter	Units	60413494001 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	20.3	90	101	75-120	11	15	
1,1-Dichloroethene	ug/L	ND	20	20	17.2	20.0	86	100	75-120	15	25	
1,2-Dichloroethane	ug/L	ND	20	20	17.6	16.7	88	84	80-120	5	25	
1,2-Dichloropropane	ug/L	ND	20	20	20.7	18.8	103	94	80-120	9	20	
2-Butanone (MEK)	ug/L	ND	100	100	83.7	88.0	84	88	50-155	5	25	
2-Hexanone	ug/L	ND	100	100	108	81.5	108	81	55-145	28	20	R1
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	116	100	116	100	70-130	15	20	
Acetone	ug/L	ND	100	100	55.9	83.8	56	84	35-160	40	25	R1
Benzene	ug/L	ND	20	20	19.5	19.0	97	94	80-120	3	25	
Bromodichloromethane	ug/L	ND	20	20	17.7	16.3	89	81	80-120	8	15	
Bromoform	ug/L	ND	20	20	17.7	13.5	88	68	60-130	27	20	R1
Bromomethane	ug/L	ND	20	20	14.4	19.8	72	99	50-140	32	45	
Carbon disulfide	ug/L	ND	20	20	16.2	19.4	81	97	75-125	18	25	
Carbon tetrachloride	ug/L	ND	20	20	17.8	18.8	89	94	70-130	5	20	
Chlorobenzene	ug/L	5.5	20	20	24.2	24.8	94	97	80-120	2	20	
Chloroethane	ug/L	ND	20	20	17.2	21.8	86	109	70-130	23	20	R1
Chloroform	ug/L	ND	20	20	16.4	17.9	82	89	75-120	9	20	
Chloromethane	ug/L	ND	20	20	17.4	18.3	87	92	45-145	5	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	16.8	19.3	83	96	80-120	14	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.0	16.0	90	80	75-125	12	20	
Dibromochloromethane	ug/L	ND	20	20	17.3	12.4	86	62	75-125	33	20	M1,R1
Ethylbenzene	ug/L	ND	20	20	18.5	18.2	93	91	80-120	2	25	
Methylene Chloride	ug/L	ND	20	20	13.5	17.6	67	87	70-140	26	25	M1,R1
Styrene	ug/L	ND	20	20	7.2	6.3	36	31	80-120	14	30	M1
Tetrachloroethene	ug/L	ND	20	20	17.4	17.8	87	89	80-125	2	25	
Toluene	ug/L	ND	20	20	19.4	19.1	97	96	80-120	2	25	
trans-1,2-Dichloroethene	ug/L	ND	20	20	17.5	20.6	87	103	80-120	16	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	17.5	13.3	88	67	75-125	27	15	M1,R1
Trichloroethene	ug/L	ND	20	20	19.5	19.3	98	96	80-125	1	20	
Vinyl chloride	ug/L	ND	20	20	17.3	21.7	86	108	65-140	23	25	
Xylene (Total)	ug/L	ND	60	60	56.1	56.0	93	93	80-120	0	30	
1,2-Dichlorobenzene-d4 (S)	%						104	96	80-120			
4-Bromofluorobenzene (S)	%						102	101	80-120			
Toluene-d8 (S)	%						102	96	80-120			
Preservation pH		1.0			1.0	1.0				0		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3238612 3238613

Parameter	Units	60413494005 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	18.0	19.3	90	97	75-125	7	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.2	20.0	91	100	80-120	9	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.3	18.9	97	94	80-120	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3238612 3238613

Parameter	Units	60413494005 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	18.6	18.7	93	93	75-120	1	15	
1,1-Dichloroethene	ug/L	ND	20	20	17.3	17.9	87	89	75-120	3	25	
1,2-Dichloroethane	ug/L	ND	20	20	18.0	18.1	90	91	80-120	1	25	
1,2-Dichloropropane	ug/L	ND	20	20	19.6	20.7	98	103	80-120	6	20	
2-Butanone (MEK)	ug/L	ND	100	100	90.2	78.8	90	79	50-155	13	25	
2-Hexanone	ug/L	ND	100	100	114	98.9	114	99	55-145	14	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	120	120	120	120	70-130	0	20	
Acetone	ug/L	ND	100	100	62.7	56.2	63	56	35-160	11	25	
Benzene	ug/L	ND	20	20	18.7	21.0	94	105	80-120	12	25	
Bromodichloromethane	ug/L	ND	20	20	18.2	19.1	91	96	80-120	5	15	
Bromoform	ug/L	ND	20	20	19.0	17.6	95	88	60-130	8	20	
Bromomethane	ug/L	ND	20	20	15.9	15.7	79	79	50-140	1	45	
Carbon disulfide	ug/L	ND	20	20	16.1	17.1	80	85	75-125	6	25	
Carbon tetrachloride	ug/L	ND	20	20	17.6	18.8	88	94	70-130	7	20	
Chlorobenzene	ug/L	ND	20	20	18.1	17.3	91	86	80-120	5	20	
Chloroethane	ug/L	ND	20	20	17.8	17.7	89	89	70-130	1	20	
Chloroform	ug/L	ND	20	20	17.7	16.6	89	83	75-120	7	20	
Chloromethane	ug/L	ND	20	20	17.9	18.4	89	91	45-145	3	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	17.3	16.8	87	84	80-120	3	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.4	18.4	92	92	75-125	0	20	
Dibromochloromethane	ug/L	ND	20	20	17.2	16.0	86	80	75-125	7	20	
Ethylbenzene	ug/L	ND	20	20	18.2	18.2	91	91	80-120	0	25	
Methylene Chloride	ug/L	ND	20	20	14.1	14.5	70	72	70-140	3	25	
Styrene	ug/L	ND	20	20	10.1	10.1	51	51	80-120	0	30	M1
Tetrachloroethene	ug/L	ND	20	20	17.8	17.5	89	88	80-125	2	25	
Toluene	ug/L	ND	20	20	18.6	17.8	93	89	80-120	4	25	
trans-1,2-Dichloroethene	ug/L	ND	20	20	17.5	17.7	88	89	80-120	1	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	17.6	16.7	88	84	75-125	5	15	
Trichloroethene	ug/L	ND	20	20	19.6	20.6	98	103	80-125	5	20	
Vinyl chloride	ug/L	ND	20	20	17.9	18.3	90	91	65-140	2	25	
Xylene (Total)	ug/L	ND	60	60	55.9	54.5	93	91	80-120	3	30	
1,2-Dichlorobenzene-d4 (S)	%						97	105	80-120			
4-Bromofluorobenzene (S)	%						99	100	80-120			
Toluene-d8 (S)	%						102	94	80-120			
Preservation pH		1.0			1.0	1.0				0		

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

QC Batch: 814454
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: 60413494014, 60413494015, 60413494016, 60413494017, 60413494018, 60413494019, 60413494020, 60413494021, 60413494022, 60413494023, 60413494024, 60413494025, 60413494026, 60413494027, 60413494028, 60413494029, 60413494030, 60413494031, 60413494032, 60413494033

METHOD BLANK: 3238988
Matrix: Water
Associated Lab Samples: 60413494014, 60413494015, 60413494016, 60413494017, 60413494018, 60413494019, 60413494020, 60413494021, 60413494022, 60413494023, 60413494024, 60413494025, 60413494026, 60413494027, 60413494028, 60413494029, 60413494030, 60413494031, 60413494032, 60413494033

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/25/22 08:12	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/25/22 08:12	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/25/22 08:12	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/25/22 08:12	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/25/22 08:12	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/25/22 08:12	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/25/22 08:12	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/25/22 08:12	
2-Hexanone	ug/L	ND	10.0	1.1	10/25/22 08:12	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/25/22 08:12	
Acetone	ug/L	ND	10.0	2.5	10/25/22 08:12	
Benzene	ug/L	ND	1.0	0.14	10/25/22 08:12	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/25/22 08:12	
Bromoform	ug/L	ND	1.0	0.68	10/25/22 08:12	
Bromomethane	ug/L	ND	5.0	0.46	10/25/22 08:12	
Carbon disulfide	ug/L	ND	5.0	0.98	10/25/22 08:12	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/25/22 08:12	
Chlorobenzene	ug/L	ND	1.0	0.089	10/25/22 08:12	
Chloroethane	ug/L	ND	1.0	0.37	10/25/22 08:12	
Chloroform	ug/L	ND	1.0	0.22	10/25/22 08:12	
Chloromethane	ug/L	ND	1.0	0.28	10/25/22 08:12	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/25/22 08:12	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/25/22 08:12	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/25/22 08:12	
Ethylbenzene	ug/L	ND	1.0	0.12	10/25/22 08:12	
Methylene Chloride	ug/L	ND	1.0	0.39	10/25/22 08:12	
Styrene	ug/L	ND	1.0	0.12	10/25/22 08:12	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/25/22 08:12	
Toluene	ug/L	ND	1.0	0.25	10/25/22 08:12	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/25/22 08:12	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/25/22 08:12	
Trichloroethene	ug/L	ND	1.0	0.21	10/25/22 08:12	
Vinyl chloride	ug/L	ND	1.0	0.17	10/25/22 08:12	
Xylene (Total)	ug/L	ND	3.0	0.28	10/25/22 08:12	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		10/25/22 08:12	
4-Bromofluorobenzene (S)	%	104	80-120		10/25/22 08:12	
Toluene-d8 (S)	%	100	80-120		10/25/22 08:12	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

LABORATORY CONTROL SAMPLE: 3238989

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.8	94	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	20.2	101	80-120	
1,1,2-Trichloroethane	ug/L	20	19.7	98	80-120	
1,1-Dichloroethane	ug/L	20	19.0	95	75-120	
1,1-Dichloroethene	ug/L	20	16.6	83	75-120	
1,2-Dichloroethane	ug/L	20	18.6	93	80-120	
1,2-Dichloropropane	ug/L	20	21.6	108	80-120	
2-Butanone (MEK)	ug/L	100	102	102	50-155	
2-Hexanone	ug/L	100	114	114	55-145	
4-Methyl-2-pentanone (MIBK)	ug/L	100	127	127	70-130	
Acetone	ug/L	100	79.6	80	35-160	
Benzene	ug/L	20	20.3	101	80-120	
Bromodichloromethane	ug/L	20	19.6	98	80-120	
Bromoform	ug/L	20	19.0	95	60-130	
Bromomethane	ug/L	20	16.2	81	50-140	
Carbon disulfide	ug/L	20	16.4	82	75-125	
Carbon tetrachloride	ug/L	20	18.1	91	70-130	
Chlorobenzene	ug/L	20	18.7	94	80-120	
Chloroethane	ug/L	20	16.4	82	70-130	
Chloroform	ug/L	20	17.2	86	75-120	
Chloromethane	ug/L	20	17.0	85	45-145	
cis-1,2-Dichloroethene	ug/L	20	17.6	88	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.3	102	75-125	
Dibromochloromethane	ug/L	20	17.9	90	75-125	
Ethylbenzene	ug/L	20	19.0	95	80-120	
Methylene Chloride	ug/L	20	14.3	72	70-140	
Styrene	ug/L	20	19.6	98	80-120	
Tetrachloroethene	ug/L	20	17.3	87	80-125	
Toluene	ug/L	20	19.3	97	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.2	91	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.8	99	75-125	
Trichloroethene	ug/L	20	20.5	102	80-125	
Vinyl chloride	ug/L	20	16.3	82	65-140	
Xylene (Total)	ug/L	60	56.4	94	80-120	
1,2-Dichlorobenzene-d4 (S)	%			95	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3238990 3238991

Parameter	Units	60413494014 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	18.8	18.4	94	92	75-125	2	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.2	18.2	91	91	80-120	0	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	17.1	18.5	86	93	80-120	8	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3238990 3238991

Parameter	Units	60413494014 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	20.2	101	101	75-120	0	15	
1,1-Dichloroethene	ug/L	ND	20	20	18.4	18.5	92	93	75-120	1	25	
1,2-Dichloroethane	ug/L	ND	20	20	18.4	18.3	92	92	80-120	1	25	
1,2-Dichloropropane	ug/L	ND	20	20	21.2	20.2	106	101	80-120	4	20	
2-Butanone (MEK)	ug/L	ND	100	100	101	110	101	110	50-155	8	25	
2-Hexanone	ug/L	ND	100	100	93.2	102	93	102	55-145	9	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	120	121	120	121	70-130	1	20	
Acetone	ug/L	ND	100	100	68.3	66.9	68	67	35-160	2	25	
Benzene	ug/L	ND	20	20	19.7	18.9	99	94	80-120	4	25	
Bromodichloromethane	ug/L	ND	20	20	18.5	18.5	93	92	80-120	0	15	
Bromoform	ug/L	ND	20	20	16.8	17.3	84	87	60-130	3	20	
Bromomethane	ug/L	ND	20	20	12.1	15.1	60	76	50-140	22	45	
Carbon disulfide	ug/L	ND	20	20	16.0	16.4	80	82	75-125	3	25	
Carbon tetrachloride	ug/L	ND	20	20	17.4	17.2	87	86	70-130	1	20	
Chlorobenzene	ug/L	ND	20	20	17.5	17.5	88	88	80-120	0	20	
Chloroethane	ug/L	ND	20	20	18.3	18.6	92	93	70-130	2	20	
Chloroform	ug/L	ND	20	20	17.9	17.8	90	89	75-120	1	20	
Chloromethane	ug/L	ND	20	20	16.4	16.3	82	82	45-145	1	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	18.5	17.5	93	87	80-120	6	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.6	18.6	98	93	75-125	5	20	
Dibromochloromethane	ug/L	ND	20	20	15.0	16.1	75	81	75-125	7	20	
Ethylbenzene	ug/L	ND	20	20	16.6	17.6	83	88	80-120	6	25	
Methylene Chloride	ug/L	ND	20	20	15.7	14.7	78	73	70-140	7	25	
Styrene	ug/L	ND	20	20	16.8	17.4	84	87	80-120	4	30	
Tetrachloroethene	ug/L	ND	20	20	18.7	18.1	94	91	80-125	3	25	
Toluene	ug/L	ND	20	20	17.4	18.1	87	91	80-120	4	25	
trans-1,2-Dichloroethene	ug/L	ND	20	20	18.7	17.7	93	89	80-120	5	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.4	17.7	82	89	75-125	8	15	
Trichloroethene	ug/L	ND	20	20	20.6	19.4	103	97	80-125	6	20	
Vinyl chloride	ug/L	ND	20	20	18.6	17.3	93	86	65-140	7	25	
Xylene (Total)	ug/L	ND	60	60	51.2	55.2	85	92	80-120	7	30	
1,2-Dichlorobenzene-d4 (S)	%						98	99	80-120			
4-Bromofluorobenzene (S)	%						96	99	80-120			
Toluene-d8 (S)	%						96	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

QC Batch: 814494
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: 60413494034, 60413494035, 60413494036, 60413494037, 60413494038, 60413494039, 60413494040, 60413494041, 60413494043, 60413494044, 60413494045

METHOD BLANK: 3239174
Matrix: Water
Associated Lab Samples: 60413494034, 60413494035, 60413494036, 60413494037, 60413494038, 60413494039, 60413494040, 60413494041, 60413494043, 60413494044, 60413494045

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/25/22 14:04	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/25/22 14:04	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/25/22 14:04	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/25/22 14:04	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/25/22 14:04	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/25/22 14:04	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/25/22 14:04	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/25/22 14:04	
2-Hexanone	ug/L	ND	10.0	1.1	10/25/22 14:04	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/25/22 14:04	
Acetone	ug/L	ND	10.0	2.5	10/25/22 14:04	
Benzene	ug/L	ND	1.0	0.14	10/25/22 14:04	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/25/22 14:04	
Bromoform	ug/L	ND	1.0	0.68	10/25/22 14:04	
Bromomethane	ug/L	ND	5.0	0.46	10/25/22 14:04	
Carbon disulfide	ug/L	ND	5.0	0.98	10/25/22 14:04	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/25/22 14:04	
Chlorobenzene	ug/L	ND	1.0	0.089	10/25/22 14:04	
Chloroethane	ug/L	ND	1.0	0.37	10/25/22 14:04	
Chloroform	ug/L	ND	1.0	0.22	10/25/22 14:04	
Chloromethane	ug/L	ND	1.0	0.28	10/25/22 14:04	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/25/22 14:04	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/25/22 14:04	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/25/22 14:04	
Ethylbenzene	ug/L	ND	1.0	0.12	10/25/22 14:04	
Methylene Chloride	ug/L	ND	1.0	0.39	10/25/22 14:04	
Styrene	ug/L	ND	1.0	0.12	10/25/22 14:04	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/25/22 14:04	
Toluene	ug/L	ND	1.0	0.25	10/25/22 14:04	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/25/22 14:04	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/25/22 14:04	
Trichloroethene	ug/L	ND	1.0	0.21	10/25/22 14:04	
Vinyl chloride	ug/L	ND	1.0	0.17	10/25/22 14:04	
Xylene (Total)	ug/L	ND	3.0	0.28	10/25/22 14:04	
1,2-Dichlorobenzene-d4 (S)	%	97	80-120		10/25/22 14:04	
4-Bromofluorobenzene (S)	%	97	80-120		10/25/22 14:04	
Toluene-d8 (S)	%	99	80-120		10/25/22 14:04	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

LABORATORY CONTROL SAMPLE: 3239175

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	17.2	86	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	20.9	104	80-120	
1,1,2-Trichloroethane	ug/L	20	18.2	91	80-120	
1,1-Dichloroethane	ug/L	20	17.9	90	75-120	
1,1-Dichloroethene	ug/L	20	15.8	79	75-120	
1,2-Dichloroethane	ug/L	20	18.8	94	80-120	
1,2-Dichloropropane	ug/L	20	21.8	109	80-120	
2-Butanone (MEK)	ug/L	100	94.3	94	50-155	
2-Hexanone	ug/L	100	104	104	55-145	
4-Methyl-2-pentanone (MIBK)	ug/L	100	129	129	70-130	
Acetone	ug/L	100	69.4	69	35-160	
Benzene	ug/L	20	18.2	91	80-120	
Bromodichloromethane	ug/L	20	18.2	91	80-120	
Bromoform	ug/L	20	18.1	90	60-130	
Bromomethane	ug/L	20	13.5	68	50-140	
Carbon disulfide	ug/L	20	15.2	76	75-125	
Carbon tetrachloride	ug/L	20	16.6	83	70-130	
Chlorobenzene	ug/L	20	17.2	86	80-120	
Chloroethane	ug/L	20	16.5	82	70-130	
Chloroform	ug/L	20	17.8	89	75-120	
Chloromethane	ug/L	20	15.9	79	45-145	
cis-1,2-Dichloroethene	ug/L	20	17.6	88	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.2	101	75-125	
Dibromochloromethane	ug/L	20	15.6	78	75-125	
Ethylbenzene	ug/L	20	16.6	83	80-120	
Methylene Chloride	ug/L	20	14.8	74	70-140	
Styrene	ug/L	20	16.6	83	80-120	
Tetrachloroethene	ug/L	20	16.4	82	80-125	
Toluene	ug/L	20	17.3	86	80-120	
trans-1,2-Dichloroethene	ug/L	20	17.2	86	80-120	
trans-1,3-Dichloropropene	ug/L	20	17.4	87	75-125	
Trichloroethene	ug/L	20	19.1	96	80-125	
Vinyl chloride	ug/L	20	15.7	78	65-140	
Xylene (Total)	ug/L	60	51.0	85	80-120	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3239176 3239177

Parameter	Units	60413494041 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	18.4	18.1	92	91	75-125	2	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.6	18.6	93	93	80-120	0	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	17.4	17.8	87	89	80-120	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3239176 3239177

Parameter	Units	60413494041 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	17.7	16.7	89	84	75-120	6	15	
1,1-Dichloroethene	ug/L	ND	20	20	17.6	16.4	88	82	75-120	7	25	
1,2-Dichloroethane	ug/L	ND	20	20	17.7	17.0	88	85	80-120	4	25	
1,2-Dichloropropane	ug/L	ND	20	20	20.0	19.1	100	96	80-120	5	20	
2-Butanone (MEK)	ug/L	ND	100	100	101	84.1	101	84	50-155	19	25	
2-Hexanone	ug/L	ND	100	100	97.6	94.1	98	94	55-145	4	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	118	113	118	113	70-130	5	20	
Acetone	ug/L	ND	100	100	65.6	53.5	66	54	35-160	20	25	
Benzene	ug/L	ND	20	20	18.4	18.9	92	94	80-120	2	25	
Bromodichloromethane	ug/L	ND	20	20	17.4	17.8	87	89	80-120	2	15	
Bromoform	ug/L	ND	20	20	15.4	14.6	77	73	60-130	5	20	
Bromomethane	ug/L	ND	20	20	9.8	12.1	49	60	50-140	21	45	M1
Carbon disulfide	ug/L	ND	20	20	16.1	16.1	80	80	75-125	0	25	
Carbon tetrachloride	ug/L	ND	20	20	16.6	17.0	83	85	70-130	3	20	
Chlorobenzene	ug/L	ND	20	20	16.7	17.1	83	85	80-120	3	20	
Chloroethane	ug/L	ND	20	20	17.1	16.4	86	82	70-130	5	20	
Chloroform	ug/L	ND	20	20	17.3	16.0	87	80	75-120	8	20	
Chloromethane	ug/L	ND	20	20	16.3	15.9	81	79	45-145	3	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	17.5	16.3	87	82	80-120	7	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	17.9	18.7	89	93	75-125	4	20	
Dibromochloromethane	ug/L	ND	20	20	15.0	14.9	75	74	75-125	1	20	M1
Ethylbenzene	ug/L	ND	20	20	16.9	17.0	85	85	80-120	0	25	
Methylene Chloride	ug/L	ND	20	20	13.9	13.3	70	66	70-140	5	25	M1
Styrene	ug/L	ND	20	20	16.0	16.8	80	84	80-120	5	30	
Tetrachloroethene	ug/L	ND	20	20	17.4	18.1	87	90	80-125	4	25	
Toluene	ug/L	ND	20	20	16.8	17.4	84	87	80-120	4	25	
trans-1,2-Dichloroethene	ug/L	ND	20	20	17.3	16.4	87	82	80-120	5	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.7	16.6	84	83	75-125	0	15	
Trichloroethene	ug/L	0.83J	20	20	19.7	19.5	94	93	80-125	1	20	
Vinyl chloride	ug/L	ND	20	20	16.7	15.8	84	79	65-140	6	25	
Xylene (Total)	ug/L	ND	60	60	51.4	53.0	86	88	80-120	3	30	
1,2-Dichlorobenzene-d4 (S)	%						95	106	80-120			
4-Bromofluorobenzene (S)	%						98	101	80-120			
Toluene-d8 (S)	%						99	96	80-120			
Preservation pH		1.0			1.0	1.0				0		

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

QC Batch: 815724
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: 60413494026

METHOD BLANK: 3244140 Matrix: Water
Associated Lab Samples: 60413494026

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	1.0	0.21	10/31/22 15:05	
1,2-Dichlorobenzene-d4 (S)	%	104	80-120		10/31/22 15:05	
4-Bromofluorobenzene (S)	%	100	80-120		10/31/22 15:05	
Toluene-d8 (S)	%	98	80-120		10/31/22 15:05	

LABORATORY CONTROL SAMPLE: 3244141

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	21.9	110	80-125	
1,2-Dichlorobenzene-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			97	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

QC Batch: 814886
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: 60413494039

METHOD BLANK: 3240849 Matrix: Water
Associated Lab Samples: 60413494039

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.58J	1.0	0.53	10/27/22 07:40	
Sulfate	mg/L	ND	1.0	0.55	10/27/22 07:40	

METHOD BLANK: 3244778 Matrix: Water
Associated Lab Samples: 60413494039

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.60J	1.0	0.53	10/31/22 08:43	
Sulfate	mg/L	ND	1.0	0.55	10/31/22 08:43	

LABORATORY CONTROL SAMPLE: 3240850

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	93	90-110	
Sulfate	mg/L	5	4.6	93	90-110	

LABORATORY CONTROL SAMPLE: 3244779

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	95	90-110	
Sulfate	mg/L	5	5.0	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3241199 3241200

Parameter	Units	60413568001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.1	5	5	6.3	6.4	103	105	80-120	2	15	
Sulfate	mg/L	548	500	500	1420	1090	174	109	80-120	26	15	M1,R1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

SAMPLE DUPLICATE: 3241201

Parameter	Units	60413568001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	1.1	1.2	9	15	
Sulfate	mg/L	548	541	1	15	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

QC Batch: 815751
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413494039

METHOD BLANK: 3244181 Matrix: Water
Associated Lab Samples: 60413494039

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.078	11/01/22 14:49	

LABORATORY CONTROL SAMPLE: 3244182

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 3244183

Parameter	Units	60413474006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	2	1.1	54	90-110	M1

MATRIX SPIKE SAMPLE: 3244185

Parameter	Units	60413312003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.078	2	1.6	81	90-110	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3244187 3244188

Parameter	Units	60413568001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.18	2	2	2.2	2.0	99	89	90-110	10	20	M1

SAMPLE DUPLICATE: 3244184

Parameter	Units	60413474008 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	ND		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

SAMPLE DUPLICATE: 3244186

Parameter	Units	60413568001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.18	0.20	11	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

QC Batch: 814742
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413494039

METHOD BLANK: 3240216 Matrix: Water
Associated Lab Samples: 60413494039

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.30	10/26/22 09:56	

LABORATORY CONTROL SAMPLE: 3240217

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.0	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3240219 3240220

Parameter	Units	60413574002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	ND	5	5	5.8	6.1	105	111	80-120	5	25	

SAMPLE DUPLICATE: 3240218

Parameter	Units	60413574002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	0.63J		25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

QC Batch: 814740
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Dissolved Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413494039

METHOD BLANK: 3240204 Matrix: Water
Associated Lab Samples: 60413494039

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.38	10/26/22 10:17	

LABORATORY CONTROL SAMPLE: 3240205

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	5	5.1	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3240207 3240208

Parameter	Units	10630402001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dissolved Organic Carbon	mg/L	1.4	5	5	6.8	7.0	107	111	80-120	3	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3240210 3240211

Parameter	Units	60413574002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dissolved Organic Carbon	mg/L	0.74J	5	5	5.7	5.4	99	94	80-120	4	25	

SAMPLE DUPLICATE: 3240206

Parameter	Units	10630402001 Result	Dup Result	RPD	Max RPD	Qualifiers
Dissolved Organic Carbon	mg/L	1.4	1.4	1	25	

SAMPLE DUPLICATE: 3240209

Parameter	Units	60413574002 Result	Dup Result	RPD	Max RPD	Qualifiers
Dissolved Organic Carbon	mg/L	0.74J	0.72J		25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

QC Batch: 752719
QC Batch Method: AM23G
Analysis Method: AM23G
Analysis Description: Low Level Volatile Fatty Acids
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413494039

METHOD BLANK: 2413262 Matrix: Water
Associated Lab Samples: 60413494039

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lactic Acid	mg/L	ND	0.50	0.053	10/26/22 16:02	
Acetic Acid	mg/L	ND	0.50	0.12	10/26/22 16:02	
Propionic Acid	mg/L	ND	0.50	0.053	10/26/22 16:02	
Formic acid	mg/L	ND	0.50	0.055	10/26/22 16:02	
Butyric Acid	mg/L	ND	0.50	0.058	10/26/22 16:02	
Pyruvic Acid	mg/L	ND	0.50	0.060	10/26/22 16:02	
i-Pentanoic Acid	mg/L	ND	0.50	0.061	10/26/22 16:02	
Pentanoic Acid	mg/L	ND	0.50	0.056	10/26/22 16:02	
i-Hexanoic Acid	mg/L	ND	0.50	0.056	10/26/22 16:02	
Hexanoic Acid	mg/L	ND	0.50	0.058	10/26/22 16:02	

LABORATORY CONTROL SAMPLE & LCSD: 2413263 2413264

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Lactic Acid	mg/L	2	1.8	1.8	88	89	70-130	0	20	
Acetic Acid	mg/L	2	1.7	1.7	83	83	70-130	0	20	
Propionic Acid	mg/L	2	1.7	1.7	85	83	70-130	2	20	
Formic acid	mg/L	2	1.7	1.7	83	84	70-130	2	20	
Butyric Acid	mg/L	2	1.7	1.7	85	83	70-130	3	20	
Pyruvic Acid	mg/L	2	1.6	1.6	81	79	70-130	3	20	
i-Pentanoic Acid	mg/L	2	1.7	1.8	86	89	70-130	4	20	
Pentanoic Acid	mg/L	2	1.6	1.6	79	78	70-130	1	20	
i-Hexanoic Acid	mg/L	2	1.6	1.5	80	77	70-130	4	20	
Hexanoic Acid	mg/L	2	1.6	1.6	78	80	70-130	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

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.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60413494039	TMW-19-202210	AM20GAX	752722		
60413494039	TMW-19-202210	EPA 3010	814323	EPA 6010	814397
60413494001	MW-29-202210	EPA 5030B/8260	814322		
60413494002	ITMW-20-202210	EPA 5030B/8260	814322		
60413494003	DUP-03-202210	EPA 5030B/8260	814322		
60413494004	MW-62R-202210	EPA 5030B/8260	814322		
60413494005	MW-60R-202210	EPA 5030B/8260	814322		
60413494006	MW-191-202210	EPA 5030B/8260	814322		
60413494007	MW-39R-202210	EPA 5030B/8260	814322		
60413494008	TMW-29-202210	EPA 5030B/8260	814322		
60413494009	MW-26-202210	EPA 5030B/8260	814322		
60413494010	MW-98-202210	EPA 5030B/8260	814322		
60413494011	MW-96-202210	EPA 5030B/8260	814322		
60413494012	DUP-08-202210	EPA 5030B/8260	814322		
60413494013	MW-97-202210	EPA 5030B/8260	814322		
60413494014	MW-68-202210	EPA 5030B/8260	814454		
60413494015	MW-22-202210	EPA 5030B/8260	814454		
60413494016	MW-184-202210	EPA 5030B/8260	814454		
60413494017	DUP-10-202210	EPA 5030B/8260	814454		
60413494018	TMW-36B-202210	EPA 5030B/8260	814454		
60413494019	MW-27-202210	EPA 5030B/8260	814454		
60413494020	TMW-36-202210	EPA 5030B/8260	814454		
60413494021	MW-196-202210	EPA 5030B/8260	814454		
60413494022	MW-195-202210	EPA 5030B/8260	814454		
60413494023	DUP-06-202210	EPA 5030B/8260	814454		
60413494024	TMW-35-202210	EPA 5030B/8260	814454		
60413494025	DUP-11-202210	EPA 5030B/8260	814454		
60413494026	MW-176-202210	EPA 5030B/8260	814454		
60413494026	MW-176-202210	EPA 5030B/8260	815724		
60413494027	MW-200-202210	EPA 5030B/8260	814454		
60413494028	TMW-27-202210	EPA 5030B/8260	814454		
60413494029	MW-91-202210	EPA 5030B/8260	814454		
60413494030	TMW-16-202210	EPA 5030B/8260	814454		
60413494031	MW-186-202210	EPA 5030B/8260	814454		
60413494032	MW-206-202210	EPA 5030B/8260	814454		
60413494033	MW-50R-202210	EPA 5030B/8260	814454		
60413494034	MW-28-202210	EPA 5030B/8260	814494		
60413494035	TMW-26-202210	EPA 5030B/8260	814494		
60413494036	ITMW-2R-202210	EPA 5030B/8260	814494		
60413494037	TMW-21-202210	EPA 5030B/8260	814494		
60413494038	TMW-20-202210	EPA 5030B/8260	814494		
60413494039	TMW-19-202210	EPA 5030B/8260	814494		
60413494040	MW-89-202210	EPA 5030B/8260	814494		
60413494041	MW-183R-202210	EPA 5030B/8260	814494		
60413494042	EB-02-202210	EPA 5030B/8260	814322		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413494

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60413494043	**EB-01-202210**	EPA 5030B/8260	814494		
60413494044	**TB-02-202210**	EPA 5030B/8260	814494		
60413494045	**TB-01-202210**	EPA 5030B/8260	814494		
60413494039	**TMW-19-202210**	EPA 300.0	814886		
60413494039	**TMW-19-202210**	EPA 353.2	815751		
60413494039	**TMW-19-202210**	SM 5310C	814742		
60413494039	**TMW-19-202210**	SM 5310C	814740		
60413494039	**TMW-19-202210**	AM23G	752719		

WO#: 60413494

Pace	DC#_Title: ENV-FRM-LENE-0009_Sar		
	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 ☐ Ice

Thermometer Used: T299 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 2.3 **Corr. Factor** 0.0 **Corrected** 2.3

Date and initials of person examining contents: 10/20/2 JA

Temperature should be above freezing to 6°C 2.6, 1.8 2.6, 1.8

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	Sample ID TMW-19 came with
Samples arrived within holding time:	☑Yes ☐No ☐N/A	extra containers. Log ones
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	that aren't 8260 for Hold
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#: SS192, SS193	☑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: Samples listed as MW-26-202210 and MW-26B-202210 on COC should be TMW-26-202210 and TMW-26B-202210

Extra containers received for TMW-19-202210 should be analyzed for ISCR parameters.

Project Manager Review: _____ Date: _____

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:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	

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	MW-29-202210	WT	G	—	—	10/17/22	1548		3				X					X		60413494
2	MW-29-202210 MS	WT	G	—	—	10/17/22	1548		3				X					X		
3	MW-29-202210 MSD	WT	G	—	—	10/17/22	1548		3				X					X		
4	ITMW-20-202210	WT	G	—	—	10/17/22	1603		3				X					X		
5	Dup-03-202210	WT	G	—	—	10/17/22	1605		3				X					X		
6	MW-62R-202210	WT	G	—	—	10/17/22	1550		3				X					X		
7	MW-60R-202210	WT	G	—	—	10/17/22	1628		3				X					X		
8	MW-60R-202210 MS	WT	G	—	—	10/17/22	1628		3				X					X		
9	MW-60R-202210 MSD	WT	G	—	—	10/17/22	1628		3				X					X		
10	MW-191-202210	WT	G	—	—	10/17/22	1719		3				X					X		
11	MW-39R-202210	WT	G	—	—	10/17/22	1715		3				X					X		
12	TMW-29-202210	WT	G	—	—	10/17/22	1800		3				X					X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Ramboll	10-18-22	1804		10/18/22	2321	2-3 2-6 1-8

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10/18/22

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Y	N	Y

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

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:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B — **Required** Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	

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	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-26-202210	WT	G			10/17/22	1715		3				X					X		60413494
2	MW-98-202210	WT	G			10/17/22	1745		3				X					X		
3	MW-96-202210	WT	G			10/17/22	1620		3				X					X		
4	Dup-08-202210	WT	G			10/17/22	1620		3				X					X		
5	MW-97-202210	WT	G			10/17/22	1800		3				X					X		
6	MW-68-202210	WT	G			10-18-22	0919		3				X					X		
7	MW-68-202210 MS	WT	G			10-18-22	0919		3				X					X		
8	MW-68-202210 MSD	WT	G			10-18-22	0919		3				X					X		
9	MW-22-202210	WT	G			10-18-22	0855		3				X					X		
10	MW-184-202210	WT	G			10-18-22	0950		3				X					X		
11	Dup-10-202210	WT	G			10-18-22	0956		3				X					X		
12	MW-36B-202210	WT	G			10-18-22	0955		3				X					X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
					10/18/22	2321	2-3	Y	N	Y
							2-6			
							1-2			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A — Required Client Information:

Company:	Ramboll
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B — Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	

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	MW-27-202210	WT	G	—		10-18-22	1032		3				X					X	X		60413494
2	MW-36-202210	WT	G	—		10-18-22	1155		3				X					X	X		
3	MW-196-202210	WT	G	—		10-18-22	0951		3				X					X	X		
4	MW-195-202210	WT	G	—		10-18-22	1132		3				X					X	X		
5	Dup-06-202210	WT	G	—		10-18-22	1132		3				X					X	X		
6	TMW-35-202210	WT	G	—		10-18-22	1216		3				X					X	X		
7	Dup-11-202210	WT	G	—		10-18-22	1210		3				X					X	X		
8	MW-176-202210	WT	G	—		10-18-22	1426		3				X					X	X		
9	MW-200-202210	WT	G	—		10-18-22	1435		3				X					X	X		
10	TMW-27-202210	WT	G	—		10-18-22	1431		3				X					X	X		
11	MW-91-202210	WT	G	—		10-18-22	1447		3				X					X	X		
12	TMW-16-202210	WT	G	—		10-18-22	1222		3				X					X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
					10/18/22	2321	2-3
							2-6
							1-8

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Y	N	Y

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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:	
Phone:	913-553-5926 Fax:
Requested Due Date/TAT:	

Section B
Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	

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)

Preservatives: Unpreserved, H_2SO_4, HNO_3, HCl, NaOH, $Na_2S_2O_3$, Methanol, Other

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-18b-202210	WT	G	—	—	10-18-22	1430		3										X		60413494
2	MW-20b-202210	WT	G	—	—	10-18-22	1000		3										X		
3	MW-50R-202210	WT	G	—	—	10-18-22	1140		3										X		
4	MW-28-202210	WT	G	—	—	10-18-22	1455		3										X		
5	TMW-26-202210	WT	G	—	—	10-18-22	1553		3										X		
6	ITMW-2R-202210	WT	G	—	—	10-18-22	1615		3										X		
7	TMW-21-202210	WT	G	—	—	10-18-22	1715		3										X		
8	TMW-20-202210						1300														
9	TMW-19-202210						1610														
10	MW-89-202210						1727														
11	MW-183R-202210						1605														
12	EB-02					10-17-22	1600														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
				[signature]	~~59 10/20~~ ~~2921~~ 10/18/22	2321	~~[illegible]~~ 2.3	~~10/20~~ Y	N	Y
							2.6			
							1.8			
							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:

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

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

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

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Ramboll	Report To:	David Meyer	Attention:	Accounts Payable
Address:	7500 College Blvd., Ste. 925	Copy To:	Caroline Chavers	Company Name:	Ramboll
	Overland Park, KS 66210			Address:	
Email To:		Purchase Order No.:		Pace Quote Reference:	
Phone: 913-553-5926	Fax:	Project Name:	WHIRLPOOL FORT SMITH, AR	Pace Project Manager:	Jamie Church
Requested Due Date/TAT:		Project Number:		Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

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-183R-202210 MS	WT	G	—		10-18-22	1605	3	3				X					X	X		60413494
2	MW-183R-202210 MSD	WT	G	—		10-18-22	1605	3	3				X					X	X		
3	EB-01-202210	WT	G	—		10-18-22	1705	3	3				X					X	X		
4	TB-02-202210	WT	G	—		10-18-22	0800	3	3				X					X	X		
5	TB-01-202210	WT	G	—		10-18-22	0800	3	2				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)
					10/18/22	2321	2.3	Y	N	Y
							2-6			
							1-8			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

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

DC#_Title: ENV-FRM-LENE-0001_Sample Container Count
Revision: 3 | Effective Date: | Issued by: Lenexa

Client: Ramboll

Profile # 7444 line 1

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		9																													
2																																
3																																
4	WT		3																													
5	WT		3																													
6	WT		3																													
7	WT		9																													
8																																
9																																
10	WT		3																													
11	WT		3																													
12	WT		3																													

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: 60413494

DC#_Title: ENV-FRM-LENE-0001_Sample Container Count
Revision: 3 | Effective Date: | Issued by: Lenexa

Client: Ramboll

Profile # YH44 line 1

Site: whirlpool Fort Smith, AR

Notes

COC Line Item	Matrix	VG9H	DG9H	DG0Q	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	WT		9																													
7																																
8																																
9	WT		3																													
10	WT		3																													
11	WT		3																													
12	WT		3																													

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: 60413494

DC#_Title: ENV-FRM-LENE-0001_Sample Container Count
Revision: 3 | Effective Date: | Issued by: Lenexa

Client: Ramboll

Profile # 7444 line 1

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: 60413494

Client: Ramboll

Profile # 4444 line 1

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				3								1	1								1		1							2			
10																																	
11			9																														
12			3																														

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: 60413494

Client: Ramboll

Profile # 7444 line 1

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																																
2																																
3	WT		3																													
4	WT	3	Trip Blanks																													
5	WT	2	Trip Blanks																													
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
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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: 60413494

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

October 26, 2022

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413510

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2022. 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.

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413510

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60413510001	**MW-89-202210**	Water	10/19/22 15:59	10/20/22 00:00
60413510002	**TMW-10-202210**	Water	10/19/22 11:20	10/20/22 00:00
60413510003	**TMW-11-202210**	Water	10/19/22 13:58	10/20/22 00:00
60413510004	**RW-69-202210**	Water	10/19/22 16:50	10/20/22 00:00

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project:
Pace Project No.:

Method:
Description:
Client:
Date:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT TO:

Name: David Meyer
Company: Ramboll
Address: 10851 Mastin Blvd, Ste. 100
Overland Park, KS
email: DMeyer@ramboll.com
Phone:
Fax:

Project Manager:
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:
Fax:

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 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	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: BAV2 VC Red.	Other:	Other:
069751	MW-89-202210	10/19/22	1559	WT						X	X																			X		
2	TMW-10-202210	10/19/22	1120	WT						X	X																			X		
3	TMW-11-202210	10/19/22	1358	WT						X	X																			X		
4	RW-69-202210	10/19/22	1650	WT						X	X																			X		

GP

Relinquished by: Jackie Zellmer Date 10-19-22 Received by: Date 10/20/22

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
4120 Seven Hills Dr
Florrisant, MO 63033

Phone:

Fax:

Identifier: 069TJ **Date Rec:** 10/20/2022 **Report Date:** 10/26/2022

Client Project #: **Client Project Name:**

Purchase Order #: SUB-105502

Test results provided for: CENSUS

Reviewed By:

Charles Slater

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: **069TJ**
Date Received: 10/20/2022

Sample Information

Client Sample ID:		**MW-89-202210**	**TMW-10-202210**	**TMW-11-202210**	**RW-69-202210**
Sample Date:		10/19/2022	10/19/2022	10/19/2022	10/19/2022
Units:		cells/mL	cells/mL	cells/mL	cells/mL
Analyst/Reviewer:		BB/CS	BB/CS	BB/CS	BB/CS
Dechlorinating Bacteria					
Dehalococcoides	*DHC*	**2.90E+00**	**3.27E+02**	**1.85E+02**	**8.00E-01**
tceA Reductase	TCE	<5.00E-01	**1.08E+02**	**2.99E+01**	<3.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	<5.00E-01	<5.00E-01	<3.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01	**5.16E+01**	**1.66E+01**	<3.00E-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 **10/20/2022**

Component	Date Prepared	Date Analyzed	Arrival Temperature	Positive Control	Extraction Blank	Negative Control
BVC	10/26/2022	10/26/2022	0 °C	100%	non-detect	non-detect
DHC	10/26/2022	10/26/2022	0 °C	99%	non-detect	non-detect
TCE	10/26/2022	10/26/2022	0 °C	100%	non-detect	non-detect
VCR	10/26/2022	10/26/2022	0 °C	106%	non-detect	non-detect

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

October 29, 2022

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413615

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 21, 2022. 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.

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

SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413615

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60413615001	**MW-25R-202210**	Water	10/20/22 12:45	10/21/22 00:00
60413615002	**MW-38-202210**	Water	10/20/22 14:35	10/21/22 00:00
60413615003	**MW-87-202210**	Water	10/20/22 12:28	10/21/22 00:00
60413615004	**MW-58R-202210**	Water	10/20/22 12:47	10/21/22 00:00
60413615005	**IW-73-202210**	Water	10/20/22 14:55	10/21/22 00:00
60413615006	**MW-50R-202210**	Water	10/20/22 17:00	10/21/22 00:00

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

PROJECT NARRATIVE

Project:
Pace Project No.:

Method:
Description:
Client:
Date:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT TO:
Name: David Meyer
Company: Ramboll
Address: 10851 Mastin Blvd. Suite 100 Overland Park, KS
email: Dmeyer@Ramboll.com
Phone:
Fax:

Project Manager:
Project Name:
Project No.:

INVOICE TO: (For Invoices paid by a third party it is imperative that all information be provided)
Name: David Meyer
Company: Ramboll
Address:
email:
Phone:
Fax:

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 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	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 (Denitrifiers-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: BAV2 VC Real.
082TS 1	MW-25R-202210	10/20/22	1245 1020 CST	WT						X	X																				X
2	MW-38-202210		1435	WT						X	X																				X
3	MW-87-202210		1228	WT						X	X																				X
4	MW-58R-202210		1247	WT						X	X																				X
5	IW-73-202210		1455	WT						X	X																				X
~~6~~	~~MW-89-202210~~	~~10/20/22~~	~~1600~~	~~WT~~						~~X~~	~~X~~																				~~X~~
6	MW-50R-202210	10/20/22	1700	WT						X	X																				X
		CAP																													

Relinquished by: Ramboll/JT Date 10-20-2022 Received by: Date 10/21/22

It is vital that chain of custody is filled out correctly & that all relative information is provided.
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* 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
4120 Seven Hills Dr
Florrisant, MO 63033

Phone:

Fax:

Identifier: 082TJ **Date Rec:** 10/21/2022 **Report Date:** 10/28/2022

Client Project #: **Client Project Name:**

Purchase Order #: SUB-105503

Test results provided for: CENSUS

Reviewed By:

Charles Slater

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: **082TJ**
Date Received: 10/21/2022

Sample Information

Client Sample ID:		**MW-25R-202210**	**MW-38-202210**	**MW-87-202210**	**MW-58R-202210**	**IW-73-202210**
Sample Date:		10/20/2022	10/20/2022	10/20/2022	10/20/2022	10/20/2022
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst/Reviewer:		BB/CS	BB/CS	BB/CS	BB/CS	BB/CS
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	<5.00E-01	**1.74E+02**	<7.00E-01	**1.20E+00**	**2.20E+01**
tceA Reductase	TCE	<5.00E-01	<5.00E-01	<7.00E-01	<5.00E-01	<3.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	**5.28E+01**	<7.00E-01	<5.00E-01	**7.00E-01**
Vinyl Chloride Reductase	VCR	<5.00E-01	**1.00E-01 (J)**	<7.00E-01	<5.00E-01	<3.00E-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: **082TJ**
Date Received: 10/21/2022

Sample Information

Client Sample ID:	**MW-50R-202210**
Sample Date:	10/20/2022
Units:	cells/mL
Analyst/Reviewer:	BB/CS

Dechlorinating Bacteria

Dehalococcoides	*DHC*	**8.00E-01**
tceA Reductase	TCE	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01
Vinyl Chloride Reductase	VCR	<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 **10/21/2022**

Component	Date Prepared	Date Analyzed	Arrival Temperature	Positive Control	Extraction Blank	Negative Control
BVC	10/21/2022	10/27/2022	0 °C	100%	non-detect	non-detect
DHC	10/21/2022	10/27/2022	0 °C	102%	non-detect	non-detect
TCE	10/21/2022	10/27/2022	0 °C	101%	non-detect	non-detect
VCR	10/21/2022	10/27/2022	0 °C	100%	non-detect	non-detect

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

November 02, 2022

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2022. 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 Gulf Coast
- 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.

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CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 22-031-0
Illinois Certification #: 2000302021-3
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 #: T104704407-21-15
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Gulf Coast
7979 Innovation Park Drive, Baton Rouge, LA 70820
Arkansas Certification #: 88-0655
DoD ELAP Certification #: 6429-01
Florida Certification #: E87854
Illinois Certification #: 004585
Kansas Certification #: E-10354
Louisiana/LELAP Certification #: 01955
North Carolina Certification #: 618
North Dakota Certification #: R-195
Oklahoma Certification #: 2019-101
South Carolina Certification #: 73006001
Texas Certification #: T104704178-19-11
USDA Soil Permit # P330-19-00209
Virginia Certification #: 460215
Washington Certification #: C929

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SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60413692001	**TMW-25-202210**	Water	10/19/22 11:34	10/20/22 18:19
60413692002	**MW-61R-202210**	Water	10/19/22 11:37	10/20/22 18:19
60413692003	**TMW-10-202210**	Water	10/19/22 11:20	10/20/22 18:19
60413692004	**MW-194-202210**	Water	10/19/22 13:27	10/20/22 18:19
60413692005	**TMW-11-202210**	Water	10/19/22 13:58	10/20/22 18:19
60413692006	**MW-99-202210**	Water	10/19/22 16:20	10/20/22 18:19

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60413692001	**TMW-25-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	RKA	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413692002	**MW-61R-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	CRN2	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413692003	**TMW-10-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	CRN2	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413692004	**MW-194-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	RKA	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413692005	**TMW-11-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	CRN2, RKA	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413692006	**MW-99-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 300.0	CRN2, RKA	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA

GCLA = Pace Analytical Gulf Coast
PASI-K = Pace Analytical Services - Kansas City

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

Method: **AM20GAX**
Description: Indicator Gases Water LHC
Client: Ramboll_AR
Date: November 02, 2022

General Information:
6 samples were analyzed for AM20GAX by Pace Analytical Gulf Coast. 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.

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.: 60413692

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Ramboll_AR
Date: November 02, 2022

General Information:
6 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.: 60413692

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Ramboll_AR
Date: November 02, 2022

General Information:
6 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: 815090

B: Analyte was detected in the associated method blank.

- BLANK for HBN 815090 [WETA/925 (Lab ID: 3241636)
  - Chloride
- BLANK for HBN 815090 [WETA/925 (Lab ID: 3244818)
  - 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: 815090

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413603005,60413692004

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

- MS (Lab ID: 3241640)
  - Chloride

Additional Comments:

Analyte Comments:

QC Batch: 815090

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 3241640)
  - Chloride

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 pres.
Client: Ramboll_AR
Date: November 02, 2022

General Information:
6 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.: 60413692

Method: **SM 5310C**
Description: 5310C TOC
Client: Ramboll_AR
Date: November 02, 2022

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.

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.: 60413692

Method: **SM 5310C**
Description: 5310C Diss. Organic Carbon LF
Client: Ramboll_AR
Date: November 02, 2022

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.

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.: 60413692

Method: **AM23G**
Description: Low Level Volatile Fatty Acids
Client: Ramboll_AR
Date: November 02, 2022

General Information:
6 samples were analyzed for AM23G by Pace Analytical Gulf Coast. 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:

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.: 60413692

Sample: TMW-25-202210 **Lab ID: 60413692001** Collected: 10/19/22 11:34 Received: 10/20/22 18:19 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**13000**	ug/L	5.0	2.0	1		10/26/22 09:57	74-82-8	
Ethane	**2.4**	ug/L	1.0	0.17	1		10/26/22 09:57	74-84-0	
Ethene	**1.9**	ug/L	1.0	0.24	1		10/26/22 09:57	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**17100**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:26	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**154**	mg/L	10.0	5.3	10		10/28/22 12:12	16887-00-6	
Sulfate	**11.1**	mg/L	10.0	5.5	10		10/28/22 12:12	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		11/02/22 14:55		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**6.8**	mg/L	2.0	0.75	2		10/31/22 15:17	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**4.3**	mg/L	1.0	0.30	1		10/31/22 13:06		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**4.9J**	mg/L	5.0	0.53	10		10/27/22 20:14	50-21-5	
Acetic Acid	**2.0J**	mg/L	5.0	1.2	10		10/27/22 20:14	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/27/22 20:14	79-09-4	
Formic acid	**55**	mg/L	5.0	0.55	10		10/27/22 20:14	64-18-6	
Butyric Acid	**0.66J**	mg/L	5.0	0.58	10		10/27/22 20:14	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/27/22 20:14	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/27/22 20:14	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/27/22 20:14	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/27/22 20:14	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/27/22 20:14	142-62-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

Sample: MW-61R-202210 **Lab ID: 60413692002** Collected: 10/19/22 11:37 Received: 10/20/22 18:19 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**1000**	ug/L	5.0	2.0	1		10/26/22 10:10	74-82-8	
Ethane	ND	ug/L	1.0	0.17	1		10/26/22 10:10	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/26/22 10:10	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**11200**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:28	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**156**	mg/L	20.0	10.5	20		10/31/22 16:36	16887-00-6	
Sulfate	**3.2**	mg/L	1.0	0.55	1		10/31/22 16:21	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		11/02/22 14:56		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**1.6**	mg/L	1.0	0.38	1		10/31/22 16:03	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**1.5**	mg/L	1.0	0.30	1		10/31/22 13:20		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**3.1J**	mg/L	5.0	0.53	10		10/27/22 21:19	50-21-5	
Acetic Acid	**1.6J**	mg/L	5.0	1.2	10		10/27/22 21:19	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/27/22 21:19	79-09-4	
Formic acid	**57**	mg/L	5.0	0.55	10		10/27/22 21:19	64-18-6	
Butyric Acid	**0.64J**	mg/L	5.0	0.58	10		10/27/22 21:19	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/27/22 21:19	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/27/22 21:19	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/27/22 21:19	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/27/22 21:19	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/27/22 21:19	142-62-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

Sample: TMW-10-202210 **Lab ID: 60413692003** Collected: 10/19/22 11:20 Received: 10/20/22 18:19 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**1200**	ug/L	5.0	2.0	1		10/26/22 10:22	74-82-8	
Ethane	ND	ug/L	1.0	0.17	1		10/26/22 10:22	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/26/22 10:22	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**11300**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:31	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**166**	mg/L	20.0	10.5	20		10/31/22 17:05	16887-00-6	
Sulfate	**2.0**	mg/L	1.0	0.55	1		10/31/22 16:50	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		11/02/22 14:57		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**2.6**	mg/L	1.0	0.38	1		10/31/22 16:18	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**2.0**	mg/L	1.0	0.30	1		10/31/22 13:34		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**4.9J**	mg/L	5.0	0.53	10		10/27/22 21:40	50-21-5	
Acetic Acid	**1.6J**	mg/L	5.0	1.2	10		10/27/22 21:40	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/27/22 21:40	79-09-4	
Formic acid	**49**	mg/L	5.0	0.55	10		10/27/22 21:40	64-18-6	
Butyric Acid	**0.61J**	mg/L	5.0	0.58	10		10/27/22 21:40	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/27/22 21:40	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/27/22 21:40	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/27/22 21:40	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/27/22 21:40	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/27/22 21:40	142-62-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

Sample: MW-194-202210 **Lab ID: 60413692004** Collected: 10/19/22 13:27 Received: 10/20/22 18:19 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**8800**	ug/L	5.0	2.0	1		10/26/22 10:34	74-82-8	
Ethane	**0.98J**	ug/L	1.0	0.17	1		10/26/22 10:34	74-84-0	
Ethene	**3.2**	ug/L	1.0	0.24	1		10/26/22 10:34	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**8610**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:33	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**188**	mg/L	10.0	5.3	10		10/28/22 12:56	16887-00-6	M1
Sulfate	**11.4**	mg/L	10.0	5.5	10		10/28/22 12:56	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		11/02/22 14:57		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.65J**	mg/L	1.0	0.38	1		10/31/22 16:34	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**0.40J**	mg/L	1.0	0.30	1		10/31/22 13:49		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**3.4J**	mg/L	5.0	0.53	10		10/27/22 22:02	50-21-5	
Acetic Acid	**1.6J**	mg/L	5.0	1.2	10		10/27/22 22:02	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/27/22 22:02	79-09-4	
Formic acid	**54**	mg/L	5.0	0.55	10		10/27/22 22:02	64-18-6	
Butyric Acid	ND	mg/L	5.0	0.58	10		10/27/22 22:02	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/27/22 22:02	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/27/22 22:02	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/27/22 22:02	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/27/22 22:02	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/27/22 22:02	142-62-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

Sample: TMW-11-202210 **Lab ID: 60413692005** Collected: 10/19/22 13:58 Received: 10/20/22 18:19 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**6000**	ug/L	5.0	2.0	1		10/26/22 10:47	74-82-8	
Ethane	**0.70J**	ug/L	1.0	0.17	1		10/26/22 10:47	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/26/22 10:47	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**4210**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:41	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**65.1**	mg/L	20.0	10.5	20		10/28/22 13:25	16887-00-6	B
Sulfate	**1.9**	mg/L	1.0	0.55	1		10/31/22 17:20	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		11/02/22 14:58		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**4.8**	mg/L	2.0	0.75	2		10/31/22 16:49	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**4.1**	mg/L	1.0	0.30	1		10/31/22 14:03		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**7.2**	mg/L	5.0	0.53	10		10/27/22 22:23	50-21-5	
Acetic Acid	**1.7J**	mg/L	5.0	1.2	10		10/27/22 22:23	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/27/22 22:23	79-09-4	
Formic acid	**49**	mg/L	5.0	0.55	10		10/27/22 22:23	64-18-6	
Butyric Acid	**0.73J**	mg/L	5.0	0.58	10		10/27/22 22:23	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/27/22 22:23	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/27/22 22:23	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/27/22 22:23	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/27/22 22:23	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/27/22 22:23	142-62-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

Sample: MW-99-202210 **Lab ID: 60413692006** Collected: 10/19/22 16:20 Received: 10/20/22 18:19 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**13000**	ug/L	5.0	2.0	1		10/26/22 10:59	74-82-8	
Ethane	**1.8**	ug/L	1.0	0.17	1		10/26/22 10:59	74-84-0	
Ethene	**0.90J**	ug/L	1.0	0.24	1		10/26/22 10:59	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**6660**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:43	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**83.8**	mg/L	20.0	10.5	20		10/28/22 13:40	16887-00-6	B
Sulfate	**4.4**	mg/L	1.0	0.55	1		10/31/22 18:03	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		11/02/22 14:59		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**40.0**	mg/L	5.0	1.9	5		10/31/22 17:05	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**42.1**	mg/L	5.0	1.5	5		10/31/22 18:34		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**7.2**	mg/L	5.0	0.53	10		10/27/22 22:45	50-21-5	
Acetic Acid	**1.8J**	mg/L	5.0	1.2	10		10/27/22 22:45	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/27/22 22:45	79-09-4	
Formic acid	**53**	mg/L	5.0	0.55	10		10/27/22 22:45	64-18-6	
Butyric Acid	**0.71J**	mg/L	5.0	0.58	10		10/27/22 22:45	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/27/22 22:45	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/27/22 22:45	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/27/22 22:45	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/27/22 22:45	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/27/22 22:45	142-62-1	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

QC Batch: 752669
QC Batch Method: AM20GAX
Analysis Method: AM20GAX
Analysis Description: Indicator Gases Water LHC
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

METHOD BLANK: 2412911 Matrix: Water
Associated Lab Samples: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Methane	ug/L	ND	5.0	2.0	10/26/22 05:33	
Ethane	ug/L	ND	1.0	0.17	10/26/22 05:33	
Ethene	ug/L	ND	1.0	0.24	10/26/22 05:33	

LABORATORY CONTROL SAMPLE & LCSD: 2412912 2412913

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	380	340	340	90	89	70-130	1	20	
Ethane	ug/L	97	88	88	91	90	70-130	1	20	
Ethene	ug/L	120	110	110	91	91	70-130	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

QC Batch: 814323
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

METHOD BLANK: 3238614 Matrix: Water
Associated Lab Samples: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	8.7J	50.0	7.4	11/01/22 10:50	

LABORATORY CONTROL SAMPLE: 3238615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9580	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3238617 3238657

Parameter	Units	60413474001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	3610	10000	10000	12800	12800	92	92	75-125	0	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

QC Batch: 815090
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: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

METHOD BLANK: 3241636 Matrix: Water
Associated Lab Samples: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.56J	1.0	0.53	10/28/22 08:39	
Sulfate	mg/L	ND	1.0	0.55	10/28/22 08:39	

METHOD BLANK: 3244818 Matrix: Water
Associated Lab Samples: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.58J	1.0	0.53	10/31/22 08:41	
Sulfate	mg/L	ND	1.0	0.55	10/31/22 08:41	

LABORATORY CONTROL SAMPLE: 3241637

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	95	90-110	
Sulfate	mg/L	5	5.2	103	90-110	

LABORATORY CONTROL SAMPLE: 3244819

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	94	90-110	
Sulfate	mg/L	5	5.2	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3241638 3241639

Parameter	Units	60413603005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	83.0	100	100	165	171	82	88	80-120	3	15	
Sulfate	mg/L	146	100	100	226	230	80	84	80-120	2	15	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

MATRIX SPIKE SAMPLE: 3241640

Parameter	Units	60413692004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	188	50	213	50	80-120	E,M1
Sulfate	mg/L	11.4	50	59.7	97	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

QC Batch: 816137
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

METHOD BLANK: 3245876 Matrix: Water
Associated Lab Samples: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.078	11/02/22 14:32	

LABORATORY CONTROL SAMPLE: 3245877

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.1	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3245880 3245879

Parameter	Units	60413574002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	ND	2	2	1.9	1.8	93	92	90-110	1	20	

MATRIX SPIKE SAMPLE: 3245882

Parameter	Units	60413900001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.2	2	4.0	93	90-110	

SAMPLE DUPLICATE: 3245878

Parameter	Units	60413574002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	ND		20	

SAMPLE DUPLICATE: 3245881

Parameter	Units	60413659002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	ND		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

QC Batch: 815249
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

METHOD BLANK: 3242295 Matrix: Water
Associated Lab Samples: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.38	10/31/22 09:54	

LABORATORY CONTROL SAMPLE: 3242296

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: 3242297

Parameter	Units	60413659001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	1.9	5	7.7	116	80-120	

SAMPLE DUPLICATE: 3242298

Parameter	Units	60413659003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	0.52J	0.50J		25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

QC Batch: 815250
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Dissolved Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

METHOD BLANK: 3242300 Matrix: Water
Associated Lab Samples: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.30	10/31/22 09:33	

LABORATORY CONTROL SAMPLE: 3242301

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	5	4.9	98	80-120	

MATRIX SPIKE SAMPLE: 3242302

Parameter	Units	60413574006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	1.7	5	7.4	113	80-120	

SAMPLE DUPLICATE: 3242303

Parameter	Units	60413574008 Result	Dup Result	RPD	Max RPD	Qualifiers
Dissolved Organic Carbon	mg/L	ND	0.61J		25	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

QC Batch: 752790
QC Batch Method: AM23G
Analysis Method: AM23G
Analysis Description: Low Level Volatile Fatty Acids
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

METHOD BLANK: 2413755 Matrix: Water
Associated Lab Samples: 60413692001, 60413692002, 60413692003, 60413692004, 60413692005, 60413692006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lactic Acid	mg/L	ND	0.50	0.053	10/27/22 16:38	
Acetic Acid	mg/L	ND	0.50	0.12	10/27/22 16:38	
Propionic Acid	mg/L	ND	0.50	0.053	10/27/22 16:38	
Formic acid	mg/L	ND	0.50	0.055	10/27/22 16:38	
Butyric Acid	mg/L	ND	0.50	0.058	10/27/22 16:38	
Pyruvic Acid	mg/L	ND	0.50	0.060	10/27/22 16:38	
i-Pentanoic Acid	mg/L	ND	0.50	0.061	10/27/22 16:38	
Pentanoic Acid	mg/L	ND	0.50	0.056	10/27/22 16:38	
i-Hexanoic Acid	mg/L	ND	0.50	0.056	10/27/22 16:38	
Hexanoic Acid	mg/L	ND	0.50	0.058	10/27/22 16:38	

LABORATORY CONTROL SAMPLE: 2413756

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lactic Acid	mg/L	2	2.0	98	70-130	
Acetic Acid	mg/L	2	1.7	87	70-130	
Propionic Acid	mg/L	2	1.8	88	70-130	
Formic acid	mg/L	2	1.8	90	70-130	
Butyric Acid	mg/L	2	1.7	87	70-130	
Pyruvic Acid	mg/L	2	1.8	89	70-130	
i-Pentanoic Acid	mg/L	2	1.8	91	70-130	
Pentanoic Acid	mg/L	2	1.7	84	70-130	
i-Hexanoic Acid	mg/L	2	1.8	91	70-130	
Hexanoic Acid	mg/L	2	1.7	86	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.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413692

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.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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.: 60413692

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60413692001	**TMW-25-202210**	AM20GAX	752669		
60413692002	**MW-61R-202210**	AM20GAX	752669		
60413692003	**TMW-10-202210**	AM20GAX	752669		
60413692004	**MW-194-202210**	AM20GAX	752669		
60413692005	**TMW-11-202210**	AM20GAX	752669		
60413692006	**MW-99-202210**	AM20GAX	752669		
60413692001	**TMW-25-202210**	EPA 3010	814323	EPA 6010	814397
60413692002	**MW-61R-202210**	EPA 3010	814323	EPA 6010	814397
60413692003	**TMW-10-202210**	EPA 3010	814323	EPA 6010	814397
60413692004	**MW-194-202210**	EPA 3010	814323	EPA 6010	814397
60413692005	**TMW-11-202210**	EPA 3010	814323	EPA 6010	814397
60413692006	**MW-99-202210**	EPA 3010	814323	EPA 6010	814397
60413692001	**TMW-25-202210**	EPA 300.0	815090		
60413692002	**MW-61R-202210**	EPA 300.0	815090		
60413692003	**TMW-10-202210**	EPA 300.0	815090		
60413692004	**MW-194-202210**	EPA 300.0	815090		
60413692005	**TMW-11-202210**	EPA 300.0	815090		
60413692006	**MW-99-202210**	EPA 300.0	815090		
60413692001	**TMW-25-202210**	EPA 353.2	816137		
60413692002	**MW-61R-202210**	EPA 353.2	816137		
60413692003	**TMW-10-202210**	EPA 353.2	816137		
60413692004	**MW-194-202210**	EPA 353.2	816137		
60413692005	**TMW-11-202210**	EPA 353.2	816137		
60413692006	**MW-99-202210**	EPA 353.2	816137		
60413692001	**TMW-25-202210**	SM 5310C	815249		
60413692002	**MW-61R-202210**	SM 5310C	815249		
60413692003	**TMW-10-202210**	SM 5310C	815249		
60413692004	**MW-194-202210**	SM 5310C	815249		
60413692005	**TMW-11-202210**	SM 5310C	815249		
60413692006	**MW-99-202210**	SM 5310C	815249		
60413692001	**TMW-25-202210**	SM 5310C	815250		
60413692002	**MW-61R-202210**	SM 5310C	815250		
60413692003	**TMW-10-202210**	SM 5310C	815250		
60413692004	**MW-194-202210**	SM 5310C	815250		
60413692005	**TMW-11-202210**	SM 5310C	815250		
60413692006	**MW-99-202210**	SM 5310C	815250		
60413692001	**TMW-25-202210**	AM23G	752790		
60413692002	**MW-61R-202210**	AM23G	752790		
60413692003	**TMW-10-202210**	AM23G	752790		
60413692004	**MW-194-202210**	AM23G	752790		
60413692005	**TMW-11-202210**	AM23G	752790		
60413692006	**MW-99-202210**	AM23G	752790		

REPORT OF LABORATORY ANALYSIS

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_San	WO#: 60413692
	Revision: 2	Effective Date: 01/12/

60413692

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: T-299 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 1.5 1.7 **Corr. Factor** 0 **Corrected** 1.5 1.7

Date and initials of person examining contents: RE 10/24

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	
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#:** 6106001 6105009	☒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
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A
Required Client Information:

Company:	Ramboll
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	
Phone:	913-553-5926 Fax:
Requested Due Date/TAT:	STD TAT

Section B
Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
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	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	6010 Iron	Sulfate	Chloride	Nitrate+Nitrite	TOC	DOC (Lab Filtered)	Methane/Ethane/Ethene	Volatile Fatty Acids	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TMW-25-202210	WT	G			10/19/22	1134		9	X	X	X					X			X	X	X	X	X	X	X	X		60413692
2	MW-61R-202210	WT	G			10/19/22	1137		9	X	X	X					X			X	X	X	X	X	X	X	X		
3	TMW-10-202210	WT	G			10/19/22	1120		9	X	X	X					X			X	X	X	X	X	X	X	X		
4	MW-194-202210	WT	G			10/19/22	1327		9	X	X	X					X			X	X	X	X	X	X	X	X		
5	TMW-11-202210	WT	G			10/19/22	1358		9	X	X	X					X			X	X	X	X	X	X	X	X		
6	MW-99-202210	WT	G			10/19/22	1620		9	X	X	X					X			X	X	X	X	X	X	X	X		
7																													
8	GP																												
9																													
10																													
11																													
12																													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
M/E/E and VFAs to Pace Gulf Coast	Ramboll	10-19-22	1800	[signature] Pace	10/24 10/20	1819	1.5	X	N	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zillmer

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 10-19-22

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

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

Client: Ramboll

Profile # 7444 Linel

Site: Whirl Pool Fort Smith

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	1								1		1							2		
2	SL			3								2	1								1		1							2		
3	WT			3								2	1								1		1							2		
4	SL			3								2	1								1		1							2		
5	WT			3								2	1								1		1							2		
6	WT			3								2	1								1		1							2		
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: 60413692

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

November 04, 2022

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2022. 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 Gulf Coast
- 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.

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

CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 22-031-0
Illinois Certification #: 2000302021-3
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 #: T104704407-21-15
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Gulf Coast
7979 Innovation Park Drive, Baton Rouge, LA 70820
Arkansas Certification #: 88-0655
DoD ELAP Certification #: 6429-01
Florida Certification #: E87854
Illinois Certification #: 004585
Kansas Certification #: E-10354
Louisiana/LELAP Certification #: 01955
North Carolina Certification #: 618
North Dakota Certification #: R-195
Oklahoma Certification #: 2019-101
South Carolina Certification #: 73006001
Texas Certification #: T104704178-19-11
USDA Soil Permit # P330-19-00209
Virginia Certification #: 460215
Washington Certification #: C929

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

SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60413695001	**TMW-10-202210**	Water	10/19/22 11:20	10/20/22 18:19
60413695002	**TMW-11-202210**	Water	10/19/22 13:58	10/20/22 18:19
60413695003	**RW-69-202210**	Water	10/19/22 16:50	10/20/22 18:19

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

SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60413695001	**TMW-10-202210**	AM20GAX	LMB	1	GCLA
		AM20GAX	LMB	4	GCLA
		EPA 6010	MA1	1	PASI-K
		SM 4500-S-2 D	KLM	1	PASI-K
		EPA 300.0	CRN2	1	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K
60413695002	**TMW-11-202210**	AM20GAX	LMB	1	GCLA
		AM20GAX	LMB	4	GCLA
		EPA 6010	MA1	1	PASI-K
		SM 4500-S-2 D	KLM	1	PASI-K
		EPA 300.0	CRN2	1	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K
60413695003	**RW-69-202210**	AM20GAX	LMB	1	GCLA
		AM20GAX	LMB	4	GCLA
		EPA 6010	MA1	1	PASI-K
		SM 4500-S-2 D	KLM	1	PASI-K
		EPA 300.0	CRN2	1	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K

GCLA = Pace Analytical Gulf Coast
PASI-K = Pace Analytical Services - Kansas City

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

Method: **AM20GAX**
Description: Indicator Gases Bubblestrip H2
Client: Ramboll_AR
Date: November 04, 2022

General Information:
3 samples were analyzed for AM20GAX by Pace Analytical Gulf Coast. 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.

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:

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

Method: **AM20GAX**
Description: Indicator Gases Water LHC
Client: Ramboll_AR
Date: November 04, 2022

General Information:
3 samples were analyzed for AM20GAX by Pace Analytical Gulf Coast. 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.

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: 752797

R1: RPD value was outside control limits.

- LCSD (Lab ID: 2413843)
  - Acetylene
  - Methane

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

Additional Comments:

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Ramboll_AR
Date: November 04, 2022

General Information:
3 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:

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Ramboll_AR
Date: November 04, 2022

General Information:
3 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: 814529

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413574002

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

- MS (Lab ID: 3239386)
  - Sulfide, Total
- MSD (Lab ID: 3239387)
  - 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.: 60413695

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Ramboll_AR
Date: November 04, 2022

General Information:
3 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.: 60413695

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 pres.
Client: Ramboll_AR
Date: November 04, 2022

General Information:
3 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: 816177

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413695002,60413979003

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

- MS (Lab ID: 3246138)
  - Nitrogen, NO2 plus NO3
- MS (Lab ID: 3246140)
  - Nitrogen, NO2 plus NO3

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

Method: **SM 5310C**
Description: 5310C TOC
Client: Ramboll_AR
Date: November 04, 2022

General Information:
3 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.: 60413695

Sample: TMW-10-202210 **Lab ID: 60413695001** Collected: 10/19/22 11:20 Received: 10/20/22 18:19 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Bubblestrip H2	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Hydrogen	**0.58J**	nM	1.9	0.49	1		10/27/22 06:45	1333-74-0	
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**5700**	ug/L	5.0	2.0	1		10/28/22 07:12	74-82-8	
Ethane	**0.57J**	ug/L	1.0	0.17	1		10/28/22 07:12	74-84-0	
Ethene	**2.6**	ug/L	1.0	0.24	1		10/28/22 07:12	74-85-1	
Acetylene	ND	ug/L	0.50	0.13	1		10/28/22 07:12	74-86-2	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**11700**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:45	7439-89-6	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.021	1		10/25/22 14:40	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		10/31/22 18:18	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		11/02/22 15:00		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**1.8**	mg/L	1.0	0.30	1		11/02/22 10:38	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

Sample: TMW-11-202210 **Lab ID: 60413695002** Collected: 10/19/22 13:58 Received: 10/20/22 18:19 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Bubblestrip H2	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Hydrogen	**2.4**	nM	1.9	0.49	1		10/27/22 06:57	1333-74-0	
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**3300**	ug/L	5.0	2.0	1		10/28/22 07:25	74-82-8	
Ethane	**0.47J**	ug/L	1.0	0.17	1		10/28/22 07:25	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/28/22 07:25	74-85-1	
Acetylene	ND	ug/L	0.50	0.13	1		10/28/22 07:25	74-86-2	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**4070**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:47	7439-89-6	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.021	1		10/25/22 14:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Sulfate	**1.8**	mg/L	1.0	0.55	1		10/31/22 18:32	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		11/02/22 15:09		M1
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**2.1**	mg/L	1.0	0.30	1		11/02/22 11:07	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

Sample: RW-69-202210 **Lab ID: 60413695003** Collected: 10/19/22 16:50 Received: 10/20/22 18:19 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Bubblestrip H2	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Hydrogen	**1.0J**	nM	1.9	0.49	1		10/27/22 07:11	1333-74-0	
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**52**	ug/L	5.0	2.0	1		10/28/22 07:38	74-82-8	
Ethane	ND	ug/L	1.0	0.17	1		10/28/22 07:38	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/28/22 07:38	74-85-1	
Acetylene	ND	ug/L	0.50	0.13	1		10/28/22 07:38	74-86-2	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**2350**	ug/L	50.0	7.4	1	10/24/22 14:56	11/01/22 11:49	7439-89-6	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.021	1		10/25/22 14:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Sulfate	**1.4**	mg/L	1.0	0.55	1		10/31/22 18:47	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		11/02/22 15:11		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.30	1		11/02/22 11:21	7440-44-0	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

QC Batch: 752793
QC Batch Method: AM20GAX
Analysis Method: AM20GAX
Analysis Description: Indicator Gases Bubble Strip H2
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413695001, 60413695002, 60413695003

METHOD BLANK: 2413829 Matrix: Air
Associated Lab Samples: 60413695001, 60413695002, 60413695003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Hydrogen	nM	ND	1.9	0.49	10/27/22 06:33	

LABORATORY CONTROL SAMPLE & LCSD: 2413830 2413831

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Hydrogen	nM	12	13	12	107	101	70-130	6	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

QC Batch: 752797
QC Batch Method: AM20GAX
Analysis Method: AM20GAX
Analysis Description: Indicator Gases Water LHC
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413695001, 60413695002, 60413695003

METHOD BLANK: 2413841 Matrix: Water
Associated Lab Samples: 60413695001, 60413695002, 60413695003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Methane	ug/L	ND	5.0	2.0	10/28/22 06:44	
Ethane	ug/L	ND	1.0	0.17	10/28/22 06:44	
Ethene	ug/L	ND	1.0	0.24	10/28/22 06:44	
Acetylene	ug/L	ND	0.50	0.13	10/28/22 06:44	

LABORATORY CONTROL SAMPLE & LCSD: 2413842 2413843

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	750	560	840	75	113	70-130	41	20	R1
Ethane	ug/L	38	49	45	130	120	70-130	8	20	
Ethene	ug/L	35	46	43	130	121	70-130	8	20	
Acetylene	ug/L	33	34	26	105	80	70-130	27	20	R1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

QC Batch: 814323
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413695001, 60413695002, 60413695003

METHOD BLANK: 3238614 Matrix: Water
Associated Lab Samples: 60413695001, 60413695002, 60413695003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	8.7J	50.0	7.4	11/01/22 10:50	

LABORATORY CONTROL SAMPLE: 3238615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9580	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3238617 3238657

Parameter	Units	60413474001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	3610	10000	10000	12800	12800	92	92	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

QC Batch: 814529
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: 60413695001, 60413695002, 60413695003

METHOD BLANK: 3239384 Matrix: Water
Associated Lab Samples: 60413695001, 60413695002, 60413695003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	0.021	10/25/22 14:20	

LABORATORY CONTROL SAMPLE: 3239385

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.55	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3239386 3239387

Parameter	Units	60413574002 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	0.66	0.66	131	131	75-125	0	20	M1

SAMPLE DUPLICATE: 3239388

Parameter	Units	60413574002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

SAMPLE DUPLICATE: 3239389

Parameter	Units	60413578002 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.: 60413695

QC Batch: 815090
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: 60413695001, 60413695002, 60413695003

METHOD BLANK: 3241636 Matrix: Water
Associated Lab Samples: 60413695001, 60413695002, 60413695003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	0.55	10/28/22 08:39	

METHOD BLANK: 3244818 Matrix: Water
Associated Lab Samples: 60413695001, 60413695002, 60413695003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	0.55	10/31/22 08:41	

LABORATORY CONTROL SAMPLE: 3241637

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

LABORATORY CONTROL SAMPLE: 3244819

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	5.2	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3241638 3241639

Parameter	Units	60413603005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	146	100	100	226	230	80	84	80-120	2	15	

MATRIX SPIKE SAMPLE: 3241640

Parameter	Units	60413692004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	11.4	50	59.7	97	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

QC Batch: 816137
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60413695001

METHOD BLANK: 3245876 Matrix: Water
Associated Lab Samples: 60413695001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.078	11/02/22 14:32	

LABORATORY CONTROL SAMPLE: 3245877

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.1	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3245880 3245879

Parameter	Units	60413574002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	ND	2	2	1.9	1.8	93	92	90-110	1	20	

MATRIX SPIKE SAMPLE: 3245882

Parameter	Units	60413900001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.2	2	4.0	93	90-110	

SAMPLE DUPLICATE: 3245878

Parameter	Units	60413574002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	ND		20	

SAMPLE DUPLICATE: 3245881

Parameter	Units	60413659002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	ND		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

QC Batch: 816177
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413695002, 60413695003

METHOD BLANK: 3246136 Matrix: Water
Associated Lab Samples: 60413695002, 60413695003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.078	11/02/22 15:07	

LABORATORY CONTROL SAMPLE: 3246137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 3246138

Parameter	Units	60413695002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	2	1.6	82	90-110	M1

MATRIX SPIKE SAMPLE: 3246140

Parameter	Units	60413979003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	2	1.5	74	90-110	M1

SAMPLE DUPLICATE: 3246139

Parameter	Units	60413543003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4.3	4.3	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

QC Batch: 816057
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413695001, 60413695002, 60413695003

METHOD BLANK: 3245548 Matrix: Water
Associated Lab Samples: 60413695001, 60413695002, 60413695003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.30	11/02/22 09:56	

LABORATORY CONTROL SAMPLE: 3245549

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

MATRIX SPIKE SAMPLE: 3245550

Parameter	Units	60413695001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	1.8	5	6.9	102	80-120	

SAMPLE DUPLICATE: 3245551

Parameter	Units	60413695003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND		25	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

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

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413695

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60413695001	**TMW-10-202210**	AM20GAX	752793		
60413695002	**TMW-11-202210**	AM20GAX	752793		
60413695003	**RW-69-202210**	AM20GAX	752793		
60413695001	**TMW-10-202210**	AM20GAX	752797		
60413695002	**TMW-11-202210**	AM20GAX	752797		
60413695003	**RW-69-202210**	AM20GAX	752797		
60413695001	**TMW-10-202210**	EPA 3010	814323	EPA 6010	814397
60413695002	**TMW-11-202210**	EPA 3010	814323	EPA 6010	814397
60413695003	**RW-69-202210**	EPA 3010	814323	EPA 6010	814397
60413695001	**TMW-10-202210**	SM 4500-S-2 D	814529		
60413695002	**TMW-11-202210**	SM 4500-S-2 D	814529		
60413695003	**RW-69-202210**	SM 4500-S-2 D	814529		
60413695001	**TMW-10-202210**	EPA 300.0	815090		
60413695002	**TMW-11-202210**	EPA 300.0	815090		
60413695003	**RW-69-202210**	EPA 300.0	815090		
60413695001	**TMW-10-202210**	EPA 353.2	816137		
60413695002	**TMW-11-202210**	EPA 353.2	816177		
60413695003	**RW-69-202210**	EPA 353.2	816177		
60413695001	**TMW-10-202210**	SM 5310C	816057		
60413695002	**TMW-11-202210**	SM 5310C	816057		
60413695003	**RW-69-202210**	SM 5310C	816057		

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sampl	WO# : 60413695
	Revision: 2	Effective Date: 01/12/202

60413695

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: T-299 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 1.5 1.7 **Corr. Factor** 0 **Corrected** 1.5 1.7

Date and initials of person examining contents: BE 10124

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	
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#:** 610600l 610509	☒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: _____

Qualtrax Document ID: 30468

Page 1 of 1

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 1

Section A — **Required** Client Information:

Company:	Ramboll
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B — **Required** Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
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 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	6010 Iron	Sulfate	Sulfide	Nitrate+Nitrite	TOC	Methane/Ethane/Ethene+Acetylene	Dissolved Hydrogen	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TMW-10-202210	WT	G			10/19/22	1120		6	X	X	X		X			X		X	X	X	X	X	X	X	X	
2	TMW-11-202210	WT	G			10/19/22	1358		6	X	X	X		X			X		X	X	X	X	X	X	X	X	
3	RW-69-202210	WT	G			10/19/22	1650		6	X	X	X		X			X		X	X	X	X	X	X	X	X	
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

GP

Requested Analysis Filtered (Y/N)

60413695

Pace Project No./ Lab I.D.

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
M/E/E+A and Dissolved Hydrogen to Pace Gulf Coast	Ramboll	10-19-22	1800	Pace	10/20	1819	1.5 to 7 Y / N / Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Eckner

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-19-22

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.

Client: Ramboll

Profile # 7444 Line 1

Site: Whirlpool Fort Smith

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	1								1								1		1				1					
2	WT			3	1								1								1		1				1					
3	WT			3	1								1								1		1				1					
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: 60413695

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

November 03, 2022

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2022. 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 - 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.

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 22-031-0
Illinois Certification #: 2000302021-3
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 #: T104704407-21-15
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60413699001	MW-40R-202210	Water	10/19/22 09:39	10/20/22 18:19
60413699002	TMW-14-202210	Water	10/19/22 09:43	10/20/22 18:19
60413699003	MW-182-202210	Water	10/19/22 10:05	10/20/22 18:19
60413699004	DUP-02-202210	Water	10/19/22 10:05	10/20/22 18:19
60413699005	ITMW-21-202210	Water	10/19/22 10:05	10/20/22 18:19
60413699006	TMW-25-202210	Water	10/19/22 11:34	10/20/22 18:19
60413699007	TMW-30-202210	Water	10/19/22 12:15	10/20/22 18:19
60413699008	DUP-01-202210	Water	10/19/22 12:15	10/20/22 18:19
60413699009	MW-61R-202210	Water	10/19/22 11:37	10/20/22 18:19
60413699010	MW-84-202210	Water	10/19/22 10:25	10/20/22 18:19
60413699011	MW-192-202210	Water	10/19/22 11:55	10/20/22 18:19
60413699012	TMW-10-202210	Water	10/19/22 11:20	10/20/22 18:19
60413699013	MW-194-202210	Water	10/19/22 13:27	10/20/22 18:19
60413699014	MW-188-202210	Water	10/19/22 13:40	10/20/22 18:19
60413699015	MW-187-202210	Water	10/19/22 14:55	10/20/22 18:19
60413699016	MW-83-202210	Water	10/19/22 13:57	10/20/22 18:19
60413699017	MW-190-202210	Water	10/19/22 15:01	10/20/22 18:19
60413699018	MW-63R-202210	Water	10/19/22 14:47	10/20/22 18:19
60413699019	TMW-11-202210	Water	10/19/22 13:58	10/20/22 18:19
60413699020	EB-03-202210	Water	10/19/22 16:15	10/20/22 18:19
60413699021	MW-82-202210	Water	10/19/22 15:52	10/20/22 18:19
60413699022	TB-03-202210	Water	10/19/22 16:30	10/20/22 18:19
60413699023	MW-203-202210	Water	10/19/22 09:45	10/20/22 18:19
60413699024	ITMW-7-202210	Water	10/19/22 11:25	10/20/22 18:19
60413699025	MW-55R-202210	Water	10/19/22 13:35	10/20/22 18:19
60413699026	ITMW-1R-202210	Water	10/19/22 15:35	10/20/22 18:19
60413699027	MW-99-202210	Water	10/19/22 16:20	10/20/22 18:19
60413699028	RW-69-202210	Water	10/19/22 16:50	10/20/22 18:19
60413699029	DUP-05-202210	Water	10/19/22 10:05	10/20/22 18:19
60413699030	MW-205-202210	Water	10/19/22 16:50	10/20/22 18:19
60413699031	MW-201-202210	Water	10/19/22 16:52	10/20/22 18:19

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60413699001	MW-40R-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699002	TMW-14-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699003	MW-182-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699004	DUP-02-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699005	ITMW-21-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699006	TMW-25-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699007	TMW-30-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699008	DUP-01-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699009	MW-61R-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699010	MW-84-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699011	MW-192-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699012	TMW-10-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699013	MW-194-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699014	MW-188-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699015	MW-187-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699016	MW-83-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699017	MW-190-202210	EPA 5030B/8260	CSC, PGH	38	PASI-K
60413699018	MW-63R-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699019	TMW-11-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699020	EB-03-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699021	MW-82-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699022	TB-03-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699023	MW-203-202210	EPA 5030B/8260	CSC, PGH	38	PASI-K
60413699024	ITMW-7-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699025	MW-55R-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699026	ITMW-1R-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699027	MW-99-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699028	RW-69-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699029	DUP-05-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699030	MW-205-202210	EPA 5030B/8260	PGH	38	PASI-K
60413699031	MW-201-202210	EPA 5030B/8260	PGH	38	PASI-K

PASI-K = Pace Analytical Services - Kansas City

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: November 03, 2022

General Information:
31 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: 814494

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413494041

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

- MS (Lab ID: 3239176)
  - Bromomethane
- MSD (Lab ID: 3239177)
  - Dibromochloromethane
  - Methylene Chloride

QC Batch: 814510

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413699015

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

- MS (Lab ID: 3239251)
  - Trichloroethene
- MSD (Lab ID: 3239252)

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: November 03, 2022

QC Batch: 814510

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413699015

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

- Dibromochloromethane
- Methylene Chloride
- Styrene
- Trichloroethene

QC Batch: 815883

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

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-40R-202210 **Lab ID: 60413699001** Collected: 10/19/22 09:39 Received: 10/20/22 18:19 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		10/25/22 16:47	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 16:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 16:47	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 16:47	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 16:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 16:47	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 16:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 16:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 16:47	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 16:47	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 16:47	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 16:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 16:47	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 16:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 16:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 16:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 16:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 16:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 16:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 16:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 16:47	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 16:47	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 16:47	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 16:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 16:47	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 16:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 16:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 16:47	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 16:47	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 16:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 16:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 16:47	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 16:47	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 16:47	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		10/25/22 16:47	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		10/25/22 16:47	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 16:47	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 16:47		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: TMW-14-202210 **Lab ID: 60413699002** Collected: 10/19/22 09:43 Received: 10/20/22 18:19 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		10/25/22 17:14	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 17:14	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 17:14	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 17:14	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 17:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 17:14	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 17:14	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 17:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 17:14	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 17:14	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 17:14	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 17:14	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 17:14	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 17:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 17:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 17:14	75-35-4	
cis-1,2-Dichloroethene	**7.2**	ug/L	1.0	0.13	1		10/25/22 17:14	156-59-2	
trans-1,2-Dichloroethene	**0.11J**	ug/L	1.0	0.10	1		10/25/22 17:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 17:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 17:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 17:14	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 17:14	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 17:14	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 17:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 17:14	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 17:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 17:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 17:14	127-18-4	
Toluene	**0.89J**	ug/L	1.0	0.25	1		10/25/22 17:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 17:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 17:14	79-00-5	
Trichloroethene	**6.1**	ug/L	1.0	0.21	1		10/25/22 17:14	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 17:14	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 17:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/25/22 17:14	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/25/22 17:14	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		10/25/22 17:14	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 17:14		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-182-202210 **Lab ID: 60413699003** Collected: 10/19/22 10:05 Received: 10/20/22 18:19 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		10/25/22 17:41	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 17:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 17:41	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 17:41	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 17:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 17:41	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 17:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 17:41	56-23-5	
Chlorobenzene	**4.9**	ug/L	1.0	0.089	1		10/25/22 17:41	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 17:41	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 17:41	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 17:41	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 17:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 17:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 17:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 17:41	75-35-4	
cis-1,2-Dichloroethene	**0.87J**	ug/L	1.0	0.13	1		10/25/22 17:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 17:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 17:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 17:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 17:41	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 17:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 17:41	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 17:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 17:41	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 17:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 17:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 17:41	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 17:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 17:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 17:41	79-00-5	
Trichloroethene	**16.3**	ug/L	1.0	0.21	1		10/25/22 17:41	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 17:41	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 17:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/25/22 17:41	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 17:41	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/25/22 17:41	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 17:41		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: DUP-02-202210 **Lab ID: 60413699004** Collected: 10/19/22 10:05 Received: 10/20/22 18:19 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		10/25/22 17:27	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 17:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 17:27	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 17:27	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 17:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 17:27	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 17:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 17:27	56-23-5	
Chlorobenzene	**5.0**	ug/L	1.0	0.089	1		10/25/22 17:27	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 17:27	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 17:27	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 17:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 17:27	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 17:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 17:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 17:27	75-35-4	
cis-1,2-Dichloroethene	**0.79J**	ug/L	1.0	0.13	1		10/25/22 17:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 17:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 17:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 17:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 17:27	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 17:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 17:27	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 17:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 17:27	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 17:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 17:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 17:27	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 17:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 17:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 17:27	79-00-5	
Trichloroethene	**16.7**	ug/L	1.0	0.21	1		10/25/22 17:27	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 17:27	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 17:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/25/22 17:27	460-00-4	
Toluene-d8 (S)	96	%	80-120		1		10/25/22 17:27	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		1		10/25/22 17:27	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 17:27		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: ITMW-21-202210 **Lab ID: 60413699005** Collected: 10/19/22 10:05 Received: 10/20/22 18:19 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		10/25/22 17:01	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 17:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 17:01	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 17:01	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 17:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 17:01	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 17:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 17:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 17:01	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 17:01	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 17:01	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 17:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 17:01	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 17:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 17:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 17:01	75-35-4	
cis-1,2-Dichloroethene	**0.29J**	ug/L	1.0	0.13	1		10/25/22 17:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 17:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 17:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 17:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 17:01	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 17:01	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 17:01	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 17:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 17:01	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 17:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 17:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 17:01	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 17:01	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 17:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 17:01	79-00-5	
Trichloroethene	**6.4**	ug/L	1.0	0.21	1		10/25/22 17:01	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 17:01	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 17:01	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/25/22 17:01	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 17:01	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/25/22 17:01	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 17:01		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: TMW-25-202210 **Lab ID: 60413699006** Collected: 10/19/22 11:34 Received: 10/20/22 18:19 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		10/25/22 23:05	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 23:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 23:05	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 23:05	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 23:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 23:05	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 23:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 23:05	56-23-5	
Chlorobenzene	**2.2**	ug/L	1.0	0.089	1		10/25/22 23:05	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 23:05	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 23:05	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 23:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 23:05	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 23:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 23:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 23:05	75-35-4	
cis-1,2-Dichloroethene	**0.81J**	ug/L	1.0	0.13	1		10/25/22 23:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 23:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 23:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 23:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 23:05	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 23:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 23:05	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 23:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 23:05	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 23:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 23:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 23:05	127-18-4	
Toluene	**0.27J**	ug/L	1.0	0.25	1		10/25/22 23:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 23:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 23:05	79-00-5	
Trichloroethene	**2.4**	ug/L	1.0	0.21	1		10/25/22 23:05	79-01-6	
Vinyl chloride	**0.60J**	ug/L	1.0	0.17	1		10/25/22 23:05	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 23:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/25/22 23:05	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/25/22 23:05	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 23:05	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 23:05		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: TMW-30-202210 **Lab ID: 60413699007** Collected: 10/19/22 12:15 Received: 10/20/22 18:19 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	200	50.8	20		10/25/22 23:19	67-64-1	
Benzene	ND	ug/L	20.0	2.7	20		10/25/22 23:19	71-43-2	
Bromodichloromethane	ND	ug/L	20.0	3.1	20		10/25/22 23:19	75-27-4	
Bromoform	ND	ug/L	20.0	13.5	20		10/25/22 23:19	75-25-2	
Bromomethane	ND	ug/L	100	9.2	20		10/25/22 23:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	200	19.5	20		10/25/22 23:19	78-93-3	
Carbon disulfide	ND	ug/L	100	19.6	20		10/25/22 23:19	75-15-0	
Carbon tetrachloride	ND	ug/L	20.0	3.4	20		10/25/22 23:19	56-23-5	
Chlorobenzene	ND	ug/L	20.0	1.8	20		10/25/22 23:19	108-90-7	
Chloroethane	ND	ug/L	20.0	7.5	20		10/25/22 23:19	75-00-3	
Chloroform	ND	ug/L	20.0	4.4	20		10/25/22 23:19	67-66-3	
Chloromethane	ND	ug/L	20.0	5.7	20		10/25/22 23:19	74-87-3	
Dibromochloromethane	ND	ug/L	20.0	6.1	20		10/25/22 23:19	124-48-1	
1,1-Dichloroethane	ND	ug/L	20.0	2.4	20		10/25/22 23:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	20.0	4.2	20		10/25/22 23:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	20.0	4.4	20		10/25/22 23:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	20.0	2.6	20		10/25/22 23:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	20.0	2.0	20		10/25/22 23:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	20.0	2.8	20		10/25/22 23:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	20.0	1.6	20		10/25/22 23:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	20.0	3.6	20		10/25/22 23:19	10061-02-6	
Ethylbenzene	ND	ug/L	20.0	2.4	20		10/25/22 23:19	100-41-4	
2-Hexanone	ND	ug/L	200	22.0	20		10/25/22 23:19	591-78-6	
Methylene Chloride	ND	ug/L	20.0	7.8	20		10/25/22 23:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	200	14.7	20		10/25/22 23:19	108-10-1	
Styrene	ND	ug/L	20.0	2.5	20		10/25/22 23:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	20.0	3.1	20		10/25/22 23:19	79-34-5	
Tetrachloroethene	ND	ug/L	20.0	6.6	20		10/25/22 23:19	127-18-4	
Toluene	ND	ug/L	20.0	5.1	20		10/25/22 23:19	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	20.0	2.2	20		10/25/22 23:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	20.0	2.8	20		10/25/22 23:19	79-00-5	
Trichloroethene	**7.2J**	ug/L	20.0	4.2	20		10/25/22 23:19	79-01-6	
Vinyl chloride	ND	ug/L	20.0	3.3	20		10/25/22 23:19	75-01-4	
Xylene (Total)	ND	ug/L	60.0	5.6	20		10/25/22 23:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		20		10/25/22 23:19	460-00-4	F1
Toluene-d8 (S)	96	%	80-120		20		10/25/22 23:19	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		20		10/25/22 23:19	2199-69-1	
Preservation pH	**1.0**		0.10		20		10/25/22 23:19		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: DUP-01-202210 **Lab ID: 60413699008** Collected: 10/19/22 12:15 Received: 10/20/22 18:19 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	200	50.8	20		10/25/22 23:32	67-64-1	
Benzene	ND	ug/L	20.0	2.7	20		10/25/22 23:32	71-43-2	
Bromodichloromethane	ND	ug/L	20.0	3.1	20		10/25/22 23:32	75-27-4	
Bromoform	ND	ug/L	20.0	13.5	20		10/25/22 23:32	75-25-2	
Bromomethane	ND	ug/L	100	9.2	20		10/25/22 23:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	200	19.5	20		10/25/22 23:32	78-93-3	
Carbon disulfide	ND	ug/L	100	19.6	20		10/25/22 23:32	75-15-0	
Carbon tetrachloride	ND	ug/L	20.0	3.4	20		10/25/22 23:32	56-23-5	
Chlorobenzene	ND	ug/L	20.0	1.8	20		10/25/22 23:32	108-90-7	
Chloroethane	ND	ug/L	20.0	7.5	20		10/25/22 23:32	75-00-3	
Chloroform	ND	ug/L	20.0	4.4	20		10/25/22 23:32	67-66-3	
Chloromethane	ND	ug/L	20.0	5.7	20		10/25/22 23:32	74-87-3	
Dibromochloromethane	ND	ug/L	20.0	6.1	20		10/25/22 23:32	124-48-1	
1,1-Dichloroethane	ND	ug/L	20.0	2.4	20		10/25/22 23:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	20.0	4.2	20		10/25/22 23:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	20.0	4.4	20		10/25/22 23:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	20.0	2.6	20		10/25/22 23:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	20.0	2.0	20		10/25/22 23:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	20.0	2.8	20		10/25/22 23:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	20.0	1.6	20		10/25/22 23:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	20.0	3.6	20		10/25/22 23:32	10061-02-6	
Ethylbenzene	ND	ug/L	20.0	2.4	20		10/25/22 23:32	100-41-4	
2-Hexanone	ND	ug/L	200	22.0	20		10/25/22 23:32	591-78-6	
Methylene Chloride	ND	ug/L	20.0	7.8	20		10/25/22 23:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	200	14.7	20		10/25/22 23:32	108-10-1	
Styrene	ND	ug/L	20.0	2.5	20		10/25/22 23:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	20.0	3.1	20		10/25/22 23:32	79-34-5	
Tetrachloroethene	ND	ug/L	20.0	6.6	20		10/25/22 23:32	127-18-4	
Toluene	ND	ug/L	20.0	5.1	20		10/25/22 23:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	20.0	2.2	20		10/25/22 23:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	20.0	2.8	20		10/25/22 23:32	79-00-5	
Trichloroethene	**8.8J**	ug/L	20.0	4.2	20		10/25/22 23:32	79-01-6	
Vinyl chloride	ND	ug/L	20.0	3.3	20		10/25/22 23:32	75-01-4	
Xylene (Total)	ND	ug/L	60.0	5.6	20		10/25/22 23:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		20		10/25/22 23:32	460-00-4	F1
Toluene-d8 (S)	99	%	80-120		20		10/25/22 23:32	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		20		10/25/22 23:32	2199-69-1	
Preservation pH	**1.0**		0.10		20		10/25/22 23:32		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-61R-202210 **Lab ID: 60413699009** Collected: 10/19/22 11:37 Received: 10/20/22 18:19 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		10/25/22 20:10	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 20:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 20:10	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 20:10	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 20:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 20:10	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 20:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 20:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 20:10	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 20:10	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 20:10	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 20:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 20:10	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 20:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 20:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 20:10	75-35-4	
cis-1,2-Dichloroethene	**2.0**	ug/L	1.0	0.13	1		10/25/22 20:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 20:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 20:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 20:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 20:10	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 20:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 20:10	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 20:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 20:10	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 20:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 20:10	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 20:10	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 20:10	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 20:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 20:10	79-00-5	
Trichloroethene	**2.8**	ug/L	1.0	0.21	1		10/25/22 20:10	79-01-6	
Vinyl chloride	**1.4**	ug/L	1.0	0.17	1		10/25/22 20:10	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 20:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		10/25/22 20:10	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/25/22 20:10	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/25/22 20:10	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 20:10		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-84-202210 **Lab ID: 60413699010** Collected: 10/19/22 10:25 Received: 10/20/22 18:19 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	**3.2J**	ug/L	10.0	2.5	1		10/25/22 20:23	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 20:23	71-43-2	
Bromodichloromethane	**0.50J**	ug/L	1.0	0.16	1		10/25/22 20:23	75-27-4	
Bromoform	**3.6**	ug/L	1.0	0.68	1		10/25/22 20:23	75-25-2	
Bromomethane	**0.81J**	ug/L	5.0	0.46	1		10/25/22 20:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 20:23	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 20:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 20:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 20:23	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 20:23	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 20:23	67-66-3	
Chloromethane	**1.8**	ug/L	1.0	0.28	1		10/25/22 20:23	74-87-3	
Dibromochloromethane	**0.68J**	ug/L	1.0	0.30	1		10/25/22 20:23	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 20:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 20:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 20:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 20:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 20:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 20:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 20:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 20:23	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 20:23	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 20:23	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 20:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 20:23	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 20:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 20:23	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 20:23	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 20:23	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 20:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 20:23	79-00-5	
Trichloroethene	**2.2**	ug/L	1.0	0.21	1		10/25/22 20:23	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 20:23	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 20:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/25/22 20:23	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 20:23	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 20:23	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 20:23		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-192-202210 **Lab ID: 60413699011** Collected: 10/19/22 11:55 Received: 10/20/22 18:19 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		10/25/22 20:37	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 20:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 20:37	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 20:37	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 20:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 20:37	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 20:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 20:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 20:37	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 20:37	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 20:37	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 20:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 20:37	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 20:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 20:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 20:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 20:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 20:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 20:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 20:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 20:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 20:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 20:37	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 20:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 20:37	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 20:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 20:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 20:37	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 20:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 20:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 20:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 20:37	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 20:37	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 20:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/25/22 20:37	460-00-4	
Toluene-d8 (S)	96	%	80-120		1		10/25/22 20:37	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/25/22 20:37	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 20:37		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: TMW-10-202210 **Lab ID: 60413699012** Collected: 10/19/22 11:20 Received: 10/20/22 18:19 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		10/25/22 22:52	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 22:52	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 22:52	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 22:52	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 22:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 22:52	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 22:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 22:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 22:52	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 22:52	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 22:52	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 22:52	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 22:52	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 22:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 22:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 22:52	75-35-4	
cis-1,2-Dichloroethene	**0.71J**	ug/L	1.0	0.13	1		10/25/22 22:52	156-59-2	
trans-1,2-Dichloroethene	**0.20J**	ug/L	1.0	0.10	1		10/25/22 22:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 22:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 22:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 22:52	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 22:52	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 22:52	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 22:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 22:52	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 22:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 22:52	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 22:52	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 22:52	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 22:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 22:52	79-00-5	
Trichloroethene	**2.1**	ug/L	1.0	0.21	1		10/25/22 22:52	79-01-6	
Vinyl chloride	**3.8**	ug/L	1.0	0.17	1		10/25/22 22:52	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 22:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/25/22 22:52	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/25/22 22:52	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/25/22 22:52	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 22:52		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-194-202210 **Lab ID: 60413699013** Collected: 10/19/22 13:27 Received: 10/20/22 18:19 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		10/25/22 20:50	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 20:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 20:50	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 20:50	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 20:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 20:50	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 20:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 20:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 20:50	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 20:50	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 20:50	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 20:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 20:50	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 20:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 20:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 20:50	75-35-4	
cis-1,2-Dichloroethene	**1.8**	ug/L	1.0	0.13	1		10/25/22 20:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 20:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 20:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 20:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 20:50	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 20:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 20:50	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 20:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 20:50	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 20:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 20:50	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 20:50	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 20:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 20:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 20:50	79-00-5	
Trichloroethene	**3.8**	ug/L	1.0	0.21	1		10/25/22 20:50	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 20:50	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 20:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/25/22 20:50	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/25/22 20:50	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 20:50	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 20:50		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-188-202210 **Lab ID: 60413699014** Collected: 10/19/22 13:40 Received: 10/20/22 18:19 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		10/25/22 21:04	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 21:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 21:04	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 21:04	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 21:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 21:04	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 21:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 21:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 21:04	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 21:04	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 21:04	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 21:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 21:04	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 21:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 21:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 21:04	75-35-4	
cis-1,2-Dichloroethene	**0.94J**	ug/L	1.0	0.13	1		10/25/22 21:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 21:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 21:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 21:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 21:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 21:04	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 21:04	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 21:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 21:04	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 21:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 21:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 21:04	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 21:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 21:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 21:04	79-00-5	
Trichloroethene	**11.2**	ug/L	1.0	0.21	1		10/25/22 21:04	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 21:04	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 21:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/25/22 21:04	460-00-4	
Toluene-d8 (S)	97	%	80-120		1		10/25/22 21:04	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	96	%	80-120		1		10/25/22 21:04	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 21:04		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-187-202210 **Lab ID: 60413699015** Collected: 10/19/22 14:55 Received: 10/20/22 18:19 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		10/25/22 22:38	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 22:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 22:38	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 22:38	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 22:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 22:38	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 22:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 22:38	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 22:38	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 22:38	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 22:38	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 22:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 22:38	124-48-1	M1
1,1-Dichloroethane	**0.72J**	ug/L	1.0	0.12	1		10/25/22 22:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 22:38	107-06-2	
1,1-Dichloroethene	**0.48J**	ug/L	1.0	0.22	1		10/25/22 22:38	75-35-4	
cis-1,2-Dichloroethene	**3.2**	ug/L	1.0	0.13	1		10/25/22 22:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 22:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 22:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 22:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 22:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 22:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 22:38	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 22:38	75-09-2	M1
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 22:38	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 22:38	100-42-5	M1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 22:38	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 22:38	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 22:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 22:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 22:38	79-00-5	
Trichloroethene	**74.2**	ug/L	1.0	0.21	1		10/25/22 22:38	79-01-6	M1
Vinyl chloride	**0.17J**	ug/L	1.0	0.17	1		10/25/22 22:38	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 22:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	80-120		1		10/25/22 22:38	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/25/22 22:38	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/25/22 22:38	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 22:38		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-83-202210 **Lab ID: 60413699016** Collected: 10/19/22 13:57 Received: 10/20/22 18:19 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		10/25/22 21:17	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 21:17	71-43-2	
Bromodichloromethane	**0.62J**	ug/L	1.0	0.16	1		10/25/22 21:17	75-27-4	
Bromoform	**3.0**	ug/L	1.0	0.68	1		10/25/22 21:17	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 21:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 21:17	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 21:17	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 21:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 21:17	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 21:17	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 21:17	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 21:17	74-87-3	
Dibromochloromethane	**0.65J**	ug/L	1.0	0.30	1		10/25/22 21:17	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 21:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 21:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 21:17	75-35-4	
cis-1,2-Dichloroethene	**0.54J**	ug/L	1.0	0.13	1		10/25/22 21:17	156-59-2	
trans-1,2-Dichloroethene	**0.11J**	ug/L	1.0	0.10	1		10/25/22 21:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 21:17	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 21:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 21:17	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 21:17	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 21:17	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 21:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 21:17	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 21:17	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 21:17	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 21:17	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 21:17	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 21:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 21:17	79-00-5	
Trichloroethene	**28.1**	ug/L	1.0	0.21	1		10/25/22 21:17	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 21:17	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 21:17	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/25/22 21:17	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/25/22 21:17	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		10/25/22 21:17	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 21:17		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-190-202210 **Lab ID: 60413699017** Collected: 10/19/22 15:01 Received: 10/20/22 18:19 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		10/25/22 21:31	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 21:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 21:31	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 21:31	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 21:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 21:31	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 21:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 21:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 21:31	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 21:31	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 21:31	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 21:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 21:31	124-48-1	
1,1-Dichloroethane	**0.33J**	ug/L	1.0	0.12	1		10/25/22 21:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 21:31	107-06-2	
1,1-Dichloroethene	**0.86J**	ug/L	1.0	0.22	1		10/25/22 21:31	75-35-4	
cis-1,2-Dichloroethene	**4.7**	ug/L	1.0	0.13	1		10/25/22 21:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 21:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 21:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 21:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 21:31	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 21:31	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 21:31	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 21:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 21:31	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 21:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 21:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 21:31	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 21:31	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 21:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 21:31	79-00-5	
Trichloroethene	**319**	ug/L	10.0	2.1	10		11/02/22 20:50	79-01-6	
Vinyl chloride	**0.28J**	ug/L	1.0	0.17	1		10/25/22 21:31	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 21:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/25/22 21:31	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/25/22 21:31	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	106	%	80-120		1		10/25/22 21:31	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 21:31		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-63R-202210 **Lab ID: 60413699018** Collected: 10/19/22 14:47 Received: 10/20/22 18:19 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		10/25/22 21:44	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 21:44	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 21:44	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 21:44	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 21:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 21:44	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 21:44	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 21:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 21:44	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 21:44	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 21:44	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 21:44	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 21:44	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 21:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 21:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 21:44	75-35-4	
cis-1,2-Dichloroethene	**0.82J**	ug/L	1.0	0.13	1		10/25/22 21:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 21:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 21:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 21:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 21:44	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 21:44	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 21:44	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 21:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 21:44	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 21:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 21:44	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 21:44	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 21:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 21:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 21:44	79-00-5	
Trichloroethene	**5.8**	ug/L	1.0	0.21	1		10/25/22 21:44	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 21:44	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 21:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/25/22 21:44	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/25/22 21:44	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/22 21:44	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 21:44		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: TMW-11-202210 **Lab ID: 60413699019** Collected: 10/19/22 13:58 Received: 10/20/22 18:19 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		10/25/22 21:58	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 21:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 21:58	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 21:58	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 21:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 21:58	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 21:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 21:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 21:58	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 21:58	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 21:58	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 21:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 21:58	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 21:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 21:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 21:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 21:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 21:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 21:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 21:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 21:58	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 21:58	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 21:58	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 21:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 21:58	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 21:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 21:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 21:58	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 21:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 21:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 21:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 21:58	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 21:58	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 21:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		10/25/22 21:58	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/25/22 21:58	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/25/22 21:58	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 21:58		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: EB-03-202210 **Lab ID: 60413699020** Collected: 10/19/22 16:15 Received: 10/20/22 18:19 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		10/25/22 19:56	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 19:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 19:56	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 19:56	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 19:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 19:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 19:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 19:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 19:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 19:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 19:56	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 19:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 19:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 19:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 19:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 19:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 19:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 19:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 19:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 19:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 19:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 19:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 19:56	591-78-6	
Methylene Chloride	**1.6**	ug/L	1.0	0.39	1		10/25/22 19:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 19:56	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 19:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 19:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 19:56	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 19:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 19:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 19:56	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 19:56	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 19:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 19:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	91	%	80-120		1		10/25/22 19:56	460-00-4	
Toluene-d8 (S)	96	%	80-120		1		10/25/22 19:56	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		10/25/22 19:56	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 19:56		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-82-202210 **Lab ID: 60413699021** Collected: 10/19/22 15:52 Received: 10/20/22 18:19 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		10/25/22 22:11	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 22:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 22:11	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 22:11	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 22:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 22:11	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 22:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 22:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 22:11	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 22:11	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 22:11	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 22:11	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 22:11	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 22:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 22:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 22:11	75-35-4	
cis-1,2-Dichloroethene	**0.62J**	ug/L	1.0	0.13	1		10/25/22 22:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 22:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 22:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 22:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 22:11	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 22:11	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 22:11	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 22:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 22:11	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 22:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 22:11	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 22:11	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 22:11	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 22:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 22:11	79-00-5	
Trichloroethene	**34.7**	ug/L	1.0	0.21	1		10/25/22 22:11	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 22:11	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 22:11	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/25/22 22:11	460-00-4	
Toluene-d8 (S)	97	%	80-120		1		10/25/22 22:11	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		10/25/22 22:11	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 22:11		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: TB-03-202210 **Lab ID: 60413699022** Collected: 10/19/22 16:30 Received: 10/20/22 18:19 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		10/25/22 19:42	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 19:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 19:42	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 19:42	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 19:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 19:42	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 19:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 19:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 19:42	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 19:42	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 19:42	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 19:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 19:42	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/22 19:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 19:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/22 19:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/22 19:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 19:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 19:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 19:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 19:42	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 19:42	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 19:42	591-78-6	
Methylene Chloride	**1.4**	ug/L	1.0	0.39	1		10/25/22 19:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 19:42	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 19:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 19:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 19:42	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 19:42	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 19:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 19:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/22 19:42	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 19:42	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 19:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/25/22 19:42	460-00-4	
Toluene-d8 (S)	94	%	80-120		1		10/25/22 19:42	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		1		10/25/22 19:42	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 19:42		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-203-202210 **Lab ID: 60413699023** Collected: 10/19/22 09:45 Received: 10/20/22 18:19 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		10/25/22 22:25	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/22 22:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/22 22:25	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/22 22:25	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/22 22:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/22 22:25	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/22 22:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/22 22:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/22 22:25	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/22 22:25	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/22 22:25	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/22 22:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/22 22:25	124-48-1	
1,1-Dichloroethane	**0.42J**	ug/L	1.0	0.12	1		10/25/22 22:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/22 22:25	107-06-2	
1,1-Dichloroethene	**0.65J**	ug/L	1.0	0.22	1		10/25/22 22:25	75-35-4	
cis-1,2-Dichloroethene	**5.7**	ug/L	1.0	0.13	1		10/25/22 22:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/22 22:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/22 22:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/22 22:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/22 22:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/22 22:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/22 22:25	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/22 22:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/22 22:25	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/22 22:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/22 22:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/22 22:25	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/22 22:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/22 22:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/22 22:25	79-00-5	
Trichloroethene	**228**	ug/L	10.0	2.1	10		11/02/22 21:04	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/22 22:25	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/22 22:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/25/22 22:25	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/22 22:25	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/25/22 22:25	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/22 22:25		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: ITMW-7-202210 **Lab ID: 60413699024** Collected: 10/19/22 11:25 Received: 10/20/22 18:19 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		11/01/22 12:23	67-64-1	
Benzene	**0.14J**	ug/L	1.0	0.14	1		11/01/22 12:23	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 12:23	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 12:23	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 12:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 12:23	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 12:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 12:23	56-23-5	
Chlorobenzene	**5.6**	ug/L	1.0	0.089	1		11/01/22 12:23	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 12:23	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 12:23	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 12:23	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 12:23	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 12:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 12:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/22 12:23	75-35-4	
cis-1,2-Dichloroethene	**6.6**	ug/L	1.0	0.13	1		11/01/22 12:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/22 12:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 12:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 12:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 12:23	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 12:23	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 12:23	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 12:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 12:23	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 12:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 12:23	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 12:23	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 12:23	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 12:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 12:23	79-00-5	
Trichloroethene	**18.7**	ug/L	1.0	0.21	1		11/01/22 12:23	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 12:23	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 12:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		11/01/22 12:23	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		11/01/22 12:23	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		1		11/01/22 12:23	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 12:23		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-55R-202210 **Lab ID: 60413699025** Collected: 10/19/22 13:35 Received: 10/20/22 18:19 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		11/01/22 12:37	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/22 12:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 12:37	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 12:37	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 12:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 12:37	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 12:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 12:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 12:37	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 12:37	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 12:37	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 12:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 12:37	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 12:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 12:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/22 12:37	75-35-4	
cis-1,2-Dichloroethene	**0.72J**	ug/L	1.0	0.13	1		11/01/22 12:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/22 12:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 12:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 12:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 12:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 12:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 12:37	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 12:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 12:37	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 12:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 12:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 12:37	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 12:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 12:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 12:37	79-00-5	
Trichloroethene	**27.5**	ug/L	1.0	0.21	1		11/01/22 12:37	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 12:37	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 12:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		11/01/22 12:37	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		11/01/22 12:37	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		11/01/22 12:37	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 12:37		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: ITMW-1R-202210 **Lab ID: 60413699026** Collected: 10/19/22 15:35 Received: 10/20/22 18:19 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		11/01/22 13:04	67-64-1	
Benzene	**0.17J**	ug/L	1.0	0.14	1		11/01/22 13:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 13:04	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 13:04	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 13:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 13:04	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 13:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 13:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 13:04	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 13:04	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 13:04	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 13:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 13:04	124-48-1	
1,1-Dichloroethane	**7.7**	ug/L	1.0	0.12	1		11/01/22 13:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 13:04	107-06-2	
1,1-Dichloroethene	**0.33J**	ug/L	1.0	0.22	1		11/01/22 13:04	75-35-4	
cis-1,2-Dichloroethene	**38.8**	ug/L	1.0	0.13	1		11/01/22 13:04	156-59-2	
trans-1,2-Dichloroethene	**0.21J**	ug/L	1.0	0.10	1		11/01/22 13:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 13:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 13:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 13:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 13:04	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 13:04	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 13:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 13:04	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 13:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 13:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 13:04	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 13:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 13:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 13:04	79-00-5	
Trichloroethene	**18.6**	ug/L	1.0	0.21	1		11/01/22 13:04	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 13:04	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 13:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%	80-120		1		11/01/22 13:04	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		11/01/22 13:04	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		11/01/22 13:04	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 13:04		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-99-202210 **Lab ID: 60413699027** Collected: 10/19/22 16:20 Received: 10/20/22 18:19 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		11/01/22 13:31	67-64-1	
Benzene	**0.53J**	ug/L	1.0	0.14	1		11/01/22 13:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 13:31	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 13:31	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 13:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 13:31	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 13:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 13:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 13:31	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 13:31	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 13:31	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 13:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 13:31	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 13:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 13:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/22 13:31	75-35-4	
cis-1,2-Dichloroethene	**1.9**	ug/L	1.0	0.13	1		11/01/22 13:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/22 13:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 13:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 13:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 13:31	10061-02-6	
Ethylbenzene	**0.22J**	ug/L	1.0	0.12	1		11/01/22 13:31	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 13:31	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 13:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	**1.4J**	ug/L	10.0	0.74	1		11/01/22 13:31	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 13:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 13:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 13:31	127-18-4	
Toluene	**1.2**	ug/L	1.0	0.25	1		11/01/22 13:31	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 13:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 13:31	79-00-5	
Trichloroethene	**2.2**	ug/L	1.0	0.21	1		11/01/22 13:31	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 13:31	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 13:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		11/01/22 13:31	460-00-4	
Toluene-d8 (S)	94	%	80-120		1		11/01/22 13:31	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		11/01/22 13:31	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 13:31		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: RW-69-202210 **Lab ID: 60413699028** Collected: 10/19/22 16:50 Received: 10/20/22 18:19 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		11/01/22 13:45	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/22 13:45	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 13:45	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 13:45	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 13:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 13:45	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 13:45	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 13:45	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 13:45	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 13:45	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 13:45	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 13:45	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 13:45	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 13:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 13:45	107-06-2	
1,1-Dichloroethene	**1.2**	ug/L	1.0	0.22	1		11/01/22 13:45	75-35-4	
cis-1,2-Dichloroethene	**7.8**	ug/L	1.0	0.13	1		11/01/22 13:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/22 13:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 13:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 13:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 13:45	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 13:45	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 13:45	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 13:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 13:45	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 13:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 13:45	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 13:45	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 13:45	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 13:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 13:45	79-00-5	
Trichloroethene	**97.6**	ug/L	1.0	0.21	1		11/01/22 13:45	79-01-6	
Vinyl chloride	**0.30J**	ug/L	1.0	0.17	1		11/01/22 13:45	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 13:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	80-120		1		11/01/22 13:45	460-00-4	
Toluene-d8 (S)	96	%	80-120		1		11/01/22 13:45	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		11/01/22 13:45	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 13:45		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: DUP-05-202210 **Lab ID: 60413699029** Collected: 10/19/22 10:05 Received: 10/20/22 18:19 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		11/01/22 13:18	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/22 13:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 13:18	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 13:18	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 13:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 13:18	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 13:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 13:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 13:18	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 13:18	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 13:18	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 13:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 13:18	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 13:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 13:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/22 13:18	75-35-4	
cis-1,2-Dichloroethene	**0.29J**	ug/L	1.0	0.13	1		11/01/22 13:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/22 13:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 13:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 13:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 13:18	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 13:18	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 13:18	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 13:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 13:18	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 13:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 13:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 13:18	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 13:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 13:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 13:18	79-00-5	
Trichloroethene	**5.4**	ug/L	1.0	0.21	1		11/01/22 13:18	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 13:18	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 13:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	80-120		1		11/01/22 13:18	460-00-4	
Toluene-d8 (S)	96	%	80-120		1		11/01/22 13:18	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		11/01/22 13:18	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 13:18		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-205-202210 **Lab ID: 60413699030** Collected: 10/19/22 16:50 Received: 10/20/22 18:19 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		11/01/22 16:01	67-64-1	
Benzene	**0.19J**	ug/L	1.0	0.14	1		11/01/22 16:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 16:01	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 16:01	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 16:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 16:01	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 16:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 16:01	56-23-5	
Chlorobenzene	**0.13J**	ug/L	1.0	0.089	1		11/01/22 16:01	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 16:01	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 16:01	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 16:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 16:01	124-48-1	
1,1-Dichloroethane	**0.93J**	ug/L	1.0	0.12	1		11/01/22 16:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 16:01	107-06-2	
1,1-Dichloroethene	**2.7**	ug/L	1.0	0.22	1		11/01/22 16:01	75-35-4	
cis-1,2-Dichloroethene	**102**	ug/L	1.0	0.13	1		11/01/22 16:01	156-59-2	
trans-1,2-Dichloroethene	**0.39J**	ug/L	1.0	0.10	1		11/01/22 16:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 16:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 16:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 16:01	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 16:01	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 16:01	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 16:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 16:01	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 16:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 16:01	79-34-5	
Tetrachloroethene	**1.2**	ug/L	1.0	0.33	1		11/01/22 16:01	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 16:01	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 16:01	71-55-6	
1,1,2-Trichloroethane	**0.64J**	ug/L	1.0	0.14	1		11/01/22 16:01	79-00-5	
Trichloroethene	**500**	ug/L	10.0	2.1	10		11/01/22 16:15	79-01-6	
Vinyl chloride	**0.32J**	ug/L	1.0	0.17	1		11/01/22 16:01	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 16:01	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		11/01/22 16:01	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		11/01/22 16:01	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	95	%	80-120		1		11/01/22 16:01	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 16:01		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

Sample: MW-201-202210 **Lab ID: 60413699031** Collected: 10/19/22 16:52 Received: 10/20/22 18:19 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		11/01/22 12:50	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/22 12:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 12:50	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 12:50	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 12:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 12:50	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 12:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 12:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 12:50	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 12:50	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 12:50	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 12:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 12:50	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 12:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 12:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/22 12:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		11/01/22 12:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/22 12:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 12:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 12:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 12:50	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 12:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 12:50	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 12:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 12:50	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 12:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 12:50	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 12:50	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 12:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 12:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 12:50	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		11/01/22 12:50	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 12:50	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 12:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		11/01/22 12:50	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		11/01/22 12:50	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		11/01/22 12:50	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 12:50		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

QC Batch: 814494
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: 60413699001, 60413699002, 60413699003, 60413699004, 60413699005

METHOD BLANK: 3239174 Matrix: Water
Associated Lab Samples: 60413699001, 60413699002, 60413699003, 60413699004, 60413699005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/25/22 14:04	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/25/22 14:04	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/25/22 14:04	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/25/22 14:04	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/25/22 14:04	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/25/22 14:04	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/25/22 14:04	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/25/22 14:04	
2-Hexanone	ug/L	ND	10.0	1.1	10/25/22 14:04	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/25/22 14:04	
Acetone	ug/L	ND	10.0	2.5	10/25/22 14:04	
Benzene	ug/L	ND	1.0	0.14	10/25/22 14:04	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/25/22 14:04	
Bromoform	ug/L	ND	1.0	0.68	10/25/22 14:04	
Bromomethane	ug/L	ND	5.0	0.46	10/25/22 14:04	
Carbon disulfide	ug/L	ND	5.0	0.98	10/25/22 14:04	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/25/22 14:04	
Chlorobenzene	ug/L	ND	1.0	0.089	10/25/22 14:04	
Chloroethane	ug/L	ND	1.0	0.37	10/25/22 14:04	
Chloroform	ug/L	ND	1.0	0.22	10/25/22 14:04	
Chloromethane	ug/L	ND	1.0	0.28	10/25/22 14:04	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/25/22 14:04	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/25/22 14:04	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/25/22 14:04	
Ethylbenzene	ug/L	ND	1.0	0.12	10/25/22 14:04	
Methylene Chloride	ug/L	ND	1.0	0.39	10/25/22 14:04	
Styrene	ug/L	ND	1.0	0.12	10/25/22 14:04	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/25/22 14:04	
Toluene	ug/L	ND	1.0	0.25	10/25/22 14:04	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/25/22 14:04	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/25/22 14:04	
Trichloroethene	ug/L	ND	1.0	0.21	10/25/22 14:04	
Vinyl chloride	ug/L	ND	1.0	0.17	10/25/22 14:04	
Xylene (Total)	ug/L	ND	3.0	0.28	10/25/22 14:04	
1,2-Dichlorobenzene-d4 (S)	%	97	80-120		10/25/22 14:04	
4-Bromofluorobenzene (S)	%	97	80-120		10/25/22 14:04	
Toluene-d8 (S)	%	99	80-120		10/25/22 14:04	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

LABORATORY CONTROL SAMPLE: 3239175

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	17.2	86	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	20.9	104	80-120	
1,1,2-Trichloroethane	ug/L	20	18.2	91	80-120	
1,1-Dichloroethane	ug/L	20	17.9	90	75-120	
1,1-Dichloroethene	ug/L	20	15.8	79	75-120	
1,2-Dichloroethane	ug/L	20	18.8	94	80-120	
1,2-Dichloropropane	ug/L	20	21.8	109	80-120	
2-Butanone (MEK)	ug/L	100	94.3	94	50-155	
2-Hexanone	ug/L	100	104	104	55-145	
4-Methyl-2-pentanone (MIBK)	ug/L	100	129	129	70-130	
Acetone	ug/L	100	69.4	69	35-160	
Benzene	ug/L	20	18.2	91	80-120	
Bromodichloromethane	ug/L	20	18.2	91	80-120	
Bromoform	ug/L	20	18.1	90	60-130	
Bromomethane	ug/L	20	13.5	68	50-140	
Carbon disulfide	ug/L	20	15.2	76	75-125	
Carbon tetrachloride	ug/L	20	16.6	83	70-130	
Chlorobenzene	ug/L	20	17.2	86	80-120	
Chloroethane	ug/L	20	16.5	82	70-130	
Chloroform	ug/L	20	17.8	89	75-120	
Chloromethane	ug/L	20	15.9	79	45-145	
cis-1,2-Dichloroethene	ug/L	20	17.6	88	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.2	101	75-125	
Dibromochloromethane	ug/L	20	15.6	78	75-125	
Ethylbenzene	ug/L	20	16.6	83	80-120	
Methylene Chloride	ug/L	20	14.8	74	70-140	
Styrene	ug/L	20	16.6	83	80-120	
Tetrachloroethene	ug/L	20	16.4	82	80-125	
Toluene	ug/L	20	17.3	86	80-120	
trans-1,2-Dichloroethene	ug/L	20	17.2	86	80-120	
trans-1,3-Dichloropropene	ug/L	20	17.4	87	75-125	
Trichloroethene	ug/L	20	19.1	96	80-125	
Vinyl chloride	ug/L	20	15.7	78	65-140	
Xylene (Total)	ug/L	60	51.0	85	80-120	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3239176 3239177

Parameter	Units	60413494041 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	18.4	18.1	92	91	75-125	2	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.6	18.6	93	93	80-120	0	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	17.4	17.8	87	89	80-120	2	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3239176 3239177

Parameter	Units	60413494041 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	17.7	16.7	89	84	75-120	6	15	
1,1-Dichloroethene	ug/L	ND	20	20	17.6	16.4	88	82	75-120	7	25	
1,2-Dichloroethane	ug/L	ND	20	20	17.7	17.0	88	85	80-120	4	25	
1,2-Dichloropropane	ug/L	ND	20	20	20.0	19.1	100	96	80-120	5	20	
2-Butanone (MEK)	ug/L	ND	100	100	101	84.1	101	84	50-155	19	25	
2-Hexanone	ug/L	ND	100	100	97.6	94.1	98	94	55-145	4	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	118	113	118	113	70-130	5	20	
Acetone	ug/L	ND	100	100	65.6	53.5	66	54	35-160	20	25	
Benzene	ug/L	ND	20	20	18.4	18.9	92	94	80-120	2	25	
Bromodichloromethane	ug/L	ND	20	20	17.4	17.8	87	89	80-120	2	15	
Bromoform	ug/L	ND	20	20	15.4	14.6	77	73	60-130	5	20	
Bromomethane	ug/L	ND	20	20	9.8	12.1	49	60	50-140	21	45	M1
Carbon disulfide	ug/L	ND	20	20	16.1	16.1	80	80	75-125	0	25	
Carbon tetrachloride	ug/L	ND	20	20	16.6	17.0	83	85	70-130	3	20	
Chlorobenzene	ug/L	ND	20	20	16.7	17.1	83	85	80-120	3	20	
Chloroethane	ug/L	ND	20	20	17.1	16.4	86	82	70-130	5	20	
Chloroform	ug/L	ND	20	20	17.3	16.0	87	80	75-120	8	20	
Chloromethane	ug/L	ND	20	20	16.3	15.9	81	79	45-145	3	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	17.5	16.3	87	82	80-120	7	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	17.9	18.7	89	93	75-125	4	20	
Dibromochloromethane	ug/L	ND	20	20	15.0	14.9	75	74	75-125	1	20	M1
Ethylbenzene	ug/L	ND	20	20	16.9	17.0	85	85	80-120	0	25	
Methylene Chloride	ug/L	ND	20	20	13.9	13.3	70	66	70-140	5	25	M1
Styrene	ug/L	ND	20	20	16.0	16.8	80	84	80-120	5	30	
Tetrachloroethene	ug/L	ND	20	20	17.4	18.1	87	90	80-125	4	25	
Toluene	ug/L	ND	20	20	16.8	17.4	84	87	80-120	4	25	
trans-1,2-Dichloroethene	ug/L	ND	20	20	17.3	16.4	87	82	80-120	5	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.7	16.6	84	83	75-125	0	15	
Trichloroethene	ug/L	0.83J	20	20	19.7	19.5	94	93	80-125	1	20	
Vinyl chloride	ug/L	ND	20	20	16.7	15.8	84	79	65-140	6	25	
Xylene (Total)	ug/L	ND	60	60	51.4	53.0	86	88	80-120	3	30	
1,2-Dichlorobenzene-d4 (S)	%						95	106	80-120			
4-Bromofluorobenzene (S)	%						98	101	80-120			
Toluene-d8 (S)	%						99	96	80-120			
Preservation pH		1.0			1.0	1.0				0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

QC Batch: 814510
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: 60413699006, 60413699007, 60413699008, 60413699009, 60413699010, 60413699011, 60413699012, 60413699013, 60413699014, 60413699015, 60413699016, 60413699017, 60413699018, 60413699019, 60413699020, 60413699021, 60413699022, 60413699023

METHOD BLANK: 3239249
Matrix: Water
Associated Lab Samples: 60413699006, 60413699007, 60413699008, 60413699009, 60413699010, 60413699011, 60413699012, 60413699013, 60413699014, 60413699015, 60413699016, 60413699017, 60413699018, 60413699019, 60413699020, 60413699021, 60413699022, 60413699023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/25/22 19:29	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/25/22 19:29	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/25/22 19:29	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/25/22 19:29	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/25/22 19:29	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/25/22 19:29	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/25/22 19:29	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/25/22 19:29	
2-Hexanone	ug/L	ND	10.0	1.1	10/25/22 19:29	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/25/22 19:29	
Acetone	ug/L	ND	10.0	2.5	10/25/22 19:29	
Benzene	ug/L	ND	1.0	0.14	10/25/22 19:29	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/25/22 19:29	
Bromoform	ug/L	ND	1.0	0.68	10/25/22 19:29	
Bromomethane	ug/L	ND	5.0	0.46	10/25/22 19:29	
Carbon disulfide	ug/L	ND	5.0	0.98	10/25/22 19:29	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/25/22 19:29	
Chlorobenzene	ug/L	ND	1.0	0.089	10/25/22 19:29	
Chloroethane	ug/L	ND	1.0	0.37	10/25/22 19:29	
Chloroform	ug/L	ND	1.0	0.22	10/25/22 19:29	
Chloromethane	ug/L	ND	1.0	0.28	10/25/22 19:29	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/25/22 19:29	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/25/22 19:29	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/25/22 19:29	
Ethylbenzene	ug/L	ND	1.0	0.12	10/25/22 19:29	
Methylene Chloride	ug/L	ND	1.0	0.39	10/25/22 19:29	
Styrene	ug/L	ND	1.0	0.12	10/25/22 19:29	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/25/22 19:29	
Toluene	ug/L	ND	1.0	0.25	10/25/22 19:29	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/25/22 19:29	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/25/22 19:29	
Trichloroethene	ug/L	ND	1.0	0.21	10/25/22 19:29	
Vinyl chloride	ug/L	ND	1.0	0.17	10/25/22 19:29	
Xylene (Total)	ug/L	ND	3.0	0.28	10/25/22 19:29	
1,2-Dichlorobenzene-d4 (S)	%	97	80-120		10/25/22 19:29	
4-Bromofluorobenzene (S)	%	98	80-120		10/25/22 19:29	
Toluene-d8 (S)	%	100	80-120		10/25/22 19:29	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

LABORATORY CONTROL SAMPLE: 3239250

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.1	90	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	20.8	104	80-120	
1,1,2-Trichloroethane	ug/L	20	19.0	95	80-120	
1,1-Dichloroethane	ug/L	20	20.6	103	75-120	
1,1-Dichloroethene	ug/L	20	17.2	86	75-120	
1,2-Dichloroethane	ug/L	20	20.4	102	80-120	
1,2-Dichloropropane	ug/L	20	20.7	104	80-120	
2-Butanone (MEK)	ug/L	100	112	112	50-155	
2-Hexanone	ug/L	100	105	105	55-145	
4-Methyl-2-pentanone (MIBK)	ug/L	100	127	127	70-130	
Acetone	ug/L	100	79.9	80	35-160	
Benzene	ug/L	20	19.6	98	80-120	
Bromodichloromethane	ug/L	20	19.3	97	80-120	
Bromoform	ug/L	20	18.1	91	60-130	
Bromomethane	ug/L	20	14.7	74	50-140	
Carbon disulfide	ug/L	20	16.0	80	75-125	
Carbon tetrachloride	ug/L	20	17.4	87	70-130	
Chlorobenzene	ug/L	20	18.1	91	80-120	
Chloroethane	ug/L	20	19.1	95	70-130	
Chloroform	ug/L	20	18.6	93	75-120	
Chloromethane	ug/L	20	15.9	80	45-145	
cis-1,2-Dichloroethene	ug/L	20	18.6	93	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.8	99	75-125	
Dibromochloromethane	ug/L	20	16.5	83	75-125	
Ethylbenzene	ug/L	20	18.2	91	80-120	
Methylene Chloride	ug/L	20	16.4	82	70-140	
Styrene	ug/L	20	18.4	92	80-120	
Tetrachloroethene	ug/L	20	17.4	87	80-125	
Toluene	ug/L	20	18.7	93	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.3	97	80-120	
trans-1,3-Dichloropropene	ug/L	20	17.8	89	75-125	
Trichloroethene	ug/L	20	19.6	98	80-125	
Vinyl chloride	ug/L	20	16.7	83	65-140	
Xylene (Total)	ug/L	60	54.8	91	80-120	
1,2-Dichlorobenzene-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3239251 3239252

Parameter	Units	60413699015 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	18.5	17.9	92	90	75-125	3	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	17.8	17.4	89	87	80-120	2	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	16.9	16.5	85	82	80-120	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3239251 3239252

Parameter	Units	60413699015 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	0.72J	20	20	18.8	18.6	91	90	75-120	1	15	
1,1-Dichloroethene	ug/L	0.48J	20	20	17.7	17.2	86	84	75-120	3	25	
1,2-Dichloroethane	ug/L	ND	20	20	18.4	16.9	92	84	80-120	9	25	
1,2-Dichloropropane	ug/L	ND	20	20	20.3	19.3	101	97	80-120	5	20	
2-Butanone (MEK)	ug/L	ND	100	100	96.1	83.5	96	84	50-155	14	25	
2-Hexanone	ug/L	ND	100	100	96.7	91.3	97	91	55-145	6	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	114	107	114	107	70-130	6	20	
Acetone	ug/L	ND	100	100	68.6	53.1	69	53	35-160	25	25	
Benzene	ug/L	ND	20	20	19.0	18.5	95	92	80-120	3	25	
Bromodichloromethane	ug/L	ND	20	20	18.0	17.7	90	88	80-120	2	15	
Bromoform	ug/L	ND	20	20	15.7	14.4	79	72	60-130	9	20	
Bromomethane	ug/L	ND	20	20	10.1	12.1	50	61	50-140	18	45	
Carbon disulfide	ug/L	ND	20	20	16.0	15.7	80	78	75-125	2	25	
Carbon tetrachloride	ug/L	ND	20	20	16.5	16.9	82	84	70-130	2	20	
Chlorobenzene	ug/L	ND	20	20	17.3	16.3	87	82	80-120	6	20	
Chloroethane	ug/L	ND	20	20	18.7	16.0	93	80	70-130	15	20	
Chloroform	ug/L	ND	20	20	17.1	15.8	86	79	75-120	8	20	
Chloromethane	ug/L	ND	20	20	15.9	15.8	79	79	45-145	1	30	
cis-1,2-Dichloroethene	ug/L	3.2	20	20	20.3	19.3	85	80	80-120	5	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.1	17.4	90	87	75-125	4	20	
Dibromochloromethane	ug/L	ND	20	20	15.2	14.2	76	71	75-125	7	20	M1
Ethylbenzene	ug/L	ND	20	20	16.8	16.7	84	83	80-120	1	25	
Methylene Chloride	ug/L	ND	20	20	14.2	13.6	70	67	70-140	4	25	M1
Styrene	ug/L	ND	20	20	16.6	15.9	83	79	80-120	5	30	M1
Tetrachloroethene	ug/L	ND	20	20	18.7	17.7	94	88	80-125	6	25	
Toluene	ug/L	ND	20	20	17.4	16.4	87	82	80-120	6	25	
trans-1,2-Dichloroethene	ug/L	ND	20	20	17.1	17.0	85	85	80-120	0	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.3	15.5	82	78	75-125	5	15	
Trichloroethene	ug/L	74.2	20	20	106	105	156	154	80-125	1	20	M1
Vinyl chloride	ug/L	0.17J	20	20	17.6	16.5	87	82	65-140	6	25	
Xylene (Total)	ug/L	ND	60	60	52.9	49.7	88	83	80-120	6	30	
1,2-Dichlorobenzene-d4 (S)	%						96	100	80-120			
4-Bromofluorobenzene (S)	%						95	97	80-120			
Toluene-d8 (S)	%						98	94	80-120			
Preservation pH		1.0			1.0	1.0				0		

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Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

QC Batch: 815883
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: 60413699024, 60413699025, 60413699026, 60413699027, 60413699028, 60413699029, 60413699030, 60413699031

METHOD BLANK: 3244702
Matrix: Water
Associated Lab Samples: 60413699024, 60413699025, 60413699026, 60413699027, 60413699028, 60413699029, 60413699030, 60413699031

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	11/01/22 12:10	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	11/01/22 12:10	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	11/01/22 12:10	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	11/01/22 12:10	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	11/01/22 12:10	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	11/01/22 12:10	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	11/01/22 12:10	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	11/01/22 12:10	
2-Hexanone	ug/L	ND	10.0	1.1	11/01/22 12:10	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	11/01/22 12:10	
Acetone	ug/L	ND	10.0	2.5	11/01/22 12:10	
Benzene	ug/L	ND	1.0	0.14	11/01/22 12:10	
Bromodichloromethane	ug/L	ND	1.0	0.16	11/01/22 12:10	
Bromoform	ug/L	ND	1.0	0.68	11/01/22 12:10	
Bromomethane	ug/L	ND	5.0	0.46	11/01/22 12:10	
Carbon disulfide	ug/L	ND	5.0	0.98	11/01/22 12:10	
Carbon tetrachloride	ug/L	ND	1.0	0.17	11/01/22 12:10	
Chlorobenzene	ug/L	ND	1.0	0.089	11/01/22 12:10	
Chloroethane	ug/L	ND	1.0	0.37	11/01/22 12:10	
Chloroform	ug/L	ND	1.0	0.22	11/01/22 12:10	
Chloromethane	ug/L	ND	1.0	0.28	11/01/22 12:10	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	11/01/22 12:10	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	11/01/22 12:10	
Dibromochloromethane	ug/L	ND	1.0	0.30	11/01/22 12:10	
Ethylbenzene	ug/L	ND	1.0	0.12	11/01/22 12:10	
Methylene Chloride	ug/L	ND	1.0	0.39	11/01/22 12:10	
Styrene	ug/L	ND	1.0	0.12	11/01/22 12:10	
Tetrachloroethene	ug/L	ND	1.0	0.33	11/01/22 12:10	
Toluene	ug/L	ND	1.0	0.25	11/01/22 12:10	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	11/01/22 12:10	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	11/01/22 12:10	
Trichloroethene	ug/L	ND	1.0	0.21	11/01/22 12:10	
Vinyl chloride	ug/L	ND	1.0	0.17	11/01/22 12:10	
Xylene (Total)	ug/L	ND	3.0	0.28	11/01/22 12:10	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120		11/01/22 12:10	
4-Bromofluorobenzene (S)	%	97	80-120		11/01/22 12:10	
Toluene-d8 (S)	%	101	80-120		11/01/22 12:10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

LABORATORY CONTROL SAMPLE: 3244703

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.2	106	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	20.6	103	80-120	
1,1,2-Trichloroethane	ug/L	20	18.6	93	80-120	
1,1-Dichloroethane	ug/L	20	20.8	104	75-120	
1,1-Dichloroethene	ug/L	20	23.5	118	75-120	
1,2-Dichloroethane	ug/L	20	20.9	104	80-120	
1,2-Dichloropropane	ug/L	20	20.8	104	80-120	
2-Butanone (MEK)	ug/L	100	99.1	99	50-155	
2-Hexanone	ug/L	100	94.1	94	55-145	
4-Methyl-2-pentanone (MIBK)	ug/L	100	80.5	81	70-130	
Acetone	ug/L	100	108	108	35-160	
Benzene	ug/L	20	20.8	104	80-120	
Bromodichloromethane	ug/L	20	21.6	108	80-120	
Bromoform	ug/L	20	15.3	76	60-130	
Bromomethane	ug/L	20	22.7	114	50-140	
Carbon disulfide	ug/L	20	24.9	125	75-125	
Carbon tetrachloride	ug/L	20	22.2	111	70-130	
Chlorobenzene	ug/L	20	21.9	109	80-120	
Chloroethane	ug/L	20	25.6	128	70-130	
Chloroform	ug/L	20	22.1	111	75-120	
Chloromethane	ug/L	20	23.0	115	45-145	
cis-1,2-Dichloroethene	ug/L	20	22.7	113	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.8	104	75-125	
Dibromochloromethane	ug/L	20	17.0	85	75-125	
Ethylbenzene	ug/L	20	21.5	108	80-120	
Methylene Chloride	ug/L	20	28.1	140	70-140	
Styrene	ug/L	20	21.8	109	80-120	
Tetrachloroethene	ug/L	20	20.4	102	80-125	
Toluene	ug/L	20	21.6	108	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.8	104	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.1	91	75-125	
Trichloroethene	ug/L	20	22.4	112	80-125	
Vinyl chloride	ug/L	20	24.4	122	65-140	
Xylene (Total)	ug/L	60	64.5	108	80-120	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			103	80-120	
Toluene-d8 (S)	%			101	80-120	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

QC Batch: 816161
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: 60413699017, 60413699023

METHOD BLANK: 3246041 Matrix: Water
Associated Lab Samples: 60413699017, 60413699023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	1.0	0.21	11/02/22 16:27	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120		11/02/22 16:27	
4-Bromofluorobenzene (S)	%	100	80-120		11/02/22 16:27	
Toluene-d8 (S)	%	97	80-120		11/02/22 16:27	

LABORATORY CONTROL SAMPLE: 3246042

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	18.8	94	80-125	
1,2-Dichlorobenzene-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			98	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413699

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: 815883

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

ANALYTE QUALIFIERS

F1 The sample was analyzed at a dilution due to foaming of the sample in the purge vessel.

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

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.: 60413699

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60413699001	**MW-40R-202210**	EPA 5030B/8260	814494		
60413699002	**TMW-14-202210**	EPA 5030B/8260	814494		
60413699003	**MW-182-202210**	EPA 5030B/8260	814494		
60413699004	**DUP-02-202210**	EPA 5030B/8260	814494		
60413699005	**ITMW-21-202210**	EPA 5030B/8260	814494		
60413699006	**TMW-25-202210**	EPA 5030B/8260	814510		
60413699007	**TMW-30-202210**	EPA 5030B/8260	814510		
60413699008	**DUP-01-202210**	EPA 5030B/8260	814510		
60413699009	**MW-61R-202210**	EPA 5030B/8260	814510		
60413699010	**MW-84-202210**	EPA 5030B/8260	814510		
60413699011	**MW-192-202210**	EPA 5030B/8260	814510		
60413699012	**TMW-10-202210**	EPA 5030B/8260	814510		
60413699013	**MW-194-202210**	EPA 5030B/8260	814510		
60413699014	**MW-188-202210**	EPA 5030B/8260	814510		
60413699015	**MW-187-202210**	EPA 5030B/8260	814510		
60413699016	**MW-83-202210**	EPA 5030B/8260	814510		
60413699017	**MW-190-202210**	EPA 5030B/8260	814510		
60413699017	**MW-190-202210**	EPA 5030B/8260	816161		
60413699018	**MW-63R-202210**	EPA 5030B/8260	814510		
60413699019	**TMW-11-202210**	EPA 5030B/8260	814510		
60413699020	**EB-03-202210**	EPA 5030B/8260	814510		
60413699021	**MW-82-202210**	EPA 5030B/8260	814510		
60413699022	**TB-03-202210**	EPA 5030B/8260	814510		
60413699023	**MW-203-202210**	EPA 5030B/8260	814510		
60413699023	**MW-203-202210**	EPA 5030B/8260	816161		
60413699024	**ITMW-7-202210**	EPA 5030B/8260	815883		
60413699025	**MW-55R-202210**	EPA 5030B/8260	815883		
60413699026	**ITMW-1R-202210**	EPA 5030B/8260	815883		
60413699027	**MW-99-202210**	EPA 5030B/8260	815883		
60413699028	**RW-69-202210**	EPA 5030B/8260	815883		
60413699029	**DUP-05-202210**	EPA 5030B/8260	815883		
60413699030	**MW-205-202210**	EPA 5030B/8260	815883		
60413699031	**MW-201-202210**	EPA 5030B/8260	815883		

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sample	WO# : 60413699
	Revision: 2	Effective Date: 01/12/202

60413699

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: T-299 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 1.0 **Corr. Factor** 0 **Corrected** 1.0

Date and initials of person examining contents: BK 10/24

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	
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: _____

Project Manager Review: _____ Date: _____

Qualtrax Document ID: 30468

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 3

Section A
Required Client Information:

Company:	Ramboll
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B
Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	

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	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-40R-202210	WT	G			10/19/22	0939		3				X					X		
2	TMW-14-202210	WT	G			10/19/22	0943		3				X					X		
3	MW-182-202210	WT	G				1005		3				X					X		
4	Dup-02-202210	WT	G				1005		3				X					X		
5	ITMW-21-202210	WT	G				1005		3				X					X		
6	TMW-25-202210	WT	G				1134		3				X					X		
7	TMW-30-202210	WT	G				1215		2				X					X		
8	Dup-01-202210	WT	G				1215		1				X					X		
9	MW-61R-202210	WT	G				1137		3				X					X		
10	MW-84-202210	WT	G				1025		3				X					X		
11	MW-192-202210	WT	G				1155		3				X					X		
12	TMW-10-202210	WT	G				1120		3				X					X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
TMW-30-202210 only 2 VOAs	Ramboll	10-19-22	1800	Pace	10/20	1819	1.0	Y	Y	Y
Dup-01-202210 only 1 VOA										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellner

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-19-22

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

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Company:	Ramboll
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	

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	MW-194-202210	WT	G			10/19/22	1327		3				X					X	X		60413699
2	MW-188-202210	WT	G			10/19/22	1340		3				X					X	X		
3	MW-187-202210	WT	G				1455		3				X					X	X		
4	MW-187-MS-202210	WT	G				1455		3				X					X	X		
5	MW-187-MSD-202210	WT	G				1455		3				X					X	X		
6	MW-83-202210	WT	G				1357		3				X					X	X		
7	MW-190-202210	WT	G				1501		3				X					X	X		
8	MW-63R-202210	WT	G				1447		3				X					X	X		
9	TMW-11-202210	WT	G				1358		3				X					X	X		
10	EB-03-202210	WT	G				1615		3				X					X	X		
11	MW-82-202210	WT	G				1552		3				X					X	X		
12	TB-03-202210	WT	G				1630		2				X					X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ramboll	10-19-22	1800	Pace	10/20	1819	1.0	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Fellner

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-19-22

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:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	VOCs

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	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-203-202210	WT	G			10/19/22	0945		3				X					X		60413699
2	ITMW-7-202210	WT	G			10/19/22	1125		3				X					X		
3	MW-55R-202210	WT	G			10/19/22	1335		3				X					X		
4	ITMW-1R-202210	WT	G			10/19/22	1535		3				X					X		
5	MW-99-202210	WT	G			10/19/22	1620		3				X					X		
6	RW-69-202210	WT	G			10/19/22	1650		3				X					X		
7	DUP-05-202210	WT	G			10/19/22	1085		3				X					X		
8	MW-205-202210	WT	G			10/19/22	1650		3				X					X		
9	MW-201-202210	WT	G			10/19/22	1652		3				X					X		
10																				
11																				
12																				

GP

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ramboll	10-19-22	1800	BC Pace	10/20	1814	1.0	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellner

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-19-22

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.

1/3

Client: Rambol

Profile # 7449 Line1

Site: whirlpool Fort smith

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	WT		3																													
3	WT		3																													
4	WT		3																													
5	WT		3																													
6	WT		3																													
7	WT		3																													
8	WT		3																													
9	WT		3																													
10	WT		3																													
11	WT		2																													
12	WT		1																													

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: 60413699

4 2/3

Client: Ramboll

Profile # 7444 Line1

Site: Whirlpool Fort Smith

Notes MW-187-202210 MS/MSD

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	LT		3																													
2	LT		3																													
3	LT		3																													
4	LT		3																													
5	LT		3																													
6	LT		3																													
7	LT		3																													
8	LT		3																													
9	LT		3																													
10	LT		3																													
11	LT		3																													
12	LT		2																													

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: 60413649

5/5

Client: Ramboll

Profile # 7444 Line 1

Site: Whirlpool Fort Smith

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	WT		3																													
3	WT		3																													
4	WT		3																													
5	WT		3																													
6	WT		3																													
7	WT		3																													
8	WT		3																													
9	WT		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: 60413699

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

October 29, 2022

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413742

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 22, 2022. 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.

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

SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413742

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60413742001	**MW-95-202210**	Water	10/21/22 08:58	10/22/22 00:00
60413742002	**ITMW-9-202210**	Water	10/21/22 09:35	10/22/22 00:00
60413742003	**MW-198-202210**	Water	10/21/22 09:10	10/22/22 00:00

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

PROJECT NARRATIVE

Project:
Pace Project No.:

Method:
Description:
Client:
Date:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT TO:
Name: David Meyer
Company: Ramboll
Address:
email: Dmeyer@ramboll.com
Phone:
Fax:

Project Manager:
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:
Fax:

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 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	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:	Other:	Other:
086TJ1	MW-95-202210	10/21/22	0858	WT						X	X																			X		
2	ITMW-9-202210	10/21/22	0935	WT						X	X																			X		
3	MW-198-202210	10/21/20	0910	WT						X	X																			X		

Relinquished by: Ramboll IJZ Date 10-21-22 Received by: Date 10/22/22

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
4120 Seven Hills Dr
Florrisant, MO 63033

Phone:

Fax:

Identifier: 086TJ **Date Rec:** 10/22/2022 **Report Date:** 10/28/2022

Client Project #: **Client Project Name:**

Purchase Order #: SUB-105505

Test results provided for: CENSUS

Reviewed By:

Charles Slater

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: **086TJ**
Date Received: 10/22/2022

Sample Information

Client Sample ID:		**MW-95-202210**	**ITMW-9-202210**	**MW-198-202210**
Sample Date:		10/21/2022	10/21/2022	10/21/2022
Units:		cells/mL	cells/mL	cells/mL
Analyst/Reviewer:		BB/CS	BB/CS	BB/CS
Dechlorinating Bacteria				
Dehalococcoides	*DHC*	**3.20E+00**	**1.11E+02**	<5.00E-01
tceA Reductase	TCE	<5.00E-01	**3.10E+00**	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	**1.20E+00**	**7.20E+00**	<5.00E-01
Vinyl Chloride Reductase	VCR	**2.00E-01 (J)**	**1.47E+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 **10/22/2022**

Component	Date Prepared	Date Analyzed	Arrival Temperature	Positive Control	Extraction Blank	Negative Control
BVC	10/22/2022	10/28/2022	0 °C	100%	non-detect	non-detect
TCE	10/22/2022	10/28/2022	0 °C	101%	non-detect	non-detect
VCR	10/22/2022	10/28/2022	0 °C	100%	non-detect	non-detect
DHC	10/22/2022	10/28/2022	0 °C	102%	non-detect	non-detect

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

November 04, 2022

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 21, 2022. 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 Gulf Coast
- 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.

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

CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 22-031-0
Illinois Certification #: 2000302021-3
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 #: T104704407-21-15
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Gulf Coast

7979 Innovation Park Drive, Baton Rouge, LA 70820
Arkansas Certification #: 88-0655
DoD ELAP Certification #: 6429-01
Florida Certification #: E87854
Illinois Certification #: 004585
Kansas Certification #: E-10354
Louisiana/LELAP Certification #: 01955
North Carolina Certification #: 618
North Dakota Certification #: R-195
Oklahoma Certification #: 2019-101
South Carolina Certification #: 73006001
Texas Certification #: T104704178-19-11
USDA Soil Permit # P330-19-00209
Virginia Certification #: 460215
Washington Certification #: C929

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

SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60413864001	**ITMW-9-202210**	Water	10/21/22 09:35	10/21/22 17:05
60413864002	**MW-95-202210**	Water	10/21/22 08:58	10/21/22 17:05
60413864003	**MW-198-202210**	Water	10/21/22 09:10	10/21/22 17:05
60413864004	**MW-25R-202210**	Water	10/21/22 08:20	10/21/22 17:05

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

SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60413864001	**ITMW-9-202210**	AM20GAX	LMB	1	GCLA
		AM20GAX	LMB	4	GCLA
		EPA 6010	MA1	1	PASI-K
		SM 4500-S-2 D	KLM	1	PASI-K
		EPA 300.0	CRN2	1	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K
60413864002	**MW-95-202210**	AM20GAX	LMB	1	GCLA
		AM20GAX	LMB	4	GCLA
		EPA 6010	MA1	1	PASI-K
		SM 4500-S-2 D	KLM	1	PASI-K
		EPA 300.0	CRN2	1	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K
60413864003	**MW-198-202210**	AM20GAX	LMB	1	GCLA
		AM20GAX	LMB	4	GCLA
		EPA 6010	MA1	1	PASI-K
		SM 4500-S-2 D	KLM	1	PASI-K
		EPA 300.0	CRN2	1	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K
60413864004	**MW-25R-202210**	AM20GAX	LMB	1	GCLA

GCLA = Pace Analytical Gulf Coast
PASI-K = Pace Analytical Services - Kansas City

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

Method: **AM20GAX**
Description: Indicator Gases Bubblestrip H2
Client: Ramboll_AR
Date: November 04, 2022

General Information:
4 samples were analyzed for AM20GAX by Pace Analytical Gulf Coast. 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.

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:

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

Method: **AM20GAX**
Description: Indicator Gases Water LHC
Client: Ramboll_AR
Date: November 04, 2022

General Information:
3 samples were analyzed for AM20GAX by Pace Analytical Gulf Coast. 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.

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: 752797

R1: RPD value was outside control limits.

- LCSD (Lab ID: 2413843)
  - Acetylene
  - Methane

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

Additional Comments:

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Ramboll_AR
Date: November 04, 2022

General Information:
3 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.

QC Batch: 815334

B: Analyte was detected in the associated method blank.

- BLANK for HBN 815334 [MPRP/739 (Lab ID: 3242637)
  - Iron

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.: 60413864

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Ramboll_AR
Date: November 04, 2022

General Information:
3 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: 814990

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413975001

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

- MS (Lab ID: 3241237)
  - Sulfide, Total
- MSD (Lab ID: 3241238)
  - 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.: 60413864

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Ramboll_AR
Date: November 04, 2022

General Information:
3 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: 815479

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413633010

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

- MS (Lab ID: 3243133)
  - Sulfate

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 pres.
Client: Ramboll_AR
Date: November 04, 2022

General Information:
3 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: 816177

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413695002,60413979003

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

- MS (Lab ID: 3246138)
  - Nitrogen, NO2 plus NO3
- MS (Lab ID: 3246140)
  - Nitrogen, NO2 plus NO3

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

Method: **SM 5310C**
Description: 5310C TOC
Client: Ramboll_AR
Date: November 04, 2022

General Information:
3 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.: 60413864

Sample: ITMW-9-202210 **Lab ID: 60413864001** Collected: 10/21/22 09:35 Received: 10/21/22 17:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Bubblestrip H2	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Hydrogen	**1.5J**	nM	1.9	0.49	1		10/31/22 08:19	1333-74-0	
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**4.7J**	ug/L	5.0	2.0	1		10/28/22 08:28	74-82-8	
Ethane	ND	ug/L	1.0	0.17	1		10/28/22 08:28	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/28/22 08:28	74-85-1	
Acetylene	ND	ug/L	0.50	0.13	1		10/28/22 08:28	74-86-2	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**11.6J**	ug/L	50.0	5.6	1	10/28/22 12:48	11/03/22 16:06	7439-89-6	B
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.021	1		10/27/22 09:21	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Sulfate	**24.2**	mg/L	10.0	5.5	10		10/31/22 14:00	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**8.7**	mg/L	0.50	0.39	5		11/02/22 15:38		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.48J**	mg/L	1.0	0.30	1		11/03/22 13:18	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

Sample: MW-95-202210 **Lab ID: 60413864002** Collected: 10/21/22 08:58 Received: 10/21/22 17:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Bubblestrip H2	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Hydrogen	**2.2**	nM	1.9	0.49	1		10/31/22 08:35	1333-74-0	
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**4.1J**	ug/L	5.0	2.0	1		10/28/22 09:43	74-82-8	
Ethane	**0.70J**	ug/L	1.0	0.17	1		10/28/22 09:43	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/28/22 09:43	74-85-1	
Acetylene	ND	ug/L	0.50	0.13	1		10/28/22 09:43	74-86-2	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**16.7J**	ug/L	50.0	5.6	1	10/28/22 12:48	11/03/22 16:08	7439-89-6	B
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.021	1		10/27/22 09:21	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Sulfate	**133**	mg/L	10.0	5.5	10		10/31/22 14:15	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**0.75**	mg/L	0.10	0.078	1		11/02/22 15:31		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.30	1		11/03/22 13:32	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

Sample: MW-198-202210 **Lab ID: 60413864003** Collected: 10/21/22 09:10 Received: 10/21/22 17:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Bubblestrip H2	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Hydrogen	**1.1J**	nM	1.9	0.49	1		10/31/22 08:47	1333-74-0	
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**17**	ug/L	5.0	2.0	1		10/28/22 09:55	74-82-8	
Ethane	**3.5**	ug/L	1.0	0.17	1		10/28/22 09:55	74-84-0	
Ethene	**0.40J**	ug/L	1.0	0.24	1		10/28/22 09:55	74-85-1	
Acetylene	**0.15J**	ug/L	0.50	0.13	1		10/28/22 09:55	74-86-2	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**49.9J**	ug/L	50.0	5.6	1	10/28/22 12:48	11/03/22 16:10	7439-89-6	B
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.021	1		10/27/22 09:22	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Sulfate	**191**	mg/L	10.0	5.5	10		10/31/22 14:29	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**1.3**	mg/L	0.10	0.078	1		11/02/22 15:32		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.40J**	mg/L	1.0	0.30	1		11/03/22 13:46	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

Sample: MW-25R-202210 **Lab ID: 60413864004** Collected: 10/21/22 08:20 Received: 10/21/22 17:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Bubblestrip H2	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Hydrogen	ND	nM	1.9	0.49	1		10/31/22 09:44	1333-74-0	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

QC Batch: 753015
QC Batch Method: AM20GAX
Analysis Method: AM20GAX
Analysis Description: Indicator Gases Bubble Strip H2
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413864001, 60413864002, 60413864003, 60413864004

METHOD BLANK: 2415038 Matrix: Air
Associated Lab Samples: 60413864001, 60413864002, 60413864003, 60413864004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Hydrogen	nM	ND	1.9	0.49	10/31/22 07:05	

LABORATORY CONTROL SAMPLE & LCSD: 2415039 2415040

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Hydrogen	nM	12	14	14	118	121	70-130	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

QC Batch: 752797
QC Batch Method: AM20GAX
Analysis Method: AM20GAX
Analysis Description: Indicator Gases Water LHC
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413864001, 60413864002, 60413864003

METHOD BLANK: 2413841 Matrix: Water
Associated Lab Samples: 60413864001, 60413864002, 60413864003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Methane	ug/L	ND	5.0	2.0	10/28/22 06:44	
Ethane	ug/L	ND	1.0	0.17	10/28/22 06:44	
Ethene	ug/L	ND	1.0	0.24	10/28/22 06:44	
Acetylene	ug/L	ND	0.50	0.13	10/28/22 06:44	

LABORATORY CONTROL SAMPLE & LCSD: 2413842 2413843

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	750	560	840	75	113	70-130	41	20	R1
Ethane	ug/L	38	49	45	130	120	70-130	8	20	
Ethene	ug/L	35	46	43	130	121	70-130	8	20	
Acetylene	ug/L	33	34	26	105	80	70-130	27	20	R1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

QC Batch: 815334
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413864001, 60413864002, 60413864003

METHOD BLANK: 3242637 Matrix: Water
Associated Lab Samples: 60413864001, 60413864002, 60413864003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	5.6J	50.0	5.6	11/03/22 15:30	

LABORATORY CONTROL SAMPLE: 3242638

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9700	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3242639 3242640

Parameter	Units	60413975005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	294	10000	10000	9660	9910	94	96	75-125	2	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

QC Batch: 814990
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: 60413864001, 60413864002, 60413864003

METHOD BLANK: 3241235 Matrix: Water
Associated Lab Samples: 60413864001, 60413864002, 60413864003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	0.021	10/27/22 09:16	

LABORATORY CONTROL SAMPLE: 3241236

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.50	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3241237 3241238

Parameter	Units	60413975001 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	0.32	0.32	64	64	75-125	0	20	M1

SAMPLE DUPLICATE: 3241239

Parameter	Units	60413975002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

QC Batch: 815479
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: 60413864001, 60413864002, 60413864003

METHOD BLANK: 3243131 Matrix: Water
Associated Lab Samples: 60413864001, 60413864002, 60413864003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	0.55	10/31/22 08:42	

METHOD BLANK: 3245892 Matrix: Water
Associated Lab Samples: 60413864001, 60413864002, 60413864003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	0.55	11/01/22 08:58	

LABORATORY CONTROL SAMPLE: 3243132

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	5.0	99	90-110	

LABORATORY CONTROL SAMPLE: 3245893

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3243133 3243134

Parameter	Units	60413633010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	21.5	100	100	143	141	121	120	80-120	1	15	M1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

QC Batch: 816177
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413864001, 60413864002, 60413864003

METHOD BLANK: 3246136 Matrix: Water
Associated Lab Samples: 60413864001, 60413864002, 60413864003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.078	11/02/22 15:07	

LABORATORY CONTROL SAMPLE: 3246137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 3246138

Parameter	Units	60413695002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	2	1.6	82	90-110	M1

MATRIX SPIKE SAMPLE: 3246140

Parameter	Units	60413979003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	2	1.5	74	90-110	M1

SAMPLE DUPLICATE: 3246139

Parameter	Units	60413543003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4.3	4.3	1	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

QC Batch: 816386
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413864001, 60413864002, 60413864003

METHOD BLANK: 3246892 Matrix: Water
Associated Lab Samples: 60413864001, 60413864002, 60413864003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.30	11/03/22 12:07	

LABORATORY CONTROL SAMPLE: 3246893

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.7	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3246895 3246896

Parameter	Units	60413943005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	1.9	5	5	6.6	6.7	94	96	80-120	1	25	

SAMPLE DUPLICATE: 3246894

Parameter	Units	60413943005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	1.9	2.0	4	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.

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QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

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.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413864

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60413864001	**ITMW-9-202210**	AM20GAX	753015		
60413864002	**MW-95-202210**	AM20GAX	753015		
60413864003	**MW-198-202210**	AM20GAX	753015		
60413864004	**MW-25R-202210**	AM20GAX	753015		
60413864001	**ITMW-9-202210**	AM20GAX	752797		
60413864002	**MW-95-202210**	AM20GAX	752797		
60413864003	**MW-198-202210**	AM20GAX	752797		
60413864001	**ITMW-9-202210**	EPA 3010	815334	EPA 6010	815391
60413864002	**MW-95-202210**	EPA 3010	815334	EPA 6010	815391
60413864003	**MW-198-202210**	EPA 3010	815334	EPA 6010	815391
60413864001	**ITMW-9-202210**	SM 4500-S-2 D	814990		
60413864002	**MW-95-202210**	SM 4500-S-2 D	814990		
60413864003	**MW-198-202210**	SM 4500-S-2 D	814990		
60413864001	**ITMW-9-202210**	EPA 300.0	815479		
60413864002	**MW-95-202210**	EPA 300.0	815479		
60413864003	**MW-198-202210**	EPA 300.0	815479		
60413864001	**ITMW-9-202210**	EPA 353.2	816177		
60413864002	**MW-95-202210**	EPA 353.2	816177		
60413864003	**MW-198-202210**	EPA 353.2	816177		
60413864001	**ITMW-9-202210**	SM 5310C	816386		
60413864002	**MW-95-202210**	SM 5310C	816386		
60413864003	**MW-198-202210**	SM 5310C	816386		

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sample C	WO#: 60413864
	Revision: 2	Effective Date: 01/12/2022

Client Name: Ranboll

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 ☑ Ziplc

Thermometer Used: T299 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 2.9 **Corr. Factor** 0.0 **Corrected** 2.9

Date and initials of person examining contents: 10-25-2022 AC

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	
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#: 55192,2072	☑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
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 2

Section A Required Client Information:

Company:	Ramboll
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	~~ISCR~~ MNA

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	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	6010 Iron	Sulfate	Chloride	Nitrate+Nitrite	TOC	DOC (Lab Filtered)	Methane/Ethane/Ethene	Volatile Fatty Acids	SVIFide	Dissolved Hydrogen	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ITMW-9-202210	WT	G			10/21/22	0935		8	X	X	X		X			X		X	X	X	X	X	X	X	X		60413864
2	MW-95-202210	WT	G			10/21/22	0858		8	X	X	X		X			X		X	X	X	X	X	X	X	X		
3	MW-198-202210	WT	G			10/21/22	0910		8	X	X	X		X			X		X	X	X	X	X	X	X	X		
4	MW-25R-202210	WT	G			10/21/22	0820		1	X	[redacted]						X									X			
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

GP

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
M/E/E and VFAs to Pace Gulf Coast	Ramboll	10-21-22	1600		10/21	1709	2.9	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 Zellner					
SIGNATURE of SAMPLER:		DATE Signed (MM/DD/YY): 10-21-22				

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

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

November 09, 2022

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 21, 2022. 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 - 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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
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CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 22-031-0
Illinois Certification #: 2000302021-3
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 #: T104704407-21-15
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60413912001	**IW-73-202210**	Water	10/21/22 09:30	10/21/22 17:05
60413912002	**ITMW-10-202210**	Water	10/21/22 09:00	10/21/22 17:05
60413912003	**EB-04-202210**	Water	10/21/22 10:30	10/21/22 17:05
60413912004	**ITMW-9-202210**	Water	10/21/22 09:35	10/21/22 17:05
60413912005	**MW-95-202210**	Water	10/21/22 08:58	10/21/22 17:05
60413912006	**MW-198-202210**	Water	10/21/22 09:10	10/21/22 17:05
60413912007	**TB-05-202210**	Water	10/21/22 11:30	10/21/22 17:05

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60413912001	**IW-73-202210**	EPA 5030B/8260	HM1	38	PASI-K
60413912002	**ITMW-10-202210**	EPA 5030B/8260	HM1	38	PASI-K
60413912003	**EB-04-202210**	EPA 5030B/8260	HM1	38	PASI-K
60413912004	**ITMW-9-202210**	EPA 5030B/8260	HM1	38	PASI-K
60413912005	**MW-95-202210**	EPA 5030B/8260	CSC	38	PASI-K
60413912006	**MW-198-202210**	EPA 5030B/8260	CSC	38	PASI-K
60413912007	**TB-05-202210**	EPA 5030B/8260	CSC	38	PASI-K

PASI-K = Pace Analytical Services - Kansas City

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: November 09, 2022

General Information:
7 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-95-202210 (Lab ID: 60413912005)

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: 816613

E: Analyte concentration exceeded the calibration range. The reported result is estimated.
- MW-95-202210 (Lab ID: 60413912005)
  - Trichloroethene

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.: 60413912

Sample: IW-73-202210 **Lab ID: 60413912001** Collected: 10/21/22 09:30 Received: 10/21/22 17:05 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		11/03/22 04:44	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/03/22 04:44	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/03/22 04:44	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/03/22 04:44	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 04:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 04:44	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 04:44	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 04:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 04:44	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 04:44	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/03/22 04:44	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 04:44	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 04:44	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/03/22 04:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/03/22 04:44	107-06-2	
1,1-Dichloroethene	**0.83J**	ug/L	1.0	0.22	1		11/03/22 04:44	75-35-4	
cis-1,2-Dichloroethene	**6.4**	ug/L	1.0	0.13	1		11/03/22 04:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/03/22 04:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 04:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 04:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 04:44	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 04:44	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 04:44	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/03/22 04:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 04:44	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 04:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/03/22 04:44	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/03/22 04:44	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/03/22 04:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/03/22 04:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/03/22 04:44	79-00-5	
Trichloroethene	**189**	ug/L	5.0	1.0	5		11/03/22 03:39	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/03/22 04:44	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 04:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		11/03/22 04:44	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		11/03/22 04:44	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		11/03/22 04:44	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 04:44		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

Sample: ITMW-10-202210 **Lab ID: 60413912002** Collected: 10/21/22 09:00 Received: 10/21/22 17:05 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		11/03/22 05:00	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/03/22 05:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/03/22 05:00	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/03/22 05:00	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 05:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 05:00	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 05:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 05:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 05:00	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 05:00	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/03/22 05:00	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 05:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 05:00	124-48-1	
1,1-Dichloroethane	**0.29J**	ug/L	1.0	0.12	1		11/03/22 05:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/03/22 05:00	107-06-2	
1,1-Dichloroethene	**0.93J**	ug/L	1.0	0.22	1		11/03/22 05:00	75-35-4	
cis-1,2-Dichloroethene	**5.7**	ug/L	1.0	0.13	1		11/03/22 05:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/03/22 05:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 05:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 05:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 05:00	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 05:00	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 05:00	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/03/22 05:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 05:00	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 05:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/03/22 05:00	79-34-5	
Tetrachloroethene	**0.33J**	ug/L	1.0	0.33	1		11/03/22 05:00	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/03/22 05:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/03/22 05:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/03/22 05:00	79-00-5	
Trichloroethene	**326**	ug/L	10.0	2.1	10		11/03/22 03:55	79-01-6	
Vinyl chloride	**0.29J**	ug/L	1.0	0.17	1		11/03/22 05:00	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 05:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		11/03/22 05:00	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		11/03/22 05:00	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		11/03/22 05:00	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 05:00		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

Sample: EB-04-202210 **Lab ID: 60413912003** Collected: 10/21/22 10:30 Received: 10/21/22 17:05 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		11/03/22 01:48	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/03/22 01:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/03/22 01:48	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/03/22 01:48	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 01:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 01:48	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 01:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 01:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 01:48	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 01:48	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/03/22 01:48	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 01:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 01:48	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/03/22 01:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/03/22 01:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/03/22 01:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		11/03/22 01:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/03/22 01:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 01:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 01:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 01:48	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 01:48	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 01:48	591-78-6	
Methylene Chloride	**1.6**	ug/L	1.0	0.39	1		11/03/22 01:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 01:48	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 01:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/03/22 01:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/03/22 01:48	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/03/22 01:48	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/03/22 01:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/03/22 01:48	79-00-5	
Trichloroethene	**0.29J**	ug/L	1.0	0.21	1		11/03/22 01:48	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/03/22 01:48	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 01:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		11/03/22 01:48	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		11/03/22 01:48	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		11/03/22 01:48	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 01:48		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

Sample: ITMW-9-202210 **Lab ID: 60413912004** Collected: 10/21/22 09:35 Received: 10/21/22 17:05 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		11/03/22 05:31	67-64-1	
Benzene	**0.31J**	ug/L	1.0	0.14	1		11/03/22 05:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/03/22 05:31	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/03/22 05:31	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 05:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 05:31	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 05:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 05:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 05:31	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 05:31	75-00-3	
Chloroform	**0.36J**	ug/L	1.0	0.22	1		11/03/22 05:31	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 05:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 05:31	124-48-1	
1,1-Dichloroethane	**0.88J**	ug/L	1.0	0.12	1		11/03/22 05:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/03/22 05:31	107-06-2	
1,1-Dichloroethene	**2.9**	ug/L	1.0	0.22	1		11/03/22 05:31	75-35-4	
cis-1,2-Dichloroethene	**39.3**	ug/L	1.0	0.13	1		11/03/22 05:31	156-59-2	
trans-1,2-Dichloroethene	**1.4**	ug/L	1.0	0.10	1		11/03/22 05:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 05:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 05:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 05:31	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 05:31	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 05:31	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/03/22 05:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 05:31	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 05:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/03/22 05:31	79-34-5	
Tetrachloroethene	**0.86J**	ug/L	1.0	0.33	1		11/03/22 05:31	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/03/22 05:31	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/03/22 05:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/03/22 05:31	79-00-5	
Trichloroethene	**802**	ug/L	50.0	10.5	50		11/03/22 04:11	79-01-6	
Vinyl chloride	**0.91J**	ug/L	1.0	0.17	1		11/03/22 05:31	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 05:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		11/03/22 05:31	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		11/03/22 05:31	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		11/03/22 05:31	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 05:31		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

Sample: MW-95-202210 **Lab ID: 60413912005** Collected: 10/21/22 08:58 Received: 10/21/22 17:05 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		11/04/22 03:18	67-64-1	
Benzene	**0.16J**	ug/L	1.0	0.14	1		11/04/22 03:18	71-43-2	
Bromodichloromethane	**0.41J**	ug/L	1.0	0.16	1		11/04/22 03:18	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/04/22 03:18	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/04/22 03:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/04/22 03:18	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/04/22 03:18	75-15-0	
Carbon tetrachloride	**0.46J**	ug/L	1.0	0.17	1		11/04/22 03:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/04/22 03:18	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/04/22 03:18	75-00-3	
Chloroform	**7.2**	ug/L	1.0	0.22	1		11/04/22 03:18	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/04/22 03:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/04/22 03:18	124-48-1	
1,1-Dichloroethane	**0.71J**	ug/L	1.0	0.12	1		11/04/22 03:18	75-34-3	
1,2-Dichloroethane	**0.22J**	ug/L	1.0	0.21	1		11/04/22 03:18	107-06-2	
1,1-Dichloroethene	**46.0**	ug/L	1.0	0.22	1		11/04/22 03:18	75-35-4	
cis-1,2-Dichloroethene	**674**	ug/L	100	12.9	100		11/04/22 14:18	156-59-2	
trans-1,2-Dichloroethene	**28.5**	ug/L	1.0	0.10	1		11/04/22 03:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/04/22 03:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/04/22 03:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/04/22 03:18	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/04/22 03:18	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/04/22 03:18	591-78-6	
Methylene Chloride	**3.1**	ug/L	1.0	0.39	1		11/04/22 03:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/04/22 03:18	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/04/22 03:18	100-42-5	
1,1,2,2-Tetrachloroethane	**0.75J**	ug/L	1.0	0.15	1		11/04/22 03:18	79-34-5	
Tetrachloroethene	**11.9**	ug/L	1.0	0.33	1		11/04/22 03:18	127-18-4	
Toluene	**1.4**	ug/L	1.0	0.25	1		11/04/22 03:18	108-88-3	
1,1,1-Trichloroethane	**5.7**	ug/L	1.0	0.11	1		11/04/22 03:18	71-55-6	
1,1,2-Trichloroethane	**2.5**	ug/L	1.0	0.14	1		11/04/22 03:18	79-00-5	
Trichloroethene	**29900**	ug/L	100	21.0	100		11/04/22 14:18	79-01-6	E
Trichloroethene	**36200**	ug/L	500	105	500		11/07/22 04:57	79-01-6	H1
Vinyl chloride	**5.3**	ug/L	1.0	0.17	1		11/04/22 03:18	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/04/22 03:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		11/04/22 03:18	460-00-4	
Toluene-d8 (S)	95	%	80-120		1		11/04/22 03:18	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		11/04/22 03:18	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/04/22 03:18		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

Sample: MW-198-202210 **Lab ID: 60413912006** Collected: 10/21/22 09:10 Received: 10/21/22 17:05 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		11/04/22 03:03	67-64-1	
Benzene	**0.24J**	ug/L	1.0	0.14	1		11/04/22 03:03	71-43-2	
Bromodichloromethane	**0.46J**	ug/L	1.0	0.16	1		11/04/22 03:03	75-27-4	
Bromoform	**0.85J**	ug/L	1.0	0.68	1		11/04/22 03:03	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/04/22 03:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/04/22 03:03	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/04/22 03:03	75-15-0	
Carbon tetrachloride	**0.41J**	ug/L	1.0	0.17	1		11/04/22 03:03	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/04/22 03:03	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/04/22 03:03	75-00-3	
Chloroform	**7.2**	ug/L	1.0	0.22	1		11/04/22 03:03	67-66-3	
Chloromethane	**0.49J**	ug/L	1.0	0.28	1		11/04/22 03:03	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/04/22 03:03	124-48-1	
1,1-Dichloroethane	**1.1**	ug/L	1.0	0.12	1		11/04/22 03:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/04/22 03:03	107-06-2	
1,1-Dichloroethene	**32.3**	ug/L	1.0	0.22	1		11/04/22 03:03	75-35-4	
cis-1,2-Dichloroethene	**1720**	ug/L	100	12.9	100		11/04/22 14:33	156-59-2	
trans-1,2-Dichloroethene	**45.6**	ug/L	1.0	0.10	1		11/04/22 03:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/04/22 03:03	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/04/22 03:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/04/22 03:03	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/04/22 03:03	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/04/22 03:03	591-78-6	
Methylene Chloride	**2.0**	ug/L	1.0	0.39	1		11/04/22 03:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/04/22 03:03	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/04/22 03:03	100-42-5	
1,1,2,2-Tetrachloroethane	**9.9**	ug/L	1.0	0.15	1		11/04/22 03:03	79-34-5	
Tetrachloroethene	**8.4**	ug/L	1.0	0.33	1		11/04/22 03:03	127-18-4	
Toluene	**0.50J**	ug/L	1.0	0.25	1		11/04/22 03:03	108-88-3	
1,1,1-Trichloroethane	**18.3**	ug/L	1.0	0.11	1		11/04/22 03:03	71-55-6	
1,1,2-Trichloroethane	**0.80J**	ug/L	1.0	0.14	1		11/04/22 03:03	79-00-5	
Trichloroethene	**18800**	ug/L	100	21.0	100		11/04/22 14:33	79-01-6	
Vinyl chloride	**95.4**	ug/L	1.0	0.17	1		11/04/22 03:03	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/04/22 03:03	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		11/04/22 03:03	460-00-4	
Toluene-d8 (S)	97	%	80-120		1		11/04/22 03:03	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		11/04/22 03:03	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/04/22 03:03		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

Sample: TB-05-202210 **Lab ID: 60413912007** Collected: 10/21/22 11:30 Received: 10/21/22 17:05 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		11/03/22 22:56	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/03/22 22:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/03/22 22:56	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/03/22 22:56	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 22:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 22:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 22:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 22:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 22:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 22:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/03/22 22:56	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 22:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 22:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/03/22 22:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/03/22 22:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/03/22 22:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		11/03/22 22:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/03/22 22:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 22:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 22:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 22:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 22:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 22:56	591-78-6	
Methylene Chloride	**1.1**	ug/L	1.0	0.39	1		11/03/22 22:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 22:56	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 22:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/03/22 22:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/03/22 22:56	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/03/22 22:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/03/22 22:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/03/22 22:56	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		11/03/22 22:56	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/03/22 22:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 22:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		11/03/22 22:56	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		11/03/22 22:56	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		11/03/22 22:56	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 22:56		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

QC Batch: 816145
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: 60413912001, 60413912002, 60413912003, 60413912004

METHOD BLANK: 3245910 Matrix: Water
Associated Lab Samples: 60413912001, 60413912002, 60413912003, 60413912004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	11/02/22 22:52	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	11/02/22 22:52	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	11/02/22 22:52	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	11/02/22 22:52	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	11/02/22 22:52	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	11/02/22 22:52	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	11/02/22 22:52	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	11/02/22 22:52	
2-Hexanone	ug/L	ND	10.0	1.1	11/02/22 22:52	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	11/02/22 22:52	
Acetone	ug/L	ND	10.0	2.5	11/02/22 22:52	
Benzene	ug/L	ND	1.0	0.14	11/02/22 22:52	
Bromodichloromethane	ug/L	ND	1.0	0.16	11/02/22 22:52	
Bromoform	ug/L	ND	1.0	0.68	11/02/22 22:52	
Bromomethane	ug/L	ND	5.0	0.46	11/02/22 22:52	
Carbon disulfide	ug/L	ND	5.0	0.98	11/02/22 22:52	
Carbon tetrachloride	ug/L	ND	1.0	0.17	11/02/22 22:52	
Chlorobenzene	ug/L	ND	1.0	0.089	11/02/22 22:52	
Chloroethane	ug/L	ND	1.0	0.37	11/02/22 22:52	
Chloroform	ug/L	ND	1.0	0.22	11/02/22 22:52	
Chloromethane	ug/L	ND	1.0	0.28	11/02/22 22:52	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	11/02/22 22:52	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	11/02/22 22:52	
Dibromochloromethane	ug/L	ND	1.0	0.30	11/02/22 22:52	
Ethylbenzene	ug/L	ND	1.0	0.12	11/02/22 22:52	
Methylene Chloride	ug/L	ND	1.0	0.39	11/02/22 22:52	
Styrene	ug/L	ND	1.0	0.12	11/02/22 22:52	
Tetrachloroethene	ug/L	ND	1.0	0.33	11/02/22 22:52	
Toluene	ug/L	ND	1.0	0.25	11/02/22 22:52	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	11/02/22 22:52	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	11/02/22 22:52	
Trichloroethene	ug/L	ND	1.0	0.21	11/02/22 22:52	
Vinyl chloride	ug/L	ND	1.0	0.17	11/02/22 22:52	
Xylene (Total)	ug/L	ND	3.0	0.28	11/02/22 22:52	
1,2-Dichlorobenzene-d4 (S)	%	101	80-120		11/02/22 22:52	
4-Bromofluorobenzene (S)	%	98	80-120		11/02/22 22:52	
Toluene-d8 (S)	%	100	80-120		11/02/22 22:52	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

LABORATORY CONTROL SAMPLE: 3245911

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.8	94	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.9	100	80-120	
1,1,2-Trichloroethane	ug/L	20	18.8	94	80-120	
1,1-Dichloroethane	ug/L	20	18.3	92	75-120	
1,1-Dichloroethene	ug/L	20	18.8	94	75-120	
1,2-Dichloroethane	ug/L	20	19.0	95	80-120	
1,2-Dichloropropane	ug/L	20	19.2	96	80-120	
2-Butanone (MEK)	ug/L	100	93.9	94	50-155	
2-Hexanone	ug/L	100	92.9	93	55-145	
4-Methyl-2-pentanone (MIBK)	ug/L	100	98.9	99	70-130	
Acetone	ug/L	100	93.0	93	35-160	
Benzene	ug/L	20	19.0	95	80-120	
Bromodichloromethane	ug/L	20	18.9	94	80-120	
Bromoform	ug/L	20	19.4	97	60-130	
Bromomethane	ug/L	20	21.5	108	50-140	
Carbon disulfide	ug/L	20	18.1	90	75-125	
Carbon tetrachloride	ug/L	20	19.0	95	70-130	
Chlorobenzene	ug/L	20	19.5	97	80-120	
Chloroethane	ug/L	20	18.2	91	70-130	
Chloroform	ug/L	20	19.0	95	75-120	
Chloromethane	ug/L	20	18.2	91	45-145	
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	75-125	
Ethylbenzene	ug/L	20	19.6	98	80-120	
Methylene Chloride	ug/L	20	17.8	89	70-140	
Styrene	ug/L	20	20.0	100	80-120	
Tetrachloroethene	ug/L	20	18.7	94	80-125	
Toluene	ug/L	20	19.1	95	80-120	
trans-1,2-Dichloroethene	ug/L	20	17.6	88	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.5	93	75-125	
Trichloroethene	ug/L	20	19.2	96	80-125	
Vinyl chloride	ug/L	20	18.2	91	65-140	
Xylene (Total)	ug/L	60	58.8	98	80-120	
1,2-Dichlorobenzene-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			100	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

QC Batch: 816367
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: 60413912005, 60413912006, 60413912007

METHOD BLANK: 3246830 Matrix: Water
Associated Lab Samples: 60413912005, 60413912006, 60413912007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	11/03/22 22:41	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	11/03/22 22:41	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	11/03/22 22:41	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	11/03/22 22:41	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	11/03/22 22:41	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	11/03/22 22:41	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	11/03/22 22:41	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	11/03/22 22:41	
2-Hexanone	ug/L	ND	10.0	1.1	11/03/22 22:41	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	11/03/22 22:41	
Acetone	ug/L	ND	10.0	2.5	11/03/22 22:41	
Benzene	ug/L	ND	1.0	0.14	11/03/22 22:41	
Bromodichloromethane	ug/L	ND	1.0	0.16	11/03/22 22:41	
Bromoform	ug/L	ND	1.0	0.68	11/03/22 22:41	
Bromomethane	ug/L	ND	5.0	0.46	11/03/22 22:41	
Carbon disulfide	ug/L	ND	5.0	0.98	11/03/22 22:41	
Carbon tetrachloride	ug/L	ND	1.0	0.17	11/03/22 22:41	
Chlorobenzene	ug/L	ND	1.0	0.089	11/03/22 22:41	
Chloroethane	ug/L	ND	1.0	0.37	11/03/22 22:41	
Chloroform	ug/L	ND	1.0	0.22	11/03/22 22:41	
Chloromethane	ug/L	ND	1.0	0.28	11/03/22 22:41	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	11/03/22 22:41	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	11/03/22 22:41	
Dibromochloromethane	ug/L	ND	1.0	0.30	11/03/22 22:41	
Ethylbenzene	ug/L	ND	1.0	0.12	11/03/22 22:41	
Methylene Chloride	ug/L	ND	1.0	0.39	11/03/22 22:41	
Styrene	ug/L	ND	1.0	0.12	11/03/22 22:41	
Tetrachloroethene	ug/L	ND	1.0	0.33	11/03/22 22:41	
Toluene	ug/L	ND	1.0	0.25	11/03/22 22:41	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	11/03/22 22:41	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	11/03/22 22:41	
Trichloroethene	ug/L	ND	1.0	0.21	11/03/22 22:41	
Vinyl chloride	ug/L	ND	1.0	0.17	11/03/22 22:41	
Xylene (Total)	ug/L	ND	3.0	0.28	11/03/22 22:41	
1,2-Dichlorobenzene-d4 (S)	%	103	80-120		11/03/22 22:41	
4-Bromofluorobenzene (S)	%	101	80-120		11/03/22 22:41	
Toluene-d8 (S)	%	97	80-120		11/03/22 22:41	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

LABORATORY CONTROL SAMPLE: 3246831

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.4	107	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.2	96	80-120	
1,1,2-Trichloroethane	ug/L	20	19.8	99	80-120	
1,1-Dichloroethane	ug/L	20	20.3	102	75-120	
1,1-Dichloroethene	ug/L	20	22.3	112	75-120	
1,2-Dichloroethane	ug/L	20	19.8	99	80-120	
1,2-Dichloropropane	ug/L	20	20.1	100	80-120	
2-Butanone (MEK)	ug/L	100	80.1	80	50-155	
2-Hexanone	ug/L	100	89.6	90	55-145	
4-Methyl-2-pentanone (MIBK)	ug/L	100	95.1	95	70-130	
Acetone	ug/L	100	64.8	65	35-160	
Benzene	ug/L	20	20.0	100	80-120	
Bromodichloromethane	ug/L	20	20.3	101	80-120	
Bromoform	ug/L	20	21.1	106	60-130	
Bromomethane	ug/L	20	21.7	109	50-140	
Carbon disulfide	ug/L	20	21.2	106	75-125	
Carbon tetrachloride	ug/L	20	19.4	97	70-130	
Chlorobenzene	ug/L	20	20.4	102	80-120	
Chloroethane	ug/L	20	21.3	107	70-130	
Chloroform	ug/L	20	20.8	104	75-120	
Chloromethane	ug/L	20	18.5	92	45-145	
cis-1,2-Dichloroethene	ug/L	20	20.4	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.5	98	75-125	
Dibromochloromethane	ug/L	20	21.4	107	75-125	
Ethylbenzene	ug/L	20	21.3	106	80-120	
Methylene Chloride	ug/L	20	22.8	114	70-140	
Styrene	ug/L	20	21.6	108	80-120	
Tetrachloroethene	ug/L	20	23.0	115	80-125	
Toluene	ug/L	20	20.2	101	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.9	109	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.6	98	75-125	
Trichloroethene	ug/L	20	20.8	104	80-125	
Vinyl chloride	ug/L	20	22.0	110	65-140	
Xylene (Total)	ug/L	60	60.3	100	80-120	
1,2-Dichlorobenzene-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			99	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

QC Batch: 816613
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: 60413912005, 60413912006

METHOD BLANK: 3247951 Matrix: Water
Associated Lab Samples: 60413912005, 60413912006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	11/04/22 10:39	
Trichloroethene	ug/L	0.58J	1.0	0.21	11/04/22 10:39	
1,2-Dichlorobenzene-d4 (S)	%	103	80-120		11/04/22 10:39	
4-Bromofluorobenzene (S)	%	101	80-120		11/04/22 10:39	
Toluene-d8 (S)	%	97	80-120		11/04/22 10:39	

LABORATORY CONTROL SAMPLE: 3247952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	20	19.1	95	80-120	
Trichloroethene	ug/L	20	19.7	99	80-125	
1,2-Dichlorobenzene-d4 (S)	%			94	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3247953 3247954

Parameter	Units	60413943005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
cis-1,2-Dichloroethene	ug/L	ND	500	500	524	511	105	102	80-120	3	20	
Trichloroethene	ug/L	ND	500	500	536	531	105	104	80-125	1	20	
1,2-Dichlorobenzene-d4 (S)	%						102	101	80-120			
4-Bromofluorobenzene (S)	%						102	101	80-120			
Toluene-d8 (S)	%						99	98	80-120			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

QC Batch: 816832
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: 60413912005

METHOD BLANK: 3248891 Matrix: Water
Associated Lab Samples: 60413912005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Trichloroethene	ug/L	0.22J	1.0	0.21	11/07/22 00:20	
1,2-Dichlorobenzene-d4 (S)	%	103	80-120		11/07/22 00:20	
4-Bromofluorobenzene (S)	%	103	80-120		11/07/22 00:20	
Toluene-d8 (S)	%	98	80-120		11/07/22 00:20	

LABORATORY CONTROL SAMPLE: 3248892

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	20.2	101	80-125	
1,2-Dichlorobenzene-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			98	80-120	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

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

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
H1	Analysis conducted outside the EPA method holding time.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413912

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60413912001	**IW-73-202210**	EPA 5030B/8260	816145		
60413912002	**ITMW-10-202210**	EPA 5030B/8260	816145		
60413912003	**EB-04-202210**	EPA 5030B/8260	816145		
60413912004	**ITMW-9-202210**	EPA 5030B/8260	816145		
60413912005	**MW-95-202210**	EPA 5030B/8260	816367		
60413912005	**MW-95-202210**	EPA 5030B/8260	816613		
60413912005	**MW-95-202210**	EPA 5030B/8260	816832		
60413912006	**MW-198-202210**	EPA 5030B/8260	816367		
60413912006	**MW-198-202210**	EPA 5030B/8260	816613		
60413912007	**TB-05-202210**	EPA 5030B/8260	816367		

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sampl	WO# : 60413912
	Revision: 2	Effective Date: 01/12/202

Client Name: Ramsdell

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: T299 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 2.9 **Corr. Factor** 0.0 **Corrected** 2.9

Date and initials of person examining contents: 10.25.2021 AC

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	
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	20694
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™
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:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	Standard TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	VOCs

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	IW-73-202210	WT	G			10/21/22	0930		3				X					X	X		60413912
2	ITMW-10-202210	WT	G			10/21/22	0900		3				X					X	X		
3	EB-04-202210	WT	G			10/21/22	1030		3				X					X	X		
4	ITMW-9-202210	WT	G			10/21/22	0935		3				X					X	X		
5	MW-95-202210	WT	G			10/21/22	0858		3				X					X	X		
6	MW-198-202210	WT	G			10/21/22	0910		3				X					X	X		
7	TB-05-202210	WT	G			10/21/22	1130		2				X					X	X		
8																					
9																					
10																					
11																					
12																					

GP

JD69H

2469H

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ramboll	10-21-22	1600		10/21	1705	2.9	Y	Y	-1

	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 Bellmer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-21-22

*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 Environ Profile #

Site: Whirlpool Fort Smith Notes 1 page

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		7																														
4		3																														
5		3																														
6		2																														
7	↓	2																														
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: 60413912

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
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November 04, 2022

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 21, 2022. 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 Gulf Coast
- 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.

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CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 22-031-0
Illinois Certification #: 2000302021-3
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 #: T104704407-21-15
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Gulf Coast
7979 Innovation Park Drive, Baton Rouge, LA 70820
Arkansas Certification #: 88-0655
DoD ELAP Certification #: 6429-01
Florida Certification #: E87854
Illinois Certification #: 004585
Kansas Certification #: E-10354
Louisiana/LELAP Certification #: 01955
North Carolina Certification #: 618
North Dakota Certification #: R-195
Oklahoma Certification #: 2019-101
South Carolina Certification #: 73006001
Texas Certification #: T104704178-19-11
USDA Soil Permit # P330-19-00209
Virginia Certification #: 460215
Washington Certification #: C929

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SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60413975001	**MW-25R-202210**	Water	10/20/22 12:45	10/21/22 02:15
60413975002	**MW-38-202210**	Water	10/20/22 14:35	10/21/22 02:15
60413975003	**MW-89-202210**	Water	10/18/22 18:08	10/21/22 02:15
60413975004	**MW-87-202210**	Water	10/20/22 12:28	10/21/22 02:15
60413975005	**MW-58R-202210**	Water	10/20/22 12:28	10/21/22 02:15
60413975006	**IW-73-202210**	Water	10/20/22 14:55	10/21/22 02:15

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60413975001	**MW-25R-202210**	AM20GAX	LMB	4	GCLA
		EPA 6010	MA1	1	PASI-K
		SM 4500-S-2 D	KLM	1	PASI-K
		EPA 300.0	CRN2	1	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K
60413975002	**MW-38-202210**	AM20GAX	LMB	1	GCLA
		AM20GAX	LMB	4	GCLA
		EPA 6010	MA1	1	PASI-K
		SM 4500-S-2 D	KLM	1	PASI-K
		EPA 300.0	CRN2	1	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K
60413975003	**MW-89-202210**	AM20GAX	LMB	1	GCLA
60413975004	**MW-87-202210**	AM20GAX	LMB	1	GCLA
		AM20GAX	LMB	4	GCLA
		EPA 6010	MA1	1	PASI-K
		SM 4500-S-2 D	KLM	1	PASI-K
		EPA 300.0	CRN2	1	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K
60413975005	**MW-58R-202210**	AM20GAX	LMB	1	GCLA
		AM20GAX	LMB	4	GCLA
		EPA 6010	MA1	1	PASI-K
		SM 4500-S-2 D	KLM	1	PASI-K
		EPA 300.0	CRN2	1	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K
60413975006	**IW-73-202210**	AM20GAX	LMB	1	GCLA
		EPA 6010	MA1	1	PASI-K
		SM 4500-S-2 D	KLM	1	PASI-K
		EPA 300.0	CRN2	1	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K

GCLA = Pace Analytical Gulf Coast
PASI-K = Pace Analytical Services - Kansas City

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Method: **AM20GAX**
Description: Indicator Gases Bubblestrip H2
Client: Ramboll_AR
Date: November 04, 2022

General Information:
5 samples were analyzed for AM20GAX by Pace Analytical Gulf Coast. 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.

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.: 60413975

Method: **AM20GAX**
Description: Indicator Gases Water LHC
Client: Ramboll_AR
Date: November 04, 2022

General Information:
4 samples were analyzed for AM20GAX by Pace Analytical Gulf Coast. 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.

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: 752797

R1: RPD value was outside control limits.

- LCSD (Lab ID: 2413843)
  - Acetylene
  - Methane

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.: 60413975

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Ramboll_AR
Date: November 04, 2022

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:

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Ramboll_AR
Date: November 04, 2022

General Information:
5 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: 814990

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413975001

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

- MS (Lab ID: 3241237)
  - Sulfide, Total
- MSD (Lab ID: 3241238)
  - Sulfide, Total

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

Additional Comments:

Pace Analytical Services, LLC
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(913)599-5665

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Ramboll_AR
Date: November 04, 2022

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:

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 pres.
Client: Ramboll_AR
Date: November 04, 2022

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: 816177

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413695002,60413979003

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

- MS (Lab ID: 3246138)
  - Nitrogen, NO2 plus NO3
- MS (Lab ID: 3246140)
  - Nitrogen, NO2 plus NO3

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

Additional Comments:

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Method: **SM 5310C**
Description: 5310C TOC
Client: Ramboll_AR
Date: November 04, 2022

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.: 60413975

Sample: MW-25R-202210 **Lab ID: 60413975001** Collected: 10/20/22 12:45 Received: 10/21/22 02:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**38**	ug/L	5.0	2.0	1		10/28/22 07:50	74-82-8	
Ethane	**5.5**	ug/L	1.0	0.17	1		10/28/22 07:50	74-84-0	
Ethene	**0.27J**	ug/L	1.0	0.24	1		10/28/22 07:50	74-85-1	
Acetylene	ND	ug/L	0.50	0.13	1		10/28/22 07:50	74-86-2	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**118**	ug/L	50.0	5.6	1	10/28/22 12:48	11/03/22 15:32	7439-89-6	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.021	1		10/27/22 09:16	18496-25-8	M1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Sulfate	**681**	mg/L	100	55.0	100		10/31/22 12:42	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**0.43**	mg/L	0.10	0.078	1		11/02/22 15:16		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.42J**	mg/L	1.0	0.30	1		11/02/22 14:41	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Sample: MW-38-202210 **Lab ID: 60413975002** Collected: 10/20/22 14:35 Received: 10/21/22 02:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Bubblestrip H2	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Hydrogen	ND	nM	1.9	0.49	1		10/31/22 07:18	1333-74-0	
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**10**	ug/L	5.0	2.0	1		10/28/22 08:03	74-82-8	
Ethane	**0.37J**	ug/L	1.0	0.17	1		10/28/22 08:03	74-84-0	
Ethene	**25**	ug/L	1.0	0.24	1		10/28/22 08:03	74-85-1	
Acetylene	ND	ug/L	0.50	0.13	1		10/28/22 08:03	74-86-2	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**5770**	ug/L	50.0	5.6	1	10/28/22 12:48	11/03/22 15:40	7439-89-6	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.021	1		10/27/22 09:17	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Sulfate	**109**	mg/L	20.0	11.0	20		10/31/22 12:57	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		11/02/22 15:17		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.30	1		11/02/22 14:55	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Sample: MW-89-202210 **Lab ID: 60413975003** Collected: 10/18/22 18:08 Received: 10/21/22 02:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Bubblestrip H2	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Hydrogen	**1.2J**	nM	1.9	0.49	1		10/31/22 07:30	1333-74-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Sample: MW-87-202210 **Lab ID: 60413975004** Collected: 10/20/22 12:28 Received: 10/21/22 02:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Bubblestrip H2	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Hydrogen	**1.2J**	nM	1.9	0.49	1		10/31/22 07:42	1333-74-0	
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	ND	ug/L	5.0	2.0	1		10/28/22 08:15	74-82-8	
Ethane	ND	ug/L	1.0	0.17	1		10/28/22 08:15	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/28/22 08:15	74-85-1	
Acetylene	ND	ug/L	0.50	0.13	1		10/28/22 08:15	74-86-2	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**837**	ug/L	50.0	5.6	1	10/28/22 12:48	11/03/22 15:42	7439-89-6	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**0.023J**	mg/L	0.050	0.021	1		10/27/22 09:19	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Sulfate	**12.2**	mg/L	2.0	1.1	2		10/31/22 13:11	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**1.5**	mg/L	0.10	0.078	1		11/02/22 15:18		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.30	1		11/02/22 15:38	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Sample: MW-58R-202210 **Lab ID: 60413975005** Collected: 10/20/22 12:28 Received: 10/21/22 02:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Bubblestrip H2	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Hydrogen	**1.3J**	nM	1.9	0.49	1		10/31/22 07:55	1333-74-0	
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**22**	ug/L	5.0	2.0	1		10/28/22 08:41	74-82-8	
Ethane	ND	ug/L	1.0	0.17	1		10/28/22 08:41	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/28/22 08:41	74-85-1	
Acetylene	ND	ug/L	0.50	0.13	1		10/28/22 08:41	74-86-2	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**294**	ug/L	50.0	5.6	1	10/28/22 12:48	11/03/22 15:44	7439-89-6	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.021	1		10/27/22 09:19	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Sulfate	**2.4**	mg/L	1.0	0.55	1		10/31/22 13:41	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**2.1**	mg/L	0.10	0.078	1		11/02/22 15:19		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.30	1		11/02/22 15:52	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Sample: IW-73-202210 **Lab ID: 60413975006** Collected: 10/20/22 14:55 Received: 10/21/22 02:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Bubblestrip H2	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Hydrogen	ND	nM	1.9	0.49	1		10/31/22 08:07	1333-74-0	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**215**	ug/L	50.0	5.6	1	10/28/22 12:48	11/03/22 15:50	7439-89-6	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.021	1		10/27/22 09:20	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Sulfate	**34.4**	mg/L	10.0	5.5	10		10/28/22 19:42	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**0.27**	mg/L	0.10	0.078	1		11/02/22 15:20		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.30	1		11/02/22 16:07	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

QC Batch: 753015
QC Batch Method: AM20GAX
Analysis Method: AM20GAX
Analysis Description: Indicator Gases Bubble Strip H2
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413975002, 60413975003, 60413975004, 60413975005, 60413975006

METHOD BLANK: 2415038 Matrix: Air
Associated Lab Samples: 60413975002, 60413975003, 60413975004, 60413975005, 60413975006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Hydrogen	nM	ND	1.9	0.49	10/31/22 07:05	

LABORATORY CONTROL SAMPLE & LCSD: 2415039 2415040

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Hydrogen	nM	12	14	14	118	121	70-130	2	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

QC Batch: 752797
QC Batch Method: AM20GAX
Analysis Method: AM20GAX
Analysis Description: Indicator Gases Water LHC
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413975001, 60413975002, 60413975004, 60413975005

METHOD BLANK: 2413841 Matrix: Water
Associated Lab Samples: 60413975001, 60413975002, 60413975004, 60413975005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Methane	ug/L	ND	5.0	2.0	10/28/22 06:44	
Ethane	ug/L	ND	1.0	0.17	10/28/22 06:44	
Ethene	ug/L	ND	1.0	0.24	10/28/22 06:44	
Acetylene	ug/L	ND	0.50	0.13	10/28/22 06:44	

LABORATORY CONTROL SAMPLE & LCSD: 2413842 2413843

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	750	560	840	75	113	70-130	41	20	R1
Ethane	ug/L	38	49	45	130	120	70-130	8	20	
Ethene	ug/L	35	46	43	130	121	70-130	8	20	
Acetylene	ug/L	33	34	26	105	80	70-130	27	20	R1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

QC Batch: 815334
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413975001, 60413975002, 60413975004, 60413975005, 60413975006

METHOD BLANK: 3242637 Matrix: Water
Associated Lab Samples: 60413975001, 60413975002, 60413975004, 60413975005, 60413975006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	5.6J	50.0	5.6	11/03/22 15:30	

LABORATORY CONTROL SAMPLE: 3242638

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9700	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3242639 3242640

Parameter	Units	60413975005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	294	10000	10000	9660	9910	94	96	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

QC Batch: 814990
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: 60413975001, 60413975002, 60413975004, 60413975005, 60413975006

METHOD BLANK: 3241235 Matrix: Water
Associated Lab Samples: 60413975001, 60413975002, 60413975004, 60413975005, 60413975006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	0.021	10/27/22 09:16	

LABORATORY CONTROL SAMPLE: 3241236

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.50	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3241237 3241238

Parameter	Units	60413975001 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	0.32	0.32	64	64	75-125	0	20	M1

SAMPLE DUPLICATE: 3241239

Parameter	Units	60413975002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

QC Batch: 815091 | Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 | Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413975001, 60413975002, 60413975004, 60413975005, 60413975006

METHOD BLANK: 3241641 Matrix: Water
Associated Lab Samples: 60413975001, 60413975002, 60413975004, 60413975005, 60413975006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	0.55	10/28/22 15:19	

METHOD BLANK: 3244815 Matrix: Water
Associated Lab Samples: 60413975001, 60413975002, 60413975004, 60413975005, 60413975006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	0.55	10/31/22 08:41	

LABORATORY CONTROL SAMPLE: 3241642

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

LABORATORY CONTROL SAMPLE: 3244816

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	5.2	104	90-110	

MATRIX SPIKE SAMPLE: 3241645

Parameter	Units	60413975004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	12.2	10	22.3	101	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

QC Batch: 816177
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413975001, 60413975002, 60413975004, 60413975005, 60413975006

METHOD BLANK: 3246136 Matrix: Water
Associated Lab Samples: 60413975001, 60413975002, 60413975004, 60413975005, 60413975006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.078	11/02/22 15:07	

LABORATORY CONTROL SAMPLE: 3246137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 3246138

Parameter	Units	60413695002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	2	1.6	82	90-110	M1

MATRIX SPIKE SAMPLE: 3246140

Parameter	Units	60413979003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	2	1.5	74	90-110	M1

SAMPLE DUPLICATE: 3246139

Parameter	Units	60413543003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4.3	4.3	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

QC Batch: 816057
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413975001, 60413975002, 60413975004, 60413975005, 60413975006

METHOD BLANK: 3245548 Matrix: Water
Associated Lab Samples: 60413975001, 60413975002, 60413975004, 60413975005, 60413975006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.30	11/02/22 09:56	

LABORATORY CONTROL SAMPLE: 3245549

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

MATRIX SPIKE SAMPLE: 3245550

Parameter	Units	60413695001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	1.8	5	6.9	102	80-120	

SAMPLE DUPLICATE: 3245551

Parameter	Units	60413695003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND		25	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

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

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413975

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60413975002	**MW-38-202210**	AM20GAX	753015		
60413975003	**MW-89-202210**	AM20GAX	753015		
60413975004	**MW-87-202210**	AM20GAX	753015		
60413975005	**MW-58R-202210**	AM20GAX	753015		
60413975006	**IW-73-202210**	AM20GAX	753015		
60413975001	**MW-25R-202210**	AM20GAX	752797		
60413975002	**MW-38-202210**	AM20GAX	752797		
60413975004	**MW-87-202210**	AM20GAX	752797		
60413975005	**MW-58R-202210**	AM20GAX	752797		
60413975001	**MW-25R-202210**	EPA 3010	815334	EPA 6010	815391
60413975002	**MW-38-202210**	EPA 3010	815334	EPA 6010	815391
60413975004	**MW-87-202210**	EPA 3010	815334	EPA 6010	815391
60413975005	**MW-58R-202210**	EPA 3010	815334	EPA 6010	815391
60413975006	**IW-73-202210**	EPA 3010	815334	EPA 6010	815391
60413975001	**MW-25R-202210**	SM 4500-S-2 D	814990		
60413975002	**MW-38-202210**	SM 4500-S-2 D	814990		
60413975004	**MW-87-202210**	SM 4500-S-2 D	814990		
60413975005	**MW-58R-202210**	SM 4500-S-2 D	814990		
60413975006	**IW-73-202210**	SM 4500-S-2 D	814990		
60413975001	**MW-25R-202210**	EPA 300.0	815091		
60413975002	**MW-38-202210**	EPA 300.0	815091		
60413975004	**MW-87-202210**	EPA 300.0	815091		
60413975005	**MW-58R-202210**	EPA 300.0	815091		
60413975006	**IW-73-202210**	EPA 300.0	815091		
60413975001	**MW-25R-202210**	EPA 353.2	816177		
60413975002	**MW-38-202210**	EPA 353.2	816177		
60413975004	**MW-87-202210**	EPA 353.2	816177		
60413975005	**MW-58R-202210**	EPA 353.2	816177		
60413975006	**IW-73-202210**	EPA 353.2	816177		
60413975001	**MW-25R-202210**	SM 5310C	816057		
60413975002	**MW-38-202210**	SM 5310C	816057		
60413975004	**MW-87-202210**	SM 5310C	816057		
60413975005	**MW-58R-202210**	SM 5310C	816057		
60413975006	**IW-73-202210**	SM 5310C	816057		

WO# : 60413975

60413975

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sample		
	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: T-299 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 0.311 **Corr. Factor** 0 **Corrected** 0.311

Date and initials of person examining contents: EC 10/26

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	
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#:** 6105009 6106001	☒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: _____

Qualtrax Document ID: 30468

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:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
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 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	6010 Iron	Sulfate	Sulfide	Nitrate+Nitrite	TOC	Methane/Ethane/Ethene+Acetylene	Dissolved Hydrogen	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-25R-202210	WT	G			10/20/22	1245		7	X	X	X		X			X		X	X	X	X	X	X	X		60413975
2	MW-38-202210	WT	G			10/20/22	1435		8	X	X	X		X			X		X	X	X	X	X	X	X		
3	MW-89-202210	AR	G			10/18/22	1808		1	X															X		
4	MW-87-202210	WT	G			10/20/22	1228		8	X	X	X		X			X		X	X	X	X	X	X	X		
5	MW-58R-202210	WT	G			10/20/22	1247		8	X	X	X		X			X		X	X	X	X	X	X	X		
6	TW-73-202210	WT	G			10/20/22	1455		8	X	X	X		X			X		X	X	X	X	X	X	X		
7																											
8																											
9																											
10																											
11																											
12																											

GP

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
M/E/E+A and Dissolved Hydrogen to Pace Gulf Coast	Ramboll	10-22	1750	Pace	10/21	0215	03/21	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Julia Fellner

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-20-22

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

Client: Ramboll

Profile # 74441ine 1

Site: whirlpool Ford smith MNA

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									1								1		1				1			1		
2	WT			3									1																	1		
3	WT																				1		1				1			1		
4	WT			3									1								1		1				1			1		
5	WT			3									1								1		1				1			1		
6	WT			/									1								1		1				1			1		
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: 60413975

Pace Analytical Services, LLC
9608 Loiret Blvd.
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November 04, 2022

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 21, 2022. 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 Gulf Coast
- 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.

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 22-031-0
Illinois Certification #: 2000302021-3
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 #: T104704407-21-15
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Gulf Coast
7979 Innovation Park Drive, Baton Rouge, LA 70820
Arkansas Certification #: 88-0655
DoD ELAP Certification #: 6429-01
Florida Certification #: E87854
Illinois Certification #: 004585
Kansas Certification #: E-10354
Louisiana/LELAP Certification #: 01955
North Carolina Certification #: 618
North Dakota Certification #: R-195
Oklahoma Certification #: 2019-101
South Carolina Certification #: 73006001
Texas Certification #: T104704178-19-11
USDA Soil Permit # P330-19-00209
Virginia Certification #: 460215
Washington Certification #: C929

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SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60413979001	**TMW-32-202210**	Water	10/20/22 09:13	10/21/22 02:15
60413979002	**MW-185-202210**	Water	10/20/22 10:00	10/21/22 02:15
60413979003	**TMW-22R-202210**	Water	10/20/22 11:30	10/21/22 02:15
60413979004	**TMW-34-202210**	Water	10/20/22 11:09	10/21/22 02:15

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60413979001	**TMW-32-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	CRN2	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413979002	**MW-185-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	CRN2	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413979003	**TMW-22R-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	CRN2	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA
60413979004	**TMW-34-202210**	AM20GAX	LMB	3	GCLA
		EPA 6010	MA1	1	PASI-K
		EPA 300.0	CRN2	2	PASI-K
		EPA 353.2	JS2	1	PASI-K
		SM 5310C	SZ	1	PASI-K
		SM 5310C	BLA	1	PASI-K
		AM23G	LHM	10	GCLA

GCLA = Pace Analytical Gulf Coast
PASI-K = Pace Analytical Services - Kansas City

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

Method: **AM20GAX**
Description: Indicator Gases Water LHC
Client: Ramboll_AR
Date: November 04, 2022

General Information:
4 samples were analyzed for AM20GAX by Pace Analytical Gulf Coast. 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.

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.: 60413979

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Ramboll_AR
Date: November 04, 2022

General Information:
4 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.: 60413979

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Ramboll_AR
Date: November 04, 2022

General Information:
4 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: 815091

B: Analyte was detected in the associated method blank.
- BLANK for HBN 815091 [WETA/925 (Lab ID: 3241641)
  - Chloride
- BLANK for HBN 815091 [WETA/925 (Lab ID: 3244815)
  - Chloride

QC Batch: 815780

B: Analyte was detected in the associated method blank.
- BLANK for HBN 815780 [WETA/926 (Lab ID: 3244277)
  - 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: 815780

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413943005

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 3244279)
  - Chloride
  - Sulfate

R1: RPD value was outside control limits.
- MSD (Lab ID: 3244280)
  - 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.: 60413979

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Ramboll_AR
Date: November 04, 2022

Analyte Comments:

QC Batch: 815780

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- DUP (Lab ID: 3244281)
  - Chloride
- MS (Lab ID: 3244279)
  - Chloride
- MSD (Lab ID: 3244280)
  - Chloride

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 pres.
Client: Ramboll_AR
Date: November 04, 2022

General Information:
4 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: 816177

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413695002,60413979003

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

- MS (Lab ID: 3246138)
  - Nitrogen, NO2 plus NO3
- MS (Lab ID: 3246140)
  - Nitrogen, NO2 plus NO3

QC Batch: 816376

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60413955012,60413979004

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

- MS (Lab ID: 3246856)
  - Nitrogen, NO2 plus NO3

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

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

Method: **SM 5310C**
Description: 5310C TOC
Client: Ramboll_AR
Date: November 04, 2022

General Information:
4 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.: 60413979

Method: **SM 5310C**
Description: 5310C Diss. Organic Carbon LF
Client: Ramboll_AR
Date: November 04, 2022

General Information:
4 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.: 60413979

Method: **AM23G**
Description: Low Level Volatile Fatty Acids
Client: Ramboll_AR
Date: November 04, 2022

General Information:
4 samples were analyzed for AM23G by Pace Analytical Gulf Coast. 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:

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.: 60413979

Sample: TMW-32-202210 **Lab ID: 60413979001** Collected: 10/20/22 09:13 Received: 10/21/22 02:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**3000**	ug/L	5.0	2.0	1		10/31/22 10:49	74-82-8	
Ethane	**0.57J**	ug/L	1.0	0.17	1		10/31/22 10:49	74-84-0	
Ethene	**0.36J**	ug/L	1.0	0.24	1		10/31/22 10:49	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**5690**	ug/L	50.0	5.6	1	10/28/22 12:48	11/03/22 15:52	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**85.0**	mg/L	10.0	5.3	10		10/31/22 14:10	16887-00-6	
Sulfate	**37.4**	mg/L	10.0	5.5	10		10/31/22 14:10	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		11/02/22 15:21		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.77J**	mg/L	1.0	0.30	1		11/02/22 16:21	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**1.7**	mg/L	1.0	0.30	1		10/31/22 14:31		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**4.1J**	mg/L	5.0	0.53	10		10/31/22 16:02	50-21-5	
Acetic Acid	**1.8J**	mg/L	5.0	1.2	10		10/31/22 16:02	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/31/22 16:02	79-09-4	
Formic acid	**56**	mg/L	5.0	0.55	10		10/31/22 16:02	64-18-6	
Butyric Acid	**0.67J**	mg/L	5.0	0.58	10		10/31/22 16:02	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/31/22 16:02	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/31/22 16:02	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/31/22 16:02	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/31/22 16:02	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/31/22 16:02	142-62-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

Sample: MW-185-202210 **Lab ID: 60413979002** Collected: 10/20/22 10:00 Received: 10/21/22 02:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	ND	ug/L	5.0	2.0	1		10/31/22 11:01	74-82-8	
Ethane	ND	ug/L	1.0	0.17	1		10/31/22 11:01	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/31/22 11:01	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**73.6**	ug/L	50.0	5.6	1	10/28/22 12:48	11/03/22 15:54	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**53.3**	mg/L	10.0	5.3	10		10/31/22 14:24	16887-00-6	B
Sulfate	**11.7**	mg/L	10.0	5.5	10		10/31/22 14:24	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**5.6**	mg/L	0.20	0.16	2		11/02/22 15:37		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.30	1		11/02/22 16:35	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**0.42J**	mg/L	1.0	0.30	1		10/31/22 15:14		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**2.1**	mg/L	0.50	0.053	1		10/31/22 16:24	50-21-5	
Acetic Acid	**0.26J**	mg/L	0.50	0.12	1		10/31/22 16:24	64-19-7	
Propionic Acid	ND	mg/L	0.50	0.053	1		10/31/22 16:24	79-09-4	
Formic acid	**5.3**	mg/L	0.50	0.055	1		10/31/22 16:24	64-18-6	
Butyric Acid	ND	mg/L	0.50	0.058	1		10/31/22 16:24	107-92-6	
Pyruvic Acid	ND	mg/L	0.50	0.060	1		10/31/22 16:24	127-17-3	
i-Pentanoic Acid	ND	mg/L	0.50	0.061	1		10/31/22 16:24	503-74-2	
Pentanoic Acid	ND	mg/L	0.50	0.056	1		10/31/22 16:24	109-52-4	
i-Hexanoic Acid	ND	mg/L	0.50	0.056	1		10/31/22 16:24	646-07-1	
Hexanoic Acid	ND	mg/L	0.50	0.058	1		10/31/22 16:24	142-62-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

Sample: TMW-22R-202210 **Lab ID: 60413979003** Collected: 10/20/22 11:30 Received: 10/21/22 02:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**6300**	ug/L	5.0	2.0	1		10/31/22 11:13	74-82-8	
Ethane	**2.7**	ug/L	1.0	0.17	1		10/31/22 11:13	74-84-0	
Ethene	**12**	ug/L	1.0	0.24	1		10/31/22 11:13	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**12500**	ug/L	50.0	5.6	1	10/28/22 12:48	11/03/22 15:56	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**202**	mg/L	20.0	10.5	20		11/02/22 23:43	16887-00-6	
Sulfate	**1.7**	mg/L	1.0	0.55	1		11/03/22 22:34	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.078	1		11/02/22 15:25		M1
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.68J**	mg/L	1.0	0.30	1		11/03/22 12:50	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**0.88J**	mg/L	1.0	0.30	1		10/31/22 15:29		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**4.3J**	mg/L	5.0	0.53	10		10/31/22 16:45	50-21-5	
Acetic Acid	**1.7J**	mg/L	5.0	1.2	10		10/31/22 16:45	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/31/22 16:45	79-09-4	
Formic acid	**49**	mg/L	5.0	0.55	10		10/31/22 16:45	64-18-6	
Butyric Acid	ND	mg/L	5.0	0.58	10		10/31/22 16:45	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/31/22 16:45	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/31/22 16:45	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/31/22 16:45	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/31/22 16:45	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/31/22 16:45	142-62-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

Sample: TMW-34-202210 **Lab ID: 60413979004** Collected: 10/20/22 11:09 Received: 10/21/22 02:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Indicator Gases Water LHC	Analytical Method: AM20GAX Pace Analytical Gulf Coast								
Methane	**1100**	ug/L	5.0	2.0	1		10/31/22 11:26	74-82-8	
Ethane	ND	ug/L	1.0	0.17	1		10/31/22 11:26	74-84-0	
Ethene	ND	ug/L	1.0	0.24	1		10/31/22 11:26	74-85-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**1240**	ug/L	50.0	5.6	1	10/28/22 12:48	11/03/22 16:04	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**49.6**	mg/L	20.0	10.5	20		11/02/22 20:33	16887-00-6	B
Sulfate	**8.9**	mg/L	1.0	0.55	1		11/03/22 22:19	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**2.6**	mg/L	0.10	0.078	1		11/03/22 15:13		
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.35J**	mg/L	1.0	0.30	1		11/03/22 13:04	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**1.0J**	mg/L	1.0	0.30	1		10/31/22 15:57		
Low Level Volatile Fatty Acids	Analytical Method: AM23G Pace Analytical Gulf Coast								
Lactic Acid	**4.0J**	mg/L	5.0	0.53	10		10/31/22 17:07	50-21-5	
Acetic Acid	**2.1J**	mg/L	5.0	1.2	10		10/31/22 17:07	64-19-7	
Propionic Acid	ND	mg/L	5.0	0.53	10		10/31/22 17:07	79-09-4	
Formic acid	**56**	mg/L	5.0	0.55	10		10/31/22 17:07	64-18-6	
Butyric Acid	**0.64J**	mg/L	5.0	0.58	10		10/31/22 17:07	107-92-6	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/31/22 17:07	127-17-3	
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/31/22 17:07	503-74-2	
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/31/22 17:07	109-52-4	
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/31/22 17:07	646-07-1	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/31/22 17:07	142-62-1	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

QC Batch: 752895
QC Batch Method: AM20GAX
Analysis Method: AM20GAX
Analysis Description: Indicator Gases Water LHC
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413979001, 60413979002, 60413979003, 60413979004

METHOD BLANK: 2414409 Matrix: Water
Associated Lab Samples: 60413979001, 60413979002, 60413979003, 60413979004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Methane	ug/L	ND	5.0	2.0	10/31/22 07:05	
Ethane	ug/L	ND	1.0	0.17	10/31/22 07:05	
Ethene	ug/L	ND	1.0	0.24	10/31/22 07:05	

LABORATORY CONTROL SAMPLE & LCSD: 2414410 2414411

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	380	360	360	95	92	70-130	2	20	
Ethane	ug/L	97	85	83	87	85	70-130	2	20	
Ethene	ug/L	120	100	100	86	83	70-130	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

QC Batch: 815334
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413979001, 60413979002, 60413979003, 60413979004

METHOD BLANK: 3242637 Matrix: Water
Associated Lab Samples: 60413979001, 60413979002, 60413979003, 60413979004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	5.6J	50.0	5.6	11/03/22 15:30	

LABORATORY CONTROL SAMPLE: 3242638

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9700	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3242639 3242640

Parameter	Units	60413975005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	294	10000	10000	9660	9910	94	96	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

QC Batch: 815091
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: 60413979001, 60413979002

METHOD BLANK: 3241641 Matrix: Water
Associated Lab Samples: 60413979001, 60413979002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.62J	1.0	0.53	10/28/22 15:19	
Sulfate	mg/L	ND	1.0	0.55	10/28/22 15:19	

METHOD BLANK: 3244815 Matrix: Water
Associated Lab Samples: 60413979001, 60413979002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.58J	1.0	0.53	10/31/22 08:41	
Sulfate	mg/L	ND	1.0	0.55	10/31/22 08:41	

LABORATORY CONTROL SAMPLE: 3241642

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	97	90-110	
Sulfate	mg/L	5	4.9	98	90-110	

LABORATORY CONTROL SAMPLE: 3244816

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	94	90-110	
Sulfate	mg/L	5	5.2	104	90-110	

MATRIX SPIKE SAMPLE: 3241645

Parameter	Units	60413975004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	87.2	100	191	104	80-120	
Sulfate	mg/L	12.2	10	22.3	101	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

QC Batch: 815780
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: 60413979003, 60413979004

METHOD BLANK: 3244277 Matrix: Water
Associated Lab Samples: 60413979003, 60413979004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.66J	1.0	0.53	11/02/22 08:51	
Sulfate	mg/L	ND	1.0	0.55	11/02/22 08:51	

METHOD BLANK: 3248273 Matrix: Water
Associated Lab Samples: 60413979003, 60413979004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.53	11/03/22 08:54	
Sulfate	mg/L	ND	1.0	0.55	11/03/22 08:54	

LABORATORY CONTROL SAMPLE: 3244278

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	99	90-110	

LABORATORY CONTROL SAMPLE: 3248274

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.6	93	90-110	
Sulfate	mg/L	5	4.8	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3244279 3244280

Parameter	Units	60413943005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	232	50	50	319	292	175	120	80-120	9	15	E,M1
Sulfate	mg/L	16.0	50	50	107	76.2	181	120	80-120	33	15	M1,R1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

SAMPLE DUPLICATE: 3244281

Parameter	Units	60413943005 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	232	249	7	15	E
Sulfate	mg/L	16.0	17.6	10	15	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

QC Batch: 816177
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413979001, 60413979002, 60413979003

METHOD BLANK: 3246136 Matrix: Water
Associated Lab Samples: 60413979001, 60413979002, 60413979003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.078	11/02/22 15:07	

LABORATORY CONTROL SAMPLE: 3246137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 3246138

Parameter	Units	60413695002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	2	1.6	82	90-110	M1

MATRIX SPIKE SAMPLE: 3246140

Parameter	Units	60413979003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	2	1.5	74	90-110	M1

SAMPLE DUPLICATE: 3246139

Parameter	Units	60413543003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4.3	4.3	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

QC Batch: 816376
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413979004

METHOD BLANK: 3246852 Matrix: Water
Associated Lab Samples: 60413979004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.078	11/03/22 15:10	

LABORATORY CONTROL SAMPLE: 3246853

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2	2.1	105	90-110	

MATRIX SPIKE SAMPLE: 3246854

Parameter	Units	60413979004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.6	2	4.5	98	90-110	

MATRIX SPIKE SAMPLE: 3246856

Parameter	Units	60413955012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	2	1.3	63	90-110	M1

SAMPLE DUPLICATE: 3246855

Parameter	Units	60413955004 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	ND		20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

QC Batch: 816057
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413979001, 60413979002

METHOD BLANK: 3245548 Matrix: Water
Associated Lab Samples: 60413979001, 60413979002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.30	11/02/22 09:56	

LABORATORY CONTROL SAMPLE: 3245549

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

MATRIX SPIKE SAMPLE: 3245550

Parameter	Units	60413695001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	1.8	5	6.9	102	80-120	

SAMPLE DUPLICATE: 3245551

Parameter	Units	60413695003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND		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

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

QC Batch: 816386
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413979003, 60413979004

METHOD BLANK: 3246892 Matrix: Water
Associated Lab Samples: 60413979003, 60413979004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.30	11/03/22 12:07	

LABORATORY CONTROL SAMPLE: 3246893

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.7	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3246895 3246896

Parameter	Units	60413943005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	1.9	5	5	6.6	6.7	94	96	80-120	1	25	

SAMPLE DUPLICATE: 3246894

Parameter	Units	60413943005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	1.9	2.0	4	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.: 60413979

QC Batch: 815250
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Dissolved Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60413979001, 60413979002, 60413979003, 60413979004

METHOD BLANK: 3242300 Matrix: Water
Associated Lab Samples: 60413979001, 60413979002, 60413979003, 60413979004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.30	10/31/22 09:33	

LABORATORY CONTROL SAMPLE: 3242301

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	5	4.9	98	80-120	

MATRIX SPIKE SAMPLE: 3242302

Parameter	Units	60413574006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	1.7	5	7.4	113	80-120	

SAMPLE DUPLICATE: 3242303

Parameter	Units	60413574008 Result	Dup Result	RPD	Max RPD	Qualifiers
Dissolved Organic Carbon	mg/L	ND	0.61J		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

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

QC Batch: 753013
QC Batch Method: AM23G
Analysis Method: AM23G
Analysis Description: Low Level Volatile Fatty Acids
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 60413979001, 60413979002, 60413979003, 60413979004

METHOD BLANK: 2415032 Matrix: Water
Associated Lab Samples: 60413979001, 60413979002, 60413979003, 60413979004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lactic Acid	mg/L	ND	0.50	0.053	10/31/22 15:40	
Acetic Acid	mg/L	ND	0.50	0.12	10/31/22 15:40	
Propionic Acid	mg/L	ND	0.50	0.053	10/31/22 15:40	
Formic acid	mg/L	ND	0.50	0.055	10/31/22 15:40	
Butyric Acid	mg/L	ND	0.50	0.058	10/31/22 15:40	
Pyruvic Acid	mg/L	ND	0.50	0.060	10/31/22 15:40	
i-Pentanoic Acid	mg/L	ND	0.50	0.061	10/31/22 15:40	
Pentanoic Acid	mg/L	ND	0.50	0.056	10/31/22 15:40	
i-Hexanoic Acid	mg/L	ND	0.50	0.056	10/31/22 15:40	
Hexanoic Acid	mg/L	ND	0.50	0.058	10/31/22 15:40	

LABORATORY CONTROL SAMPLE & LCSD: 2415033 2415034

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Lactic Acid	mg/L	2	1.7	1.7	86	87	70-130	1	20	
Acetic Acid	mg/L	2	1.7	1.7	84	84	70-130	0	20	
Propionic Acid	mg/L	2	1.7	1.7	85	86	70-130	0	20	
Formic acid	mg/L	2	1.6	1.6	82	82	70-130	1	20	
Butyric Acid	mg/L	2	1.7	1.7	85	85	70-130	1	20	
Pyruvic Acid	mg/L	2	1.6	1.5	81	77	70-130	5	20	
i-Pentanoic Acid	mg/L	2	1.6	1.7	82	87	70-130	6	20	
Pentanoic Acid	mg/L	2	1.6	1.6	78	79	70-130	1	20	
i-Hexanoic Acid	mg/L	2	1.8	1.8	89	88	70-130	1	20	
Hexanoic Acid	mg/L	2	1.5	1.5	77	77	70-130	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

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.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60413979

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60413979001	**TMW-32-202210**	AM20GAX	752895		
60413979002	**MW-185-202210**	AM20GAX	752895		
60413979003	**TMW-22R-202210**	AM20GAX	752895		
60413979004	**TMW-34-202210**	AM20GAX	752895		
60413979001	**TMW-32-202210**	EPA 3010	815334	EPA 6010	815391
60413979002	**MW-185-202210**	EPA 3010	815334	EPA 6010	815391
60413979003	**TMW-22R-202210**	EPA 3010	815334	EPA 6010	815391
60413979004	**TMW-34-202210**	EPA 3010	815334	EPA 6010	815391
60413979001	**TMW-32-202210**	EPA 300.0	815091		
60413979002	**MW-185-202210**	EPA 300.0	815091		
60413979003	**TMW-22R-202210**	EPA 300.0	815780		
60413979004	**TMW-34-202210**	EPA 300.0	815780		
60413979001	**TMW-32-202210**	EPA 353.2	816177		
60413979002	**MW-185-202210**	EPA 353.2	816177		
60413979003	**TMW-22R-202210**	EPA 353.2	816177		
60413979004	**TMW-34-202210**	EPA 353.2	816376		
60413979001	**TMW-32-202210**	SM 5310C	816057		
60413979002	**MW-185-202210**	SM 5310C	816057		
60413979003	**TMW-22R-202210**	SM 5310C	816386		
60413979004	**TMW-34-202210**	SM 5310C	816386		
60413979001	**TMW-32-202210**	SM 5310C	815250		
60413979002	**MW-185-202210**	SM 5310C	815250		
60413979003	**TMW-22R-202210**	SM 5310C	815250		
60413979004	**TMW-34-202210**	SM 5310C	815250		
60413979001	**TMW-32-202210**	AM23G	753013		
60413979002	**MW-185-202210**	AM23G	753013		
60413979003	**TMW-22R-202210**	AM23G	753013		
60413979004	**TMW-34-202210**	AM23G	753013		

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sample C	WO# : 60413979
	Revision: 2	Effective Date: 01/12/2022

60413979

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: T-299 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 0.311 **Corr. Factor** 0 **Corrected** 0.311

Date and initials of person examining contents: EC 10/26

Temperature should be above freezing to 6°C

Chain of Custody present:	☒Yes ☐No ☐N/A	DG9Qs for Sample
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	Iw-73 202210 received
Samples arrived within holding time:	☒Yes ☐No ☐N/A	empty
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	
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#: 610600	☒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: _____

Qualtrax Document ID: 30468

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:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
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	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	6010 Iron	Sulfate	Chloride	Nitrate+Nitrite	TOC	DOC (Lab Filtered)	Methane/Ethane/Ethene	Volatile Fatty Acids	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TMW-32-202210	WT	G			10/20/22	0913		9	X	X	X		X			X		X	X	X	X	X	X	X	X	
2	MW-185-202210	WT	G			10/20/22	1000		9	X	X	X		X			X		X	X	X	X	X	X	X	X	
3	TMW-~~31~~R-202210	WT	G				1109		9	X	X	X		X			X		X	X	X	X	X	X	X	X	
4	TMW-22R-202210	WT	G				1130		9	X	X	X		X			X		X	X	X	X	X	X	X	X	
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

GP

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
M/E/E and VFAs to Pace Gulf Coast	Ramboll	10-20-22	1750	Pace	10/21	0215	0311	Y	Y	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zillmer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-20-22

6041397 9

Pace Project No./ Lab I.D.

*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 Line 1

Site: Whirlpool Fort Smith, AR ISCR

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								1	1								1		1							2		
2	WT			3								1	1								1		1							2		
3	LT			3								1	1								1		1							2		
4	LT			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: 60411979

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

November 03, 2022

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 21, 2022. 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 - 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.

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 22-031-0
Illinois Certification #: 2000302021-3
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 #: T104704407-21-15
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

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SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60414073001	ITMW-18-202210	Water	10/20/22 09:09	10/21/22 02:15
60414073002	MW-202-202210	Water	10/20/22 09:10	10/21/22 02:15
60414073003	TMW-23-202210	Water	10/20/22 09:09	10/21/22 02:15
60414073004	ITMW-19-202210	Water	10/20/22 10:38	10/21/22 02:15
60414073005	TMW-32-202210	Water	10/20/22 09:13	10/21/22 02:15
60414073006	TMW-12-202210	Water	10/20/22 10:43	10/21/22 02:15
60414073007	DUP-07-202210	Water	10/20/22 10:43	10/21/22 02:15
60414073008	MW-204-202210	Water	10/20/22 11:15	10/21/22 02:15
60414073009	TMW-34-202210	Water	10/20/22 11:09	10/21/22 02:15
60414073010	MW-185-202210	Water	10/20/22 10:00	10/21/22 02:15
60414073011	MW-25R-202210	Water	10/20/22 12:45	10/21/22 02:15
60414073012	MW-58R-202210	Water	10/20/22 12:47	10/21/22 02:15
60414073013	VP-12-202210	Water	10/20/22 15:29	10/21/22 02:15
60414073014	MW-179-202210	Water	10/20/22 15:51	10/21/22 02:15
60414073015	MW-57R-202210	Water	10/20/22 15:57	10/21/22 02:15
60414073016	ITMW-5-202210	Water	10/20/22 16:30	10/21/22 02:15
60414073017	MW-93-202210	Water	10/20/22 16:19	10/21/22 02:15
60414073018	TB-04-202210	Water	10/20/22 16:58	10/21/22 02:15
60414073019	MW-189-202210	Water	10/20/22 16:45	10/21/22 02:15
60414073020	MW-46R-202210	Water	10/20/22 17:09	10/21/22 02:15
60414073021	RW-1-202210	Water	10/20/22 16:40	10/21/22 02:15
60414073022	DUP-09-202210	Water	10/20/22 09:50	10/21/22 02:15
60414073023	DUP-04-202210	Water	10/20/22 13:17	10/21/22 02:15
60414073024	IW-77-202210	Water	10/20/22 13:40	10/21/22 02:15
60414073025	MW-24-202210	Water	10/20/22 13:17	10/21/22 02:15
60414073026	IW-78-202210	Water	10/20/22 09:50	10/21/22 02:15
60414073027	TMW-22R-202210	Water	10/20/22 11:30	10/21/22 02:15
60414073028	MW-87-202210	Water	10/20/22 12:28	10/21/22 02:15
60414073029	MW-199-202210	Water	10/20/22 13:45	10/21/22 02:15
60414073030	MW-56R-202210	Water	10/20/22 14:37	10/21/22 02:15
60414073031	EB-05-202210	Water	10/20/22 16:52	10/21/22 02:15
60414073032	MW-175-202210	Water	10/20/22 14:26	10/21/22 02:15
60414073033	VP-7-202210	Water	10/20/22 14:30	10/21/22 02:15
60414073034	VP-8-202210	Water	10/20/22 14:38	10/21/22 02:15
60414073035	MW-38-202210	Water	10/20/22 14:35	10/21/22 02:15
60414073036	TMW-24-202210	Water	10/20/22 15:06	10/21/22 02:15

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60414073001	ITMW-18-202210	EPA 5030B/8260	CSC	38	PASI-K
60414073002	MW-202-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073003	TMW-23-202210	EPA 5030B/8260	HM1, PGH	38	PASI-K
60414073004	ITMW-19-202210	EPA 5030B/8260	HM1, PGH	38	PASI-K
60414073005	TMW-32-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073006	TMW-12-202210	EPA 5030B/8260	HM1, PGH	38	PASI-K
60414073007	DUP-07-202210	EPA 5030B/8260	HM1, PGH	38	PASI-K
60414073008	MW-204-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073009	TMW-34-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073010	MW-185-202210	EPA 5030B/8260	HM1, PGH	38	PASI-K
60414073011	MW-25R-202210	EPA 5030B/8260	CSC, PGH	38	PASI-K
60414073012	MW-58R-202210	EPA 5030B/8260	HM1, PGH	38	PASI-K
60414073013	VP-12-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073014	MW-179-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073015	MW-57R-202210	EPA 5030B/8260	HM1, PGH	38	PASI-K
60414073016	ITMW-5-202210	EPA 5030B/8260	HM1, PGH	38	PASI-K
60414073017	MW-93-202210	EPA 5030B/8260	CSC, PGH	38	PASI-K
60414073018	TB-04-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073019	MW-189-202210	EPA 5030B/8260	HM1, PGH	38	PASI-K
60414073020	MW-46R-202210	EPA 5030B/8260	HM1, PGH	38	PASI-K
60414073021	RW-1-202210	EPA 5030B/8260	CSC, PGH	38	PASI-K
60414073022	DUP-09-202210	EPA 5030B/8260	HM1	38	PASI-K
60414073023	DUP-04-202210	EPA 5030B/8260	HM1	38	PASI-K
60414073024	IW-77-202210	EPA 5030B/8260	HM1, PGH	38	PASI-K
60414073025	MW-24-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073026	IW-78-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073027	TMW-22R-202210	EPA 5030B/8260	HM1, PGH	38	PASI-K
60414073028	MW-87-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073029	MW-199-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073030	MW-56R-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073031	EB-05-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073032	MW-175-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073033	VP-7-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073034	VP-8-202210	EPA 5030B/8260	PGH	38	PASI-K
60414073035	MW-38-202210	EPA 5030B/8260	HM1	38	PASI-K
60414073036	TMW-24-202210	EPA 5030B/8260	HM1	38	PASI-K

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory

PASI-K = Pace Analytical Services - Kansas City

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: November 03, 2022

General Information:
36 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.

QC Batch: 815718

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: 3244132)
  - 1,2-Dichloroethane
  - trans-1,2-Dichloroethene

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

QC Batch: 815718

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

QC Batch: 815883

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

QC Batch: 816221

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60412542058

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

- MS (Lab ID: 3246291)

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: November 03, 2022

QC Batch: 816221

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60412542058

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

- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- 1,1-Dichloroethane
- 1,1-Dichloroethene
- 1,2-Dichloroethane
- 1,2-Dichloropropane
- 2-Butanone (MEK)
- 2-Hexanone
- 4-Methyl-2-pentanone (MIBK)
- Acetone
- Benzene
- Bromodichloromethane
- Bromoform
- Carbon disulfide
- Carbon tetrachloride
- Chlorobenzene
- Chloroethane
- Chloroform
- Chloromethane
- Dibromochloromethane
- Ethylbenzene
- Methylene Chloride
- Styrene
- Tetrachloroethene
- Toluene
- Vinyl chloride
- cis-1,2-Dichloroethene
- cis-1,3-Dichloropropene
- trans-1,2-Dichloroethene
- trans-1,3-Dichloropropene

• MSD (Lab ID: 3246292)

- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- 1,1-Dichloroethane
- 1,1-Dichloroethene
- 1,2-Dichloroethane
- 1,2-Dichloropropane
- 2-Butanone (MEK)
- 2-Hexanone
- 4-Methyl-2-pentanone (MIBK)
- Acetone

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: November 03, 2022

QC Batch: 816221

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60412542058

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

- Benzene
- Bromodichloromethane
- Bromoform
- Carbon disulfide
- Carbon tetrachloride
- Chlorobenzene
- Chloroethane
- Chloroform
- Chloromethane
- Dibromochloromethane
- Ethylbenzene
- Methylene Chloride
- Styrene
- Tetrachloroethene
- Toluene
- Vinyl chloride
- cis-1,2-Dichloroethene
- cis-1,3-Dichloropropene
- trans-1,2-Dichloroethene
- trans-1,3-Dichloropropene

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.: 60414073

Sample: ITMW-18-202210 **Lab ID: 60414073001** Collected: 10/20/22 09:09 Received: 10/21/22 02:15 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		11/03/22 03:51	67-64-1	
Benzene	**0.19J**	ug/L	1.0	0.14	1		11/03/22 03:51	71-43-2	
Bromodichloromethane	**0.60J**	ug/L	1.0	0.16	1		11/03/22 03:51	75-27-4	
Bromoform	**2.6**	ug/L	1.0	0.68	1		11/03/22 03:51	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 03:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 03:51	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 03:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 03:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 03:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 03:51	75-00-3	
Chloroform	**2.0**	ug/L	1.0	0.22	1		11/03/22 03:51	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 03:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 03:51	124-48-1	
1,1-Dichloroethane	**0.46J**	ug/L	1.0	0.12	1		11/03/22 03:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/03/22 03:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/03/22 03:51	75-35-4	
cis-1,2-Dichloroethene	**183**	ug/L	1.0	0.13	1		11/03/22 03:51	156-59-2	
trans-1,2-Dichloroethene	**34.9**	ug/L	1.0	0.10	1		11/03/22 03:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 03:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 03:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 03:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 03:51	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 03:51	591-78-6	
Methylene Chloride	**1.3**	ug/L	1.0	0.39	1		11/03/22 03:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 03:51	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 03:51	100-42-5	
1,1,2,2-Tetrachloroethane	**0.24J**	ug/L	1.0	0.15	1		11/03/22 03:51	79-34-5	
Tetrachloroethene	**1.1**	ug/L	1.0	0.33	1		11/03/22 03:51	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/03/22 03:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/03/22 03:51	71-55-6	
1,1,2-Trichloroethane	**0.28J**	ug/L	1.0	0.14	1		11/03/22 03:51	79-00-5	
Trichloroethene	**2930**	ug/L	20.0	4.2	20		11/03/22 03:37	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/03/22 03:51	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 03:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		11/03/22 03:51	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		11/03/22 03:51	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		11/03/22 03:51	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 03:51		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-202-202210 **Lab ID: 60414073002** Collected: 10/20/22 09:10 Received: 10/21/22 02:15 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		10/31/22 17:50	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/22 17:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/22 17:50	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/22 17:50	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/22 17:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/22 17:50	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/22 17:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/22 17:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/22 17:50	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/22 17:50	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/31/22 17:50	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/22 17:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/22 17:50	124-48-1	
1,1-Dichloroethane	**0.30J**	ug/L	1.0	0.12	1		10/31/22 17:50	75-34-3	
1,2-Dichloroethane	**0.24J**	ug/L	1.0	0.21	1		10/31/22 17:50	107-06-2	L2
1,1-Dichloroethene	**3.4**	ug/L	1.0	0.22	1		10/31/22 17:50	75-35-4	
cis-1,2-Dichloroethene	**15.7**	ug/L	1.0	0.13	1		10/31/22 17:50	156-59-2	
trans-1,2-Dichloroethene	**0.17J**	ug/L	1.0	0.10	1		10/31/22 17:50	156-60-5	L2
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/22 17:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/22 17:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/22 17:50	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/22 17:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/22 17:50	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/22 17:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/22 17:50	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/22 17:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/22 17:50	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/22 17:50	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/22 17:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/22 17:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/22 17:50	79-00-5	
Trichloroethene	**158**	ug/L	1.0	0.21	1		10/31/22 17:50	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/22 17:50	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/22 17:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%	80-120		1		10/31/22 17:50	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/31/22 17:50	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		10/31/22 17:50	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/22 17:50		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: TMW-23-202210 **Lab ID: 60414073003** Collected: 10/20/22 09:09 Received: 10/21/22 02:15 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		10/31/22 19:24	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/22 19:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/22 19:24	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/22 19:24	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/22 19:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/22 19:24	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/22 19:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/22 19:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/22 19:24	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/22 19:24	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/31/22 19:24	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/22 19:24	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/22 19:24	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/22 19:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/22 19:24	107-06-2	L2
1,1-Dichloroethene	**2.9**	ug/L	1.0	0.22	1		10/31/22 19:24	75-35-4	
cis-1,2-Dichloroethene	**6.0**	ug/L	1.0	0.13	1		10/31/22 19:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/31/22 19:24	156-60-5	L2
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/22 19:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/22 19:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/22 19:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/22 19:24	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/22 19:24	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/22 19:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/22 19:24	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/22 19:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/22 19:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/22 19:24	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/22 19:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/22 19:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/22 19:24	79-00-5	
Trichloroethene	**154**	ug/L	5.0	1.0	5		11/03/22 02:04	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/22 19:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/22 19:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/31/22 19:24	460-00-4	
Toluene-d8 (S)	93	%	80-120		1		10/31/22 19:24	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/31/22 19:24	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/22 19:24		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: ITMW-19-202210 **Lab ID: 60414073004** Collected: 10/20/22 10:38 Received: 10/21/22 02:15 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		11/02/22 23:08	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/02/22 23:08	71-43-2	
Bromodichloromethane	**0.59J**	ug/L	1.0	0.16	1		11/02/22 23:08	75-27-4	
Bromoform	**11.5**	ug/L	1.0	0.68	1		11/02/22 23:08	75-25-2	
Bromomethane	**1.2J**	ug/L	5.0	0.46	1		11/02/22 23:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/02/22 23:08	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/02/22 23:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/02/22 23:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/02/22 23:08	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/02/22 23:08	75-00-3	
Chloroform	**1.9**	ug/L	1.0	0.22	1		11/02/22 23:08	67-66-3	
Chloromethane	**0.89J**	ug/L	1.0	0.28	1		11/02/22 23:08	74-87-3	
Dibromochloromethane	**0.87J**	ug/L	1.0	0.30	1		11/02/22 23:08	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/02/22 23:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/02/22 23:08	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/02/22 23:08	75-35-4	
cis-1,2-Dichloroethene	**12.2**	ug/L	1.0	0.13	1		11/02/22 23:08	156-59-2	
trans-1,2-Dichloroethene	**2.1**	ug/L	1.0	0.10	1		11/02/22 23:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/02/22 23:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/02/22 23:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/02/22 23:08	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/02/22 23:08	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/02/22 23:08	591-78-6	
Methylene Chloride	**0.53J**	ug/L	1.0	0.39	1		11/02/22 23:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/02/22 23:08	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/02/22 23:08	100-42-5	
1,1,2,2-Tetrachloroethane	**0.55J**	ug/L	1.0	0.15	1		11/02/22 23:08	79-34-5	
Tetrachloroethene	**0.69J**	ug/L	1.0	0.33	1		11/02/22 23:08	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/02/22 23:08	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/02/22 23:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/02/22 23:08	79-00-5	
Trichloroethene	**1570**	ug/L	10.0	2.1	10		10/31/22 20:05	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/02/22 23:08	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/02/22 23:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		11/02/22 23:08	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		11/02/22 23:08	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		11/02/22 23:08	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/02/22 23:08		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: TMW-32-202210 **Lab ID: 60414073005** Collected: 10/20/22 09:13 Received: 10/21/22 02:15 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		10/31/22 18:03	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/22 18:03	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/22 18:03	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/22 18:03	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/22 18:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/22 18:03	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/22 18:03	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/22 18:03	56-23-5	
Chlorobenzene	**1.2**	ug/L	1.0	0.089	1		10/31/22 18:03	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/22 18:03	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/31/22 18:03	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/22 18:03	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/22 18:03	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/22 18:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/22 18:03	107-06-2	L2
1,1-Dichloroethene	**2.7**	ug/L	1.0	0.22	1		10/31/22 18:03	75-35-4	
cis-1,2-Dichloroethene	**6.1**	ug/L	1.0	0.13	1		10/31/22 18:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/31/22 18:03	156-60-5	L2
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/22 18:03	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/22 18:03	10061-01-5	
trans-1,3-Dichloropropene	**0.35J**	ug/L	1.0	0.18	1		10/31/22 18:03	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/22 18:03	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/22 18:03	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/22 18:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/22 18:03	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/22 18:03	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/22 18:03	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/22 18:03	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/22 18:03	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/22 18:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/22 18:03	79-00-5	
Trichloroethene	**17.0**	ug/L	1.0	0.21	1		10/31/22 18:03	79-01-6	
Vinyl chloride	**0.28J**	ug/L	1.0	0.17	1		10/31/22 18:03	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/22 18:03	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/31/22 18:03	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/31/22 18:03	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	95	%	80-120		1		10/31/22 18:03	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/22 18:03		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: TMW-12-202210 **Lab ID: 60414073006** Collected: 10/20/22 10:43 Received: 10/21/22 02:15 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		11/02/22 23:24	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/02/22 23:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/02/22 23:24	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/02/22 23:24	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/02/22 23:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/02/22 23:24	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/02/22 23:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/02/22 23:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/02/22 23:24	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/02/22 23:24	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/02/22 23:24	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/02/22 23:24	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/02/22 23:24	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/02/22 23:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/02/22 23:24	107-06-2	
1,1-Dichloroethene	**1.4**	ug/L	1.0	0.22	1		11/02/22 23:24	75-35-4	
cis-1,2-Dichloroethene	**8.4**	ug/L	1.0	0.13	1		11/02/22 23:24	156-59-2	
trans-1,2-Dichloroethene	**0.18J**	ug/L	1.0	0.10	1		11/02/22 23:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/02/22 23:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/02/22 23:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/02/22 23:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/02/22 23:24	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/02/22 23:24	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/02/22 23:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/02/22 23:24	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/02/22 23:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/02/22 23:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/02/22 23:24	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/02/22 23:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/02/22 23:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/02/22 23:24	79-00-5	
Trichloroethene	**330**	ug/L	10.0	2.1	10		10/31/22 20:18	79-01-6	
Vinyl chloride	**0.22J**	ug/L	1.0	0.17	1		11/02/22 23:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/02/22 23:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		11/02/22 23:24	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		11/02/22 23:24	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		11/02/22 23:24	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/02/22 23:24		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: DUP-07-202210 **Lab ID: 60414073007** Collected: 10/20/22 10:43 Received: 10/21/22 02:15 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		11/02/22 23:40	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/02/22 23:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/02/22 23:40	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/02/22 23:40	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/02/22 23:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/02/22 23:40	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/02/22 23:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/02/22 23:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/02/22 23:40	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/02/22 23:40	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/02/22 23:40	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/02/22 23:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/02/22 23:40	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/02/22 23:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/02/22 23:40	107-06-2	
1,1-Dichloroethene	**1.5**	ug/L	1.0	0.22	1		11/02/22 23:40	75-35-4	
cis-1,2-Dichloroethene	**9.0**	ug/L	1.0	0.13	1		11/02/22 23:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/02/22 23:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/02/22 23:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/02/22 23:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/02/22 23:40	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/02/22 23:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/02/22 23:40	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/02/22 23:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/02/22 23:40	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/02/22 23:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/02/22 23:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/02/22 23:40	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/02/22 23:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/02/22 23:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/02/22 23:40	79-00-5	
Trichloroethene	**318**	ug/L	10.0	2.1	10		10/31/22 20:32	79-01-6	
Vinyl chloride	**0.20J**	ug/L	1.0	0.17	1		11/02/22 23:40	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/02/22 23:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		11/02/22 23:40	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		11/02/22 23:40	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		11/02/22 23:40	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/02/22 23:40		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-204-202210 **Lab ID: 60414073008** Collected: 10/20/22 11:15 Received: 10/21/22 02:15 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		10/31/22 18:43	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/22 18:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/22 18:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/22 18:43	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/22 18:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/22 18:43	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/22 18:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/22 18:43	56-23-5	
Chlorobenzene	**0.96J**	ug/L	1.0	0.089	1		10/31/22 18:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/22 18:43	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/31/22 18:43	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/22 18:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/22 18:43	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/22 18:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/22 18:43	107-06-2	L2
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/31/22 18:43	75-35-4	
cis-1,2-Dichloroethene	**4.8**	ug/L	1.0	0.13	1		10/31/22 18:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/31/22 18:43	156-60-5	L2
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/22 18:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/22 18:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/22 18:43	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/22 18:43	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/22 18:43	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/22 18:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/22 18:43	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/22 18:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/22 18:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/22 18:43	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/22 18:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/22 18:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/22 18:43	79-00-5	
Trichloroethene	**39.4**	ug/L	1.0	0.21	1		10/31/22 18:43	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/22 18:43	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/22 18:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/31/22 18:43	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/31/22 18:43	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/31/22 18:43	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/22 18:43		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: TMW-34-202210 **Lab ID: 60414073009** Collected: 10/20/22 11:09 Received: 10/21/22 02:15 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		10/31/22 18:57	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/22 18:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/22 18:57	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/22 18:57	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/22 18:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/22 18:57	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/22 18:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/22 18:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/22 18:57	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/22 18:57	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/31/22 18:57	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/22 18:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/22 18:57	124-48-1	
1,1-Dichloroethane	**0.44J**	ug/L	1.0	0.12	1		10/31/22 18:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/22 18:57	107-06-2	L2
1,1-Dichloroethene	**3.7**	ug/L	1.0	0.22	1		10/31/22 18:57	75-35-4	
cis-1,2-Dichloroethene	**38.7**	ug/L	1.0	0.13	1		10/31/22 18:57	156-59-2	
trans-1,2-Dichloroethene	**0.17J**	ug/L	1.0	0.10	1		10/31/22 18:57	156-60-5	L2
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/22 18:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/22 18:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/22 18:57	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/22 18:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/22 18:57	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/22 18:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/22 18:57	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/22 18:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/22 18:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/22 18:57	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/22 18:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/22 18:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/22 18:57	79-00-5	
Trichloroethene	**151**	ug/L	1.0	0.21	1		10/31/22 18:57	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/22 18:57	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/22 18:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/31/22 18:57	460-00-4	
Toluene-d8 (S)	95	%	80-120		1		10/31/22 18:57	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		10/31/22 18:57	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/22 18:57		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-185-202210 **Lab ID: 60414073010** Collected: 10/20/22 10:00 Received: 10/21/22 02:15 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		10/31/22 19:37	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/22 19:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/22 19:37	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/22 19:37	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/22 19:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/22 19:37	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/22 19:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/22 19:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/22 19:37	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/22 19:37	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/31/22 19:37	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/22 19:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/22 19:37	124-48-1	
1,1-Dichloroethane	**0.48J**	ug/L	1.0	0.12	1		10/31/22 19:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/22 19:37	107-06-2	L2
1,1-Dichloroethene	**3.5**	ug/L	1.0	0.22	1		10/31/22 19:37	75-35-4	
cis-1,2-Dichloroethene	**8.9**	ug/L	1.0	0.13	1		10/31/22 19:37	156-59-2	
trans-1,2-Dichloroethene	**0.14J**	ug/L	1.0	0.10	1		10/31/22 19:37	156-60-5	L2
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/22 19:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/22 19:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/22 19:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/22 19:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/22 19:37	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/22 19:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/22 19:37	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/22 19:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/22 19:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/22 19:37	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/22 19:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/22 19:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/22 19:37	79-00-5	
Trichloroethene	**168**	ug/L	5.0	1.0	5		11/03/22 02:19	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/22 19:37	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/22 19:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/31/22 19:37	460-00-4	
Toluene-d8 (S)	96	%	80-120		1		10/31/22 19:37	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	96	%	80-120		1		10/31/22 19:37	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/22 19:37		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-25R-202210 **Lab ID: 60414073011** Collected: 10/20/22 12:45 Received: 10/21/22 02:15 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		11/03/22 03:22	67-64-1	
Benzene	**0.62J**	ug/L	1.0	0.14	1		11/03/22 03:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/03/22 03:22	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/03/22 03:22	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 03:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 03:22	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 03:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 03:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 03:22	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 03:22	75-00-3	
Chloroform	**4.5**	ug/L	1.0	0.22	1		11/03/22 03:22	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 03:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 03:22	124-48-1	
1,1-Dichloroethane	**1.6**	ug/L	1.0	0.12	1		11/03/22 03:22	75-34-3	
1,2-Dichloroethane	**0.42J**	ug/L	1.0	0.21	1		11/03/22 03:22	107-06-2	
1,1-Dichloroethene	**16.1**	ug/L	1.0	0.22	1		11/03/22 03:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		11/03/22 03:22	156-59-2	
trans-1,2-Dichloroethene	**97.6**	ug/L	1.0	0.10	1		11/03/22 03:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 03:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 03:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 03:22	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 03:22	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 03:22	591-78-6	
Methylene Chloride	**1.8**	ug/L	1.0	0.39	1		11/03/22 03:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 03:22	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 03:22	100-42-5	
1,1,2,2-Tetrachloroethane	**1.6**	ug/L	1.0	0.15	1		11/03/22 03:22	79-34-5	
Tetrachloroethene	**2.0**	ug/L	1.0	0.33	1		11/03/22 03:22	127-18-4	
Toluene	**0.31J**	ug/L	1.0	0.25	1		11/03/22 03:22	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/03/22 03:22	71-55-6	
1,1,2-Trichloroethane	**0.34J**	ug/L	1.0	0.14	1		11/03/22 03:22	79-00-5	
Trichloroethene	**7530**	ug/L	50.0	10.5	50		10/31/22 21:40	79-01-6	
Vinyl chloride	**26.4**	ug/L	1.0	0.17	1		11/03/22 03:22	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 03:22	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		11/03/22 03:22	460-00-4	
Toluene-d8 (S)	106	%	80-120		1		11/03/22 03:22	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		1		11/03/22 03:22	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 03:22		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-58R-202210 **Lab ID: 60414073012** Collected: 10/20/22 12:47 Received: 10/21/22 02:15 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		11/02/22 23:56	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/02/22 23:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/02/22 23:56	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/02/22 23:56	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/02/22 23:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/02/22 23:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/02/22 23:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/02/22 23:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/02/22 23:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/02/22 23:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/02/22 23:56	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/02/22 23:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/02/22 23:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/02/22 23:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/02/22 23:56	107-06-2	
1,1-Dichloroethene	**1.7**	ug/L	1.0	0.22	1		11/02/22 23:56	75-35-4	
cis-1,2-Dichloroethene	**6.9**	ug/L	1.0	0.13	1		11/02/22 23:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/02/22 23:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/02/22 23:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/02/22 23:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/02/22 23:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/02/22 23:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/02/22 23:56	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/02/22 23:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/02/22 23:56	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/02/22 23:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/02/22 23:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/02/22 23:56	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/02/22 23:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/02/22 23:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/02/22 23:56	79-00-5	
Trichloroethene	**226**	ug/L	10.0	2.1	10		10/31/22 20:46	79-01-6	
Vinyl chloride	**0.45J**	ug/L	1.0	0.17	1		11/02/22 23:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/02/22 23:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		11/02/22 23:56	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		11/02/22 23:56	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		11/02/22 23:56	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/02/22 23:56		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: VP-12-202210 **Lab ID: 60414073013** Collected: 10/20/22 15:29 Received: 10/21/22 02:15 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		10/31/22 18:16	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/22 18:16	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/22 18:16	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/22 18:16	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/22 18:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/22 18:16	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/22 18:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/22 18:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/22 18:16	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/22 18:16	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/31/22 18:16	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/22 18:16	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/22 18:16	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/22 18:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/22 18:16	107-06-2	L2
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/31/22 18:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/31/22 18:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/31/22 18:16	156-60-5	L2
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/22 18:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/22 18:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/22 18:16	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/22 18:16	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/22 18:16	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/22 18:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/22 18:16	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/22 18:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/22 18:16	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/22 18:16	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/22 18:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/22 18:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/22 18:16	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/31/22 18:16	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/22 18:16	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/22 18:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/31/22 18:16	460-00-4	
Toluene-d8 (S)	96	%	80-120		1		10/31/22 18:16	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/31/22 18:16	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/22 18:16		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-179-202210 **Lab ID: 60414073014** Collected: 10/20/22 15:51 Received: 10/21/22 02:15 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		10/31/22 18:30	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/22 18:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/22 18:30	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/22 18:30	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/22 18:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/22 18:30	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/22 18:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/22 18:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/22 18:30	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/22 18:30	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/31/22 18:30	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/22 18:30	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/22 18:30	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/22 18:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/22 18:30	107-06-2	L2
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/31/22 18:30	75-35-4	
cis-1,2-Dichloroethene	**3.8**	ug/L	1.0	0.13	1		10/31/22 18:30	156-59-2	
trans-1,2-Dichloroethene	**0.10J**	ug/L	1.0	0.10	1		10/31/22 18:30	156-60-5	L2
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/22 18:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/22 18:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/22 18:30	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/22 18:30	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/22 18:30	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/22 18:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/22 18:30	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/22 18:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/22 18:30	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/22 18:30	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/22 18:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/22 18:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/22 18:30	79-00-5	
Trichloroethene	**28.9**	ug/L	1.0	0.21	1		10/31/22 18:30	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/22 18:30	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/22 18:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%	80-120		1		10/31/22 18:30	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/31/22 18:30	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/31/22 18:30	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/22 18:30		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-57R-202210 **Lab ID: 60414073015** Collected: 10/20/22 15:57 Received: 10/21/22 02:15 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		10/31/22 19:10	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/22 19:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/22 19:10	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/22 19:10	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/22 19:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/22 19:10	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/22 19:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/22 19:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/22 19:10	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/22 19:10	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/31/22 19:10	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/22 19:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/22 19:10	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/22 19:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/22 19:10	107-06-2	L2
1,1-Dichloroethene	**3.6**	ug/L	1.0	0.22	1		10/31/22 19:10	75-35-4	
cis-1,2-Dichloroethene	**12.0**	ug/L	1.0	0.13	1		10/31/22 19:10	156-59-2	
trans-1,2-Dichloroethene	**0.13J**	ug/L	1.0	0.10	1		10/31/22 19:10	156-60-5	L2
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/22 19:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/22 19:10	10061-01-5	
trans-1,3-Dichloropropene	**0.32J**	ug/L	1.0	0.18	1		10/31/22 19:10	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/22 19:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/22 19:10	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/22 19:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/22 19:10	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/22 19:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/22 19:10	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/22 19:10	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/22 19:10	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/22 19:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/22 19:10	79-00-5	
Trichloroethene	**258**	ug/L	10.0	2.1	10		11/03/22 02:35	79-01-6	
Vinyl chloride	**1.3**	ug/L	1.0	0.17	1		10/31/22 19:10	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/22 19:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/31/22 19:10	460-00-4	
Toluene-d8 (S)	97	%	80-120		1		10/31/22 19:10	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		10/31/22 19:10	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/22 19:10		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: ITMW-5-202210 **Lab ID: 60414073016** Collected: 10/20/22 16:30 Received: 10/21/22 02:15 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		11/03/22 00:12	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/03/22 00:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/03/22 00:12	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/03/22 00:12	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 00:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 00:12	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 00:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 00:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 00:12	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 00:12	75-00-3	
Chloroform	**0.68J**	ug/L	1.0	0.22	1		11/03/22 00:12	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 00:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 00:12	124-48-1	
1,1-Dichloroethane	**0.77J**	ug/L	1.0	0.12	1		11/03/22 00:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/03/22 00:12	107-06-2	
1,1-Dichloroethene	**5.6**	ug/L	1.0	0.22	1		11/03/22 00:12	75-35-4	
cis-1,2-Dichloroethene	**27.6**	ug/L	1.0	0.13	1		11/03/22 00:12	156-59-2	
trans-1,2-Dichloroethene	**0.31J**	ug/L	1.0	0.10	1		11/03/22 00:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 00:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 00:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 00:12	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 00:12	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 00:12	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/03/22 00:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 00:12	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 00:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/03/22 00:12	79-34-5	
Tetrachloroethene	**1.5**	ug/L	1.0	0.33	1		11/03/22 00:12	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/03/22 00:12	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/03/22 00:12	71-55-6	
1,1,2-Trichloroethane	**0.17J**	ug/L	1.0	0.14	1		11/03/22 00:12	79-00-5	
Trichloroethene	**2710**	ug/L	20.0	4.2	20		10/31/22 21:27	79-01-6	
Vinyl chloride	**1.1**	ug/L	1.0	0.17	1		11/03/22 00:12	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 00:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		11/03/22 00:12	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		11/03/22 00:12	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		11/03/22 00:12	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 00:12		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-93-202210 **Lab ID: 60414073017** Collected: 10/20/22 16:19 Received: 10/21/22 02:15 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		11/03/22 03:08	67-64-1	
Benzene	**0.20J**	ug/L	1.0	0.14	1		11/03/22 03:08	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/03/22 03:08	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/03/22 03:08	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 03:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 03:08	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 03:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 03:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 03:08	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 03:08	75-00-3	
Chloroform	**2.2**	ug/L	1.0	0.22	1		11/03/22 03:08	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 03:08	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 03:08	124-48-1	
1,1-Dichloroethane	**0.20J**	ug/L	1.0	0.12	1		11/03/22 03:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/03/22 03:08	107-06-2	
1,1-Dichloroethene	**13.5**	ug/L	1.0	0.22	1		11/03/22 03:08	75-35-4	
cis-1,2-Dichloroethene	**81.9**	ug/L	1.0	0.13	1		11/03/22 03:08	156-59-2	
trans-1,2-Dichloroethene	**4.8**	ug/L	1.0	0.10	1		11/03/22 03:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 03:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 03:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 03:08	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 03:08	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 03:08	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/03/22 03:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 03:08	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 03:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/03/22 03:08	79-34-5	
Tetrachloroethene	**3.5**	ug/L	1.0	0.33	1		11/03/22 03:08	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/03/22 03:08	108-88-3	
1,1,1-Trichloroethane	**0.14J**	ug/L	1.0	0.11	1		11/03/22 03:08	71-55-6	
1,1,2-Trichloroethane	**0.58J**	ug/L	1.0	0.14	1		11/03/22 03:08	79-00-5	
Trichloroethene	**9010**	ug/L	200	42.0	200		10/31/22 21:54	79-01-6	
Vinyl chloride	**1.2**	ug/L	1.0	0.17	1		11/03/22 03:08	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 03:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		11/03/22 03:08	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		11/03/22 03:08	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		11/03/22 03:08	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 03:08		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: TB-04-202210 **Lab ID: 60414073018** Collected: 10/20/22 16:58 Received: 10/21/22 02:15 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		10/31/22 17:36	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/22 17:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/22 17:36	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/22 17:36	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/22 17:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/22 17:36	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/22 17:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/22 17:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/22 17:36	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/22 17:36	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/31/22 17:36	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/22 17:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/22 17:36	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/22 17:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/22 17:36	107-06-2	L2
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/31/22 17:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/31/22 17:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/31/22 17:36	156-60-5	L2
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/22 17:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/22 17:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/22 17:36	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/22 17:36	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/22 17:36	591-78-6	
Methylene Chloride	**1.3**	ug/L	1.0	0.39	1		10/31/22 17:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/22 17:36	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/22 17:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/22 17:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/22 17:36	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/22 17:36	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/22 17:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/22 17:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/31/22 17:36	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/22 17:36	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/22 17:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	80-120		1		10/31/22 17:36	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/31/22 17:36	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/31/22 17:36	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/22 17:36		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Lenexa, KS 66219
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-189-202210 **Lab ID: 60414073019** Collected: 10/20/22 16:45 Received: 10/21/22 02:15 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		11/03/22 00:28	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/03/22 00:28	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/03/22 00:28	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/03/22 00:28	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 00:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 00:28	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 00:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 00:28	56-23-5	
Chlorobenzene	**0.28J**	ug/L	1.0	0.089	1		11/03/22 00:28	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 00:28	75-00-3	
Chloroform	**0.69J**	ug/L	1.0	0.22	1		11/03/22 00:28	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 00:28	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 00:28	124-48-1	
1,1-Dichloroethane	**0.29J**	ug/L	1.0	0.12	1		11/03/22 00:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/03/22 00:28	107-06-2	
1,1-Dichloroethene	**0.39J**	ug/L	1.0	0.22	1		11/03/22 00:28	75-35-4	
cis-1,2-Dichloroethene	**7.0**	ug/L	1.0	0.13	1		11/03/22 00:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/03/22 00:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 00:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 00:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 00:28	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 00:28	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 00:28	591-78-6	
Methylene Chloride	**0.42J**	ug/L	1.0	0.39	1		11/03/22 00:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 00:28	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 00:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/03/22 00:28	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/03/22 00:28	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/03/22 00:28	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/03/22 00:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/03/22 00:28	79-00-5	
Trichloroethene	**221**	ug/L	10.0	2.1	10		10/31/22 20:59	79-01-6	
Vinyl chloride	**0.23J**	ug/L	1.0	0.17	1		11/03/22 00:28	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 00:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		11/03/22 00:28	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		11/03/22 00:28	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		11/03/22 00:28	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 00:28		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-46R-202210 **Lab ID: 60414073020** Collected: 10/20/22 17:09 Received: 10/21/22 02:15 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		11/03/22 00:44	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/03/22 00:44	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/03/22 00:44	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/03/22 00:44	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 00:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 00:44	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 00:44	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 00:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 00:44	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 00:44	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/03/22 00:44	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 00:44	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 00:44	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/03/22 00:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/03/22 00:44	107-06-2	
1,1-Dichloroethene	**1.1**	ug/L	1.0	0.22	1		11/03/22 00:44	75-35-4	
cis-1,2-Dichloroethene	**8.7**	ug/L	1.0	0.13	1		11/03/22 00:44	156-59-2	
trans-1,2-Dichloroethene	**0.23J**	ug/L	1.0	0.10	1		11/03/22 00:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 00:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 00:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 00:44	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 00:44	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 00:44	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/03/22 00:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 00:44	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 00:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/03/22 00:44	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/03/22 00:44	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/03/22 00:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/03/22 00:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/03/22 00:44	79-00-5	
Trichloroethene	**298**	ug/L	10.0	2.1	10		10/31/22 21:13	79-01-6	
Vinyl chloride	**0.26J**	ug/L	1.0	0.17	1		11/03/22 00:44	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 00:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		11/03/22 00:44	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		11/03/22 00:44	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		11/03/22 00:44	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 00:44		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: RW-1-202210 **Lab ID: 60414073021** Collected: 10/20/22 16:40 Received: 10/21/22 02:15 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	**11.4**	ug/L	10.0	2.5	1		11/03/22 02:53	67-64-1	
Benzene	**1.3**	ug/L	1.0	0.14	1		11/03/22 02:53	71-43-2	
Bromodichloromethane	**0.25J**	ug/L	1.0	0.16	1		11/03/22 02:53	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/03/22 02:53	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 02:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 02:53	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 02:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 02:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 02:53	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 02:53	75-00-3	
Chloroform	**11.9**	ug/L	1.0	0.22	1		11/03/22 02:53	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 02:53	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 02:53	124-48-1	
1,1-Dichloroethane	**1.8**	ug/L	1.0	0.12	1		11/03/22 02:53	75-34-3	
1,2-Dichloroethane	**0.58J**	ug/L	1.0	0.21	1		11/03/22 02:53	107-06-2	
1,1-Dichloroethene	**186**	ug/L	1.0	0.22	1		11/03/22 02:53	75-35-4	
cis-1,2-Dichloroethene	**17100**	ug/L	1000	129	1000		11/01/22 17:23	156-59-2	
trans-1,2-Dichloroethene	**76.5**	ug/L	1.0	0.10	1		11/03/22 02:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 02:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 02:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 02:53	10061-02-6	
Ethylbenzene	**0.42J**	ug/L	1.0	0.12	1		11/03/22 02:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 02:53	591-78-6	
Methylene Chloride	**6.7**	ug/L	1.0	0.39	1		11/03/22 02:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 02:53	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 02:53	100-42-5	
1,1,2,2-Tetrachloroethane	**3.2**	ug/L	1.0	0.15	1		11/03/22 02:53	79-34-5	
Tetrachloroethene	**31.4**	ug/L	1.0	0.33	1		11/03/22 02:53	127-18-4	
Toluene	**6.8**	ug/L	1.0	0.25	1		11/03/22 02:53	108-88-3	
1,1,1-Trichloroethane	**13.1**	ug/L	1.0	0.11	1		11/03/22 02:53	71-55-6	
1,1,2-Trichloroethane	**3.1**	ug/L	1.0	0.14	1		11/03/22 02:53	79-00-5	
Trichloroethene	**82400**	ug/L	1000	210	1000		11/01/22 17:23	79-01-6	
Vinyl chloride	ND	ug/L	1000	167	1000		11/01/22 17:23	75-01-4	
Xylene (Total)	**2.2J**	ug/L	3.0	0.28	1		11/03/22 02:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		11/03/22 02:53	460-00-4	
Toluene-d8 (S)	91	%	80-120		1		11/03/22 02:53	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		11/03/22 02:53	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 02:53		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: DUP-09-202210 **Lab ID: 60414073022** Collected: 10/20/22 09:50 Received: 10/21/22 02:15 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	**2.7J**	ug/L	10.0	2.5	1		11/03/22 00:59	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/03/22 00:59	71-43-2	
Bromodichloromethane	**0.20J**	ug/L	1.0	0.16	1		11/03/22 00:59	75-27-4	
Bromoform	**21.8**	ug/L	1.0	0.68	1		11/03/22 00:59	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 00:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 00:59	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 00:59	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 00:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 00:59	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 00:59	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/03/22 00:59	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 00:59	74-87-3	
Dibromochloromethane	**0.57J**	ug/L	1.0	0.30	1		11/03/22 00:59	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/03/22 00:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/03/22 00:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/03/22 00:59	75-35-4	
cis-1,2-Dichloroethene	**0.49J**	ug/L	1.0	0.13	1		11/03/22 00:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/03/22 00:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 00:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 00:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 00:59	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 00:59	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 00:59	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/03/22 00:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 00:59	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 00:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/03/22 00:59	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/03/22 00:59	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/03/22 00:59	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/03/22 00:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/03/22 00:59	79-00-5	
Trichloroethene	**19.3**	ug/L	1.0	0.21	1		11/03/22 00:59	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/03/22 00:59	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 00:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		11/03/22 00:59	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		11/03/22 00:59	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		11/03/22 00:59	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 00:59		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: DUP-04-202210 **Lab ID: 60414073023** Collected: 10/20/22 13:17 Received: 10/21/22 02:15 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		11/03/22 01:15	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/03/22 01:15	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/03/22 01:15	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/03/22 01:15	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 01:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 01:15	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 01:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 01:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 01:15	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 01:15	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/03/22 01:15	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 01:15	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 01:15	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/03/22 01:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/03/22 01:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/03/22 01:15	75-35-4	
cis-1,2-Dichloroethene	**0.31J**	ug/L	1.0	0.13	1		11/03/22 01:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/03/22 01:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 01:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 01:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 01:15	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 01:15	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 01:15	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/03/22 01:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 01:15	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 01:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/03/22 01:15	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/03/22 01:15	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/03/22 01:15	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/03/22 01:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/03/22 01:15	79-00-5	
Trichloroethene	**10.9**	ug/L	1.0	0.21	1		11/03/22 01:15	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/03/22 01:15	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 01:15	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		11/03/22 01:15	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		11/03/22 01:15	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		11/03/22 01:15	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 01:15		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: IW-77-202210 **Lab ID: 60414073024** Collected: 10/20/22 13:40 Received: 10/21/22 02:15 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		11/01/22 15:48	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/22 15:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 15:48	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 15:48	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 15:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 15:48	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 15:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 15:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 15:48	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 15:48	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 15:48	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 15:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 15:48	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 15:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 15:48	107-06-2	
1,1-Dichloroethene	**0.73J**	ug/L	1.0	0.22	1		11/01/22 15:48	75-35-4	
cis-1,2-Dichloroethene	**5.7**	ug/L	1.0	0.13	1		11/01/22 15:48	156-59-2	
trans-1,2-Dichloroethene	**0.28J**	ug/L	1.0	0.10	1		11/01/22 15:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 15:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 15:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 15:48	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 15:48	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 15:48	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 15:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 15:48	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 15:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 15:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 15:48	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 15:48	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 15:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 15:48	79-00-5	
Trichloroethene	**157**	ug/L	5.0	1.0	5		11/03/22 02:51	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 15:48	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 15:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	109	%	80-120		1		11/01/22 15:48	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		11/01/22 15:48	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		11/01/22 15:48	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 15:48		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-24-202210 **Lab ID: 60414073025** Collected: 10/20/22 13:17 Received: 10/21/22 02:15 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		11/01/22 15:34	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/22 15:34	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 15:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 15:34	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 15:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 15:34	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 15:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 15:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 15:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 15:34	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 15:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 15:34	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 15:34	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 15:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 15:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/22 15:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		11/01/22 15:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/22 15:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 15:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 15:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 15:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 15:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 15:34	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 15:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 15:34	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 15:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 15:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 15:34	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 15:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 15:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 15:34	79-00-5	
Trichloroethene	**10.5**	ug/L	1.0	0.21	1		11/01/22 15:34	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 15:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 15:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		11/01/22 15:34	460-00-4	
Toluene-d8 (S)	96	%	80-120		1		11/01/22 15:34	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		11/01/22 15:34	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 15:34		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: IW-78-202210 **Lab ID: 60414073026** Collected: 10/20/22 09:50 Received: 10/21/22 02:15 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		11/01/22 14:12	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/22 14:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 14:12	75-27-4	
Bromoform	**13.4**	ug/L	1.0	0.68	1		11/01/22 14:12	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 14:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 14:12	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 14:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 14:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 14:12	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 14:12	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 14:12	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 14:12	74-87-3	
Dibromochloromethane	**0.91J**	ug/L	1.0	0.30	1		11/01/22 14:12	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 14:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 14:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/22 14:12	75-35-4	
cis-1,2-Dichloroethene	**0.24J**	ug/L	1.0	0.13	1		11/01/22 14:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/22 14:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 14:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 14:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 14:12	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 14:12	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 14:12	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 14:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 14:12	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 14:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 14:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 14:12	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 14:12	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 14:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 14:12	79-00-5	
Trichloroethene	**17.9**	ug/L	1.0	0.21	1		11/01/22 14:12	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 14:12	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 14:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		11/01/22 14:12	460-00-4	
Toluene-d8 (S)	97	%	80-120		1		11/01/22 14:12	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		11/01/22 14:12	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 14:12		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: TMW-22R-202210 **Lab ID: 60414073027** Collected: 10/20/22 11:30 Received: 10/21/22 02:15 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		11/01/22 14:26	67-64-1	
Benzene	**0.23J**	ug/L	1.0	0.14	1		11/01/22 14:26	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 14:26	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 14:26	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 14:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 14:26	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 14:26	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 14:26	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 14:26	108-90-7	
Chloroethane	**3.5**	ug/L	1.0	0.37	1		11/03/22 01:32	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 14:26	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 14:26	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 14:26	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 14:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 14:26	107-06-2	
1,1-Dichloroethene	**0.33J**	ug/L	1.0	0.22	1		11/01/22 14:26	75-35-4	
cis-1,2-Dichloroethene	**35.6**	ug/L	1.0	0.13	1		11/01/22 14:26	156-59-2	
trans-1,2-Dichloroethene	**1.3**	ug/L	1.0	0.10	1		11/01/22 14:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 14:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 14:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 14:26	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 14:26	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 14:26	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 14:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 14:26	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 14:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 14:26	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 14:26	127-18-4	
Toluene	**0.30J**	ug/L	1.0	0.25	1		11/01/22 14:26	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 14:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 14:26	79-00-5	
Trichloroethene	**35.9**	ug/L	1.0	0.21	1		11/01/22 14:26	79-01-6	
Vinyl chloride	**21.4**	ug/L	1.0	0.17	1		11/01/22 14:26	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 14:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%	80-120		1		11/01/22 14:26	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		11/01/22 14:26	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		11/01/22 14:26	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 14:26		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-87-202210 **Lab ID: 60414073028** Collected: 10/20/22 12:28 Received: 10/21/22 02:15 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		11/01/22 16:29	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/22 16:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 16:29	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 16:29	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 16:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 16:29	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 16:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 16:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 16:29	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 16:29	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 16:29	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 16:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 16:29	124-48-1	
1,1-Dichloroethane	**0.96J**	ug/L	1.0	0.12	1		11/01/22 16:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 16:29	107-06-2	
1,1-Dichloroethene	**3.0**	ug/L	1.0	0.22	1		11/01/22 16:29	75-35-4	
cis-1,2-Dichloroethene	**20.9**	ug/L	1.0	0.13	1		11/01/22 16:29	156-59-2	
trans-1,2-Dichloroethene	**0.40J**	ug/L	1.0	0.10	1		11/01/22 16:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 16:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 16:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 16:29	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 16:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 16:29	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 16:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 16:29	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 16:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 16:29	79-34-5	
Tetrachloroethene	**3.1**	ug/L	1.0	0.33	1		11/01/22 16:29	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 16:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 16:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 16:29	79-00-5	
Trichloroethene	**242**	ug/L	10.0	2.1	10		11/01/22 16:42	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 16:29	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 16:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	108	%	80-120		1		11/01/22 16:29	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		11/01/22 16:29	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		11/01/22 16:29	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 16:29		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-199-202210 **Lab ID: 60414073029** Collected: 10/20/22 13:45 Received: 10/21/22 02:15 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		11/01/22 15:07	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/22 15:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 15:07	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 15:07	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 15:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 15:07	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 15:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 15:07	56-23-5	
Chlorobenzene	**0.79J**	ug/L	1.0	0.089	1		11/01/22 15:07	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 15:07	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 15:07	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 15:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 15:07	124-48-1	
1,1-Dichloroethane	**0.17J**	ug/L	1.0	0.12	1		11/01/22 15:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 15:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/22 15:07	75-35-4	
cis-1,2-Dichloroethene	**10.2**	ug/L	1.0	0.13	1		11/01/22 15:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/22 15:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 15:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 15:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 15:07	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 15:07	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 15:07	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 15:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 15:07	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 15:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 15:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 15:07	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 15:07	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 15:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 15:07	79-00-5	
Trichloroethene	**83.0**	ug/L	1.0	0.21	1		11/01/22 15:07	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 15:07	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 15:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		11/01/22 15:07	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		11/01/22 15:07	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		11/01/22 15:07	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 15:07		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-56R-202210 **Lab ID: 60414073030** Collected: 10/20/22 14:37 Received: 10/21/22 02:15 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		11/01/22 16:56	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/22 16:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 16:56	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 16:56	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 16:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 16:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 16:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 16:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 16:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 16:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 16:56	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 16:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 16:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 16:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 16:56	107-06-2	
1,1-Dichloroethene	**1.1**	ug/L	1.0	0.22	1		11/01/22 16:56	75-35-4	
cis-1,2-Dichloroethene	**11.5**	ug/L	1.0	0.13	1		11/01/22 16:56	156-59-2	
trans-1,2-Dichloroethene	**0.14J**	ug/L	1.0	0.10	1		11/01/22 16:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 16:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 16:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 16:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 16:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 16:56	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 16:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 16:56	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 16:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 16:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 16:56	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 16:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 16:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 16:56	79-00-5	
Trichloroethene	**615**	ug/L	20.0	4.2	20		11/01/22 17:09	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 16:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 16:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		11/01/22 16:56	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		11/01/22 16:56	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		11/01/22 16:56	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 16:56		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: EB-05-202210 **Lab ID: 60414073031** Collected: 10/20/22 16:52 Received: 10/21/22 02:15 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		11/01/22 13:59	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/22 13:59	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 13:59	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 13:59	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 13:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 13:59	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 13:59	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 13:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 13:59	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 13:59	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 13:59	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 13:59	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 13:59	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 13:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 13:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/22 13:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		11/01/22 13:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/22 13:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 13:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 13:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 13:59	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 13:59	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 13:59	591-78-6	
Methylene Chloride	**0.49J**	ug/L	1.0	0.39	1		11/01/22 13:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 13:59	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 13:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 13:59	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 13:59	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 13:59	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 13:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 13:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		11/01/22 13:59	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 13:59	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 13:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		11/01/22 13:59	460-00-4	
Toluene-d8 (S)	96	%	80-120		1		11/01/22 13:59	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		11/01/22 13:59	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 13:59		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-175-202210 **Lab ID: 60414073032** Collected: 10/20/22 14:26 Received: 10/21/22 02:15 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		11/01/22 15:20	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/22 15:20	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 15:20	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 15:20	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 15:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 15:20	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 15:20	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 15:20	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 15:20	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 15:20	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 15:20	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 15:20	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 15:20	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 15:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 15:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/22 15:20	75-35-4	
cis-1,2-Dichloroethene	**2.2**	ug/L	1.0	0.13	1		11/01/22 15:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/22 15:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 15:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 15:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 15:20	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 15:20	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 15:20	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 15:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 15:20	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 15:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 15:20	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 15:20	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 15:20	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 15:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 15:20	79-00-5	
Trichloroethene	**139**	ug/L	1.0	0.21	1		11/01/22 15:20	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 15:20	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 15:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		11/01/22 15:20	460-00-4	
Toluene-d8 (S)	96	%	80-120		1		11/01/22 15:20	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		11/01/22 15:20	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 15:20		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: VP-7-202210 **Lab ID: 60414073033** Collected: 10/20/22 14:30 Received: 10/21/22 02:15 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	**31.2**	ug/L	10.0	2.5	1		11/01/22 14:40	67-64-1	
Benzene	**0.32J**	ug/L	1.0	0.14	1		11/01/22 14:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 14:40	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 14:40	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 14:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 14:40	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 14:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 14:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 14:40	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 14:40	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 14:40	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/22 14:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 14:40	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 14:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 14:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/22 14:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		11/01/22 14:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/22 14:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 14:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 14:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 14:40	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 14:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 14:40	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 14:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 14:40	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 14:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 14:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 14:40	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/22 14:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 14:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 14:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		11/01/22 14:40	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 14:40	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 14:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%	80-120		1		11/01/22 14:40	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		11/01/22 14:40	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		11/01/22 14:40	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 14:40		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: VP-8-202210 **Lab ID: 60414073034** Collected: 10/20/22 14:38 Received: 10/21/22 02:15 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	**37.0**	ug/L	10.0	2.5	1		11/01/22 14:53	67-64-1	
Benzene	**0.55J**	ug/L	1.0	0.14	1		11/01/22 14:53	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/22 14:53	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/22 14:53	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/22 14:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/22 14:53	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/22 14:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/22 14:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/22 14:53	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/22 14:53	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/22 14:53	67-66-3	
Chloromethane	**0.63J**	ug/L	1.0	0.28	1		11/01/22 14:53	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/22 14:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/22 14:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/22 14:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/22 14:53	75-35-4	
cis-1,2-Dichloroethene	**0.15J**	ug/L	1.0	0.13	1		11/01/22 14:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/22 14:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/22 14:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/22 14:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/22 14:53	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/22 14:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/22 14:53	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/22 14:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/22 14:53	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/22 14:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/22 14:53	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/22 14:53	127-18-4	
Toluene	**0.34J**	ug/L	1.0	0.25	1		11/01/22 14:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/22 14:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/22 14:53	79-00-5	
Trichloroethene	**5.6**	ug/L	1.0	0.21	1		11/01/22 14:53	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/22 14:53	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/22 14:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	110	%	80-120		1		11/01/22 14:53	460-00-4	
Toluene-d8 (S)	95	%	80-120		1		11/01/22 14:53	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	96	%	80-120		1		11/01/22 14:53	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/22 14:53		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: MW-38-202210 **Lab ID: 60414073035** Collected: 10/20/22 14:35 Received: 10/21/22 02:15 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		11/03/22 05:16	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/03/22 05:16	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/03/22 05:16	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/03/22 05:16	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 05:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 05:16	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 05:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 05:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 05:16	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 05:16	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/03/22 05:16	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 05:16	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 05:16	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/03/22 05:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/03/22 05:16	107-06-2	
1,1-Dichloroethene	**4.7**	ug/L	1.0	0.22	1		11/03/22 05:16	75-35-4	
cis-1,2-Dichloroethene	**695**	ug/L	50.0	6.4	50		11/03/22 03:08	156-59-2	
trans-1,2-Dichloroethene	**2.8**	ug/L	1.0	0.10	1		11/03/22 05:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 05:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 05:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 05:16	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 05:16	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 05:16	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/03/22 05:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 05:16	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 05:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/03/22 05:16	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/03/22 05:16	127-18-4	
Toluene	**0.37J**	ug/L	1.0	0.25	1		11/03/22 05:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/03/22 05:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/03/22 05:16	79-00-5	
Trichloroethene	**1250**	ug/L	50.0	10.5	50		11/03/22 03:08	79-01-6	
Vinyl chloride	**541**	ug/L	50.0	8.4	50		11/03/22 03:08	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 05:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		11/03/22 05:16	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		11/03/22 05:16	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		1		11/03/22 05:16	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 05:16		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Sample: TMW-24-202210 **Lab ID: 60414073036** Collected: 10/20/22 15:06 Received: 10/21/22 02:15 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		11/03/22 04:27	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/03/22 04:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/03/22 04:27	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/03/22 04:27	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/22 04:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/22 04:27	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/22 04:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/03/22 04:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/22 04:27	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/22 04:27	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/03/22 04:27	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/22 04:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/22 04:27	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/03/22 04:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/03/22 04:27	107-06-2	
1,1-Dichloroethene	**1.1**	ug/L	1.0	0.22	1		11/03/22 04:27	75-35-4	
cis-1,2-Dichloroethene	**8.7**	ug/L	1.0	0.13	1		11/03/22 04:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/03/22 04:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/22 04:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/22 04:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/22 04:27	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/22 04:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/22 04:27	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/03/22 04:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/22 04:27	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/03/22 04:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/03/22 04:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/03/22 04:27	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/03/22 04:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/03/22 04:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/03/22 04:27	79-00-5	
Trichloroethene	**393**	ug/L	10.0	2.1	10		11/03/22 03:24	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/03/22 04:27	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/22 04:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		11/03/22 04:27	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		11/03/22 04:27	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		11/03/22 04:27	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/22 04:27		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

QC Batch: 815718
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: 60414073002, 60414073003, 60414073004, 60414073005, 60414073006, 60414073007, 60414073008, 60414073009, 60414073010, 60414073011, 60414073012, 60414073013, 60414073014, 60414073015, 60414073016, 60414073017, 60414073018, 60414073019, 60414073020

METHOD BLANK: 3244131
Matrix: Water
Associated Lab Samples: 60414073002, 60414073003, 60414073004, 60414073005, 60414073006, 60414073007, 60414073008, 60414073009, 60414073010, 60414073011, 60414073012, 60414073013, 60414073014, 60414073015, 60414073016, 60414073017, 60414073018, 60414073019, 60414073020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/31/22 17:22	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/31/22 17:22	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/31/22 17:22	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/31/22 17:22	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/31/22 17:22	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/31/22 17:22	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/31/22 17:22	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/31/22 17:22	
2-Hexanone	ug/L	ND	10.0	1.1	10/31/22 17:22	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/31/22 17:22	
Acetone	ug/L	ND	10.0	2.5	10/31/22 17:22	
Benzene	ug/L	ND	1.0	0.14	10/31/22 17:22	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/31/22 17:22	
Bromoform	ug/L	ND	1.0	0.68	10/31/22 17:22	
Bromomethane	ug/L	ND	5.0	0.46	10/31/22 17:22	
Carbon disulfide	ug/L	ND	5.0	0.98	10/31/22 17:22	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/31/22 17:22	
Chlorobenzene	ug/L	ND	1.0	0.089	10/31/22 17:22	
Chloroethane	ug/L	ND	1.0	0.37	10/31/22 17:22	
Chloroform	ug/L	ND	1.0	0.22	10/31/22 17:22	
Chloromethane	ug/L	ND	1.0	0.28	10/31/22 17:22	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/31/22 17:22	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/31/22 17:22	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/31/22 17:22	
Ethylbenzene	ug/L	ND	1.0	0.12	10/31/22 17:22	
Methylene Chloride	ug/L	ND	1.0	0.39	10/31/22 17:22	
Styrene	ug/L	ND	1.0	0.12	10/31/22 17:22	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/31/22 17:22	
Toluene	ug/L	ND	1.0	0.25	10/31/22 17:22	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/31/22 17:22	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/31/22 17:22	
Trichloroethene	ug/L	ND	1.0	0.21	10/31/22 17:22	
Vinyl chloride	ug/L	ND	1.0	0.17	10/31/22 17:22	
Xylene (Total)	ug/L	ND	3.0	0.28	10/31/22 17:22	
1,2-Dichlorobenzene-d4 (S)	%	97	80-120		10/31/22 17:22	
4-Bromofluorobenzene (S)	%	107	80-120		10/31/22 17:22	
Toluene-d8 (S)	%	99	80-120		10/31/22 17:22	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

LABORATORY CONTROL SAMPLE: 3244132

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.2	101	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.2	96	80-120	
1,1,2-Trichloroethane	ug/L	20	20.5	103	80-120	
1,1-Dichloroethane	ug/L	20	15.1	75	75-120	
1,1-Dichloroethene	ug/L	20	17.2	86	75-120	
1,2-Dichloroethane	ug/L	20	15.6	78	80-120	L2
1,2-Dichloropropane	ug/L	20	21.5	108	80-120	
2-Butanone (MEK)	ug/L	100	78.0	78	50-155	
2-Hexanone	ug/L	100	118	118	55-145	
4-Methyl-2-pentanone (MIBK)	ug/L	100	101	101	70-130	
Acetone	ug/L	100	86.9	87	35-160	
Benzene	ug/L	20	21.1	105	80-120	
Bromodichloromethane	ug/L	20	18.5	92	80-120	
Bromoform	ug/L	20	18.7	94	60-130	
Bromomethane	ug/L	20	19.2	96	50-140	
Carbon disulfide	ug/L	20	18.6	93	75-125	
Carbon tetrachloride	ug/L	20	19.1	95	70-130	
Chlorobenzene	ug/L	20	20.9	104	80-120	
Chloroethane	ug/L	20	19.4	97	70-130	
Chloroform	ug/L	20	15.5	77	75-120	
Chloromethane	ug/L	20	20.6	103	45-145	
cis-1,2-Dichloroethene	ug/L	20	16.2	81	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.6	103	75-125	
Dibromochloromethane	ug/L	20	18.1	91	75-125	
Ethylbenzene	ug/L	20	20.1	100	80-120	
Methylene Chloride	ug/L	20	18.8	94	70-140	
Styrene	ug/L	20	20.4	102	80-120	
Tetrachloroethene	ug/L	20	20.0	100	80-125	
Toluene	ug/L	20	20.9	104	80-120	
trans-1,2-Dichloroethene	ug/L	20	14.3	72	80-120	L2
trans-1,3-Dichloropropene	ug/L	20	18.4	92	75-125	
Trichloroethene	ug/L	20	21.0	105	80-125	
Vinyl chloride	ug/L	20	22.4	112	65-140	
Xylene (Total)	ug/L	60	63.9	107	80-120	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			97	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

QC Batch: 815883
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: 60414073021, 60414073024, 60414073025, 60414073026, 60414073027, 60414073028, 60414073029, 60414073030, 60414073031, 60414073032, 60414073033, 60414073034

METHOD BLANK: 3244702
Matrix: Water
Associated Lab Samples: 60414073021, 60414073024, 60414073025, 60414073026, 60414073027, 60414073028, 60414073029, 60414073030, 60414073031, 60414073032, 60414073033, 60414073034

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	11/01/22 12:10	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	11/01/22 12:10	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	11/01/22 12:10	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	11/01/22 12:10	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	11/01/22 12:10	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	11/01/22 12:10	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	11/01/22 12:10	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	11/01/22 12:10	
2-Hexanone	ug/L	ND	10.0	1.1	11/01/22 12:10	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	11/01/22 12:10	
Acetone	ug/L	ND	10.0	2.5	11/01/22 12:10	
Benzene	ug/L	ND	1.0	0.14	11/01/22 12:10	
Bromodichloromethane	ug/L	ND	1.0	0.16	11/01/22 12:10	
Bromoform	ug/L	ND	1.0	0.68	11/01/22 12:10	
Bromomethane	ug/L	ND	5.0	0.46	11/01/22 12:10	
Carbon disulfide	ug/L	ND	5.0	0.98	11/01/22 12:10	
Carbon tetrachloride	ug/L	ND	1.0	0.17	11/01/22 12:10	
Chlorobenzene	ug/L	ND	1.0	0.089	11/01/22 12:10	
Chloroethane	ug/L	ND	1.0	0.37	11/01/22 12:10	
Chloroform	ug/L	ND	1.0	0.22	11/01/22 12:10	
Chloromethane	ug/L	ND	1.0	0.28	11/01/22 12:10	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	11/01/22 12:10	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	11/01/22 12:10	
Dibromochloromethane	ug/L	ND	1.0	0.30	11/01/22 12:10	
Ethylbenzene	ug/L	ND	1.0	0.12	11/01/22 12:10	
Methylene Chloride	ug/L	ND	1.0	0.39	11/01/22 12:10	
Styrene	ug/L	ND	1.0	0.12	11/01/22 12:10	
Tetrachloroethene	ug/L	ND	1.0	0.33	11/01/22 12:10	
Toluene	ug/L	ND	1.0	0.25	11/01/22 12:10	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	11/01/22 12:10	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	11/01/22 12:10	
Trichloroethene	ug/L	ND	1.0	0.21	11/01/22 12:10	
Vinyl chloride	ug/L	ND	1.0	0.17	11/01/22 12:10	
Xylene (Total)	ug/L	ND	3.0	0.28	11/01/22 12:10	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120		11/01/22 12:10	
4-Bromofluorobenzene (S)	%	97	80-120		11/01/22 12:10	
Toluene-d8 (S)	%	101	80-120		11/01/22 12:10	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

LABORATORY CONTROL SAMPLE: 3244703

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.2	106	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	20.6	103	80-120	
1,1,2-Trichloroethane	ug/L	20	18.6	93	80-120	
1,1-Dichloroethane	ug/L	20	20.8	104	75-120	
1,1-Dichloroethene	ug/L	20	23.5	118	75-120	
1,2-Dichloroethane	ug/L	20	20.9	104	80-120	
1,2-Dichloropropane	ug/L	20	20.8	104	80-120	
2-Butanone (MEK)	ug/L	100	99.1	99	50-155	
2-Hexanone	ug/L	100	94.1	94	55-145	
4-Methyl-2-pentanone (MIBK)	ug/L	100	80.5	81	70-130	
Acetone	ug/L	100	108	108	35-160	
Benzene	ug/L	20	20.8	104	80-120	
Bromodichloromethane	ug/L	20	21.6	108	80-120	
Bromoform	ug/L	20	15.3	76	60-130	
Bromomethane	ug/L	20	22.7	114	50-140	
Carbon disulfide	ug/L	20	24.9	125	75-125	
Carbon tetrachloride	ug/L	20	22.2	111	70-130	
Chlorobenzene	ug/L	20	21.9	109	80-120	
Chloroethane	ug/L	20	25.6	128	70-130	
Chloroform	ug/L	20	22.1	111	75-120	
Chloromethane	ug/L	20	23.0	115	45-145	
cis-1,2-Dichloroethene	ug/L	20	22.7	113	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.8	104	75-125	
Dibromochloromethane	ug/L	20	17.0	85	75-125	
Ethylbenzene	ug/L	20	21.5	108	80-120	
Methylene Chloride	ug/L	20	28.1	140	70-140	
Styrene	ug/L	20	21.8	109	80-120	
Tetrachloroethene	ug/L	20	20.4	102	80-125	
Toluene	ug/L	20	21.6	108	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.8	104	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.1	91	75-125	
Trichloroethene	ug/L	20	22.4	112	80-125	
Vinyl chloride	ug/L	20	24.4	122	65-140	
Xylene (Total)	ug/L	60	64.5	108	80-120	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			103	80-120	
Toluene-d8 (S)	%			101	80-120	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

QC Batch: 816145
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: 60414073003, 60414073004, 60414073006, 60414073007, 60414073010, 60414073012, 60414073015, 60414073016, 60414073019, 60414073020, 60414073022, 60414073023, 60414073024, 60414073027, 60414073035, 60414073036

METHOD BLANK: 3245910
Matrix: Water
Associated Lab Samples: 60414073003, 60414073004, 60414073006, 60414073007, 60414073010, 60414073012, 60414073015, 60414073016, 60414073019, 60414073020, 60414073022, 60414073023, 60414073024, 60414073027, 60414073035, 60414073036

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	11/02/22 22:52	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	11/02/22 22:52	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	11/02/22 22:52	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	11/02/22 22:52	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	11/02/22 22:52	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	11/02/22 22:52	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	11/02/22 22:52	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	11/02/22 22:52	
2-Hexanone	ug/L	ND	10.0	1.1	11/02/22 22:52	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	11/02/22 22:52	
Acetone	ug/L	ND	10.0	2.5	11/02/22 22:52	
Benzene	ug/L	ND	1.0	0.14	11/02/22 22:52	
Bromodichloromethane	ug/L	ND	1.0	0.16	11/02/22 22:52	
Bromoform	ug/L	ND	1.0	0.68	11/02/22 22:52	
Bromomethane	ug/L	ND	5.0	0.46	11/02/22 22:52	
Carbon disulfide	ug/L	ND	5.0	0.98	11/02/22 22:52	
Carbon tetrachloride	ug/L	ND	1.0	0.17	11/02/22 22:52	
Chlorobenzene	ug/L	ND	1.0	0.089	11/02/22 22:52	
Chloroethane	ug/L	ND	1.0	0.37	11/02/22 22:52	
Chloroform	ug/L	ND	1.0	0.22	11/02/22 22:52	
Chloromethane	ug/L	ND	1.0	0.28	11/02/22 22:52	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	11/02/22 22:52	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	11/02/22 22:52	
Dibromochloromethane	ug/L	ND	1.0	0.30	11/02/22 22:52	
Ethylbenzene	ug/L	ND	1.0	0.12	11/02/22 22:52	
Methylene Chloride	ug/L	ND	1.0	0.39	11/02/22 22:52	
Styrene	ug/L	ND	1.0	0.12	11/02/22 22:52	
Tetrachloroethene	ug/L	ND	1.0	0.33	11/02/22 22:52	
Toluene	ug/L	ND	1.0	0.25	11/02/22 22:52	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	11/02/22 22:52	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	11/02/22 22:52	
Trichloroethene	ug/L	ND	1.0	0.21	11/02/22 22:52	
Vinyl chloride	ug/L	ND	1.0	0.17	11/02/22 22:52	
Xylene (Total)	ug/L	ND	3.0	0.28	11/02/22 22:52	
1,2-Dichlorobenzene-d4 (S)	%	101	80-120		11/02/22 22:52	
4-Bromofluorobenzene (S)	%	98	80-120		11/02/22 22:52	
Toluene-d8 (S)	%	100	80-120		11/02/22 22:52	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

LABORATORY CONTROL SAMPLE: 3245911

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.8	94	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.9	100	80-120	
1,1,2-Trichloroethane	ug/L	20	18.8	94	80-120	
1,1-Dichloroethane	ug/L	20	18.3	92	75-120	
1,1-Dichloroethene	ug/L	20	18.8	94	75-120	
1,2-Dichloroethane	ug/L	20	19.0	95	80-120	
1,2-Dichloropropane	ug/L	20	19.2	96	80-120	
2-Butanone (MEK)	ug/L	100	93.9	94	50-155	
2-Hexanone	ug/L	100	92.9	93	55-145	
4-Methyl-2-pentanone (MIBK)	ug/L	100	98.9	99	70-130	
Acetone	ug/L	100	93.0	93	35-160	
Benzene	ug/L	20	19.0	95	80-120	
Bromodichloromethane	ug/L	20	18.9	94	80-120	
Bromoform	ug/L	20	19.4	97	60-130	
Bromomethane	ug/L	20	21.5	108	50-140	
Carbon disulfide	ug/L	20	18.1	90	75-125	
Carbon tetrachloride	ug/L	20	19.0	95	70-130	
Chlorobenzene	ug/L	20	19.5	97	80-120	
Chloroethane	ug/L	20	18.2	91	70-130	
Chloroform	ug/L	20	19.0	95	75-120	
Chloromethane	ug/L	20	18.2	91	45-145	
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	75-125	
Ethylbenzene	ug/L	20	19.6	98	80-120	
Methylene Chloride	ug/L	20	17.8	89	70-140	
Styrene	ug/L	20	20.0	100	80-120	
Tetrachloroethene	ug/L	20	18.7	94	80-125	
Toluene	ug/L	20	19.1	95	80-120	
trans-1,2-Dichloroethene	ug/L	20	17.6	88	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.5	93	75-125	
Trichloroethene	ug/L	20	19.2	96	80-125	
Vinyl chloride	ug/L	20	18.2	91	65-140	
Xylene (Total)	ug/L	60	58.8	98	80-120	
1,2-Dichlorobenzene-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			100	80-120	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

QC Batch: 816221
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: 60414073001, 60414073011, 60414073017, 60414073021

METHOD BLANK: 3246289 Matrix: Water
Associated Lab Samples: 60414073001, 60414073011, 60414073017, 60414073021

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	11/02/22 22:31	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	11/02/22 22:31	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	11/02/22 22:31	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	11/02/22 22:31	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	11/02/22 22:31	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	11/02/22 22:31	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	11/02/22 22:31	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	11/02/22 22:31	
2-Hexanone	ug/L	ND	10.0	1.1	11/02/22 22:31	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	11/02/22 22:31	
Acetone	ug/L	ND	10.0	2.5	11/02/22 22:31	
Benzene	ug/L	ND	1.0	0.14	11/02/22 22:31	
Bromodichloromethane	ug/L	ND	1.0	0.16	11/02/22 22:31	
Bromoform	ug/L	ND	1.0	0.68	11/02/22 22:31	
Bromomethane	ug/L	ND	5.0	0.46	11/02/22 22:31	
Carbon disulfide	ug/L	ND	5.0	0.98	11/02/22 22:31	
Carbon tetrachloride	ug/L	ND	1.0	0.17	11/02/22 22:31	
Chlorobenzene	ug/L	ND	1.0	0.089	11/02/22 22:31	
Chloroethane	ug/L	ND	1.0	0.37	11/02/22 22:31	
Chloroform	ug/L	ND	1.0	0.22	11/02/22 22:31	
Chloromethane	ug/L	ND	1.0	0.28	11/02/22 22:31	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	11/02/22 22:31	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	11/02/22 22:31	
Dibromochloromethane	ug/L	ND	1.0	0.30	11/02/22 22:31	
Ethylbenzene	ug/L	ND	1.0	0.12	11/02/22 22:31	
Methylene Chloride	ug/L	ND	1.0	0.39	11/02/22 22:31	
Styrene	ug/L	ND	1.0	0.12	11/02/22 22:31	
Tetrachloroethene	ug/L	ND	1.0	0.33	11/02/22 22:31	
Toluene	ug/L	ND	1.0	0.25	11/02/22 22:31	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	11/02/22 22:31	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	11/02/22 22:31	
Trichloroethene	ug/L	ND	1.0	0.21	11/02/22 22:31	
Vinyl chloride	ug/L	ND	1.0	0.17	11/02/22 22:31	
Xylene (Total)	ug/L	ND	3.0	0.28	11/02/22 22:31	
1,2-Dichlorobenzene-d4 (S)	%	103	80-120		11/02/22 22:31	
4-Bromofluorobenzene (S)	%	102	80-120		11/02/22 22:31	
Toluene-d8 (S)	%	98	80-120		11/02/22 22:31	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

LABORATORY CONTROL SAMPLE: 3246290

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.9	95	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	17.6	88	80-120	
1,1,2-Trichloroethane	ug/L	20	18.7	93	80-120	
1,1-Dichloroethane	ug/L	20	18.1	90	75-120	
1,1-Dichloroethene	ug/L	20	20.2	101	75-120	
1,2-Dichloroethane	ug/L	20	18.2	91	80-120	
1,2-Dichloropropane	ug/L	20	18.1	90	80-120	
2-Butanone (MEK)	ug/L	100	71.7	72	50-155	
2-Hexanone	ug/L	100	83.7	84	55-145	
4-Methyl-2-pentanone (MIBK)	ug/L	100	87.8	88	70-130	
Acetone	ug/L	100	56.6	57	35-160	
Benzene	ug/L	20	18.1	90	80-120	
Bromodichloromethane	ug/L	20	18.3	91	80-120	
Bromoform	ug/L	20	19.8	99	60-130	
Bromomethane	ug/L	20	20.4	102	50-140	
Carbon disulfide	ug/L	20	19.2	96	75-125	
Carbon tetrachloride	ug/L	20	18.1	90	70-130	
Chlorobenzene	ug/L	20	18.8	94	80-120	
Chloroethane	ug/L	20	19.6	98	70-130	
Chloroform	ug/L	20	18.6	93	75-120	
Chloromethane	ug/L	20	17.0	85	45-145	
cis-1,2-Dichloroethene	ug/L	20	18.4	92	80-120	
cis-1,3-Dichloropropene	ug/L	20	17.8	89	75-125	
Dibromochloromethane	ug/L	20	19.7	99	75-125	
Ethylbenzene	ug/L	20	19.0	95	80-120	
Methylene Chloride	ug/L	20	17.8	89	70-140	
Styrene	ug/L	20	19.9	100	80-120	
Tetrachloroethene	ug/L	20	19.8	99	80-125	
Toluene	ug/L	20	17.9	90	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.3	97	80-120	
trans-1,3-Dichloropropene	ug/L	20	17.7	89	75-125	
Trichloroethene	ug/L	20	18.1	90	80-125	
Vinyl chloride	ug/L	20	19.3	96	65-140	
Xylene (Total)	ug/L	60	54.6	91	80-120	
1,2-Dichlorobenzene-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			103	80-120	
Toluene-d8 (S)	%			99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3246291 3246292

Parameter	Units	60412542058 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	2000	2000	1000	1050	50	53	75-125	5	15	M1
1,1,2,2-Tetrachloroethane	ug/L	ND	2000	2000	1000	1010	50	51	80-120	1	15	M1
1,1,2-Trichloroethane	ug/L	ND	2000	2000	1020	1070	51	54	80-120	5	20	M1

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3246291 3246292

Parameter	Units	60412542058 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	2000	2000	994	1030	50	51	75-120	3	15	M1
1,1-Dichloroethene	ug/L	ND	2000	2000	1130	1180	56	59	75-120	4	25	M1
1,2-Dichloroethane	ug/L	ND	2000	2000	1350	1330	68	67	80-120	2	25	M1
1,2-Dichloropropane	ug/L	ND	2000	2000	992	1020	50	51	80-120	3	20	M1
2-Butanone (MEK)	ug/L	ND	10000	10000	3940	4140	39	41	50-155	5	25	M1
2-Hexanone	ug/L	ND	10000	10000	4580	4840	46	48	55-145	5	20	M1
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10000	10000	4780	5040	48	50	70-130	5	20	M1
Acetone	ug/L	ND	10000	10000	3160	3240	30	31	35-160	2	25	M1
Benzene	ug/L	12400	2000	2000	13300	12200	48	-9	80-120	9	25	M1
Bromodichloromethane	ug/L	ND	2000	2000	986	1030	49	51	80-120	4	15	M1
Bromoform	ug/L	ND	2000	2000	1010	1020	51	51	60-130	1	20	M1
Bromomethane	ug/L	ND	2000	2000	1120	1130	56	57	50-140	2	45	
Carbon disulfide	ug/L	ND	2000	2000	1040	1080	52	54	75-125	4	25	M1
Carbon tetrachloride	ug/L	ND	2000	2000	872	934	44	47	70-130	7	20	M1
Chlorobenzene	ug/L	ND	2000	2000	1030	1080	52	54	80-120	4	20	M1
Chloroethane	ug/L	ND	2000	2000	1040	1080	52	54	70-130	3	20	M1
Chloroform	ug/L	ND	2000	2000	1020	1090	51	54	75-120	7	20	M1
Chloromethane	ug/L	ND	2000	2000	844	877	42	44	45-145	4	30	M1
cis-1,2-Dichloroethene	ug/L	ND	2000	2000	1120	1130	56	57	80-120	1	20	M1
cis-1,3-Dichloropropene	ug/L	ND	2000	2000	955	993	48	50	75-125	4	20	M1
Dibromochloromethane	ug/L	ND	2000	2000	1020	1060	51	53	75-125	4	20	M1
Ethylbenzene	ug/L	1890	2000	2000	2940	2750	52	43	80-120	7	25	M1
Methylene Chloride	ug/L	ND	2000	2000	1010	1050	49	52	70-140	4	25	M1
Styrene	ug/L	ND	2000	2000	1070	1130	54	57	80-120	5	30	M1
Tetrachloroethene	ug/L	ND	2000	2000	1130	1170	56	59	80-125	4	25	M1
Toluene	ug/L	219	2000	2000	1220	1220	50	50	80-120	0	25	M1
trans-1,2-Dichloroethene	ug/L	ND	2000	2000	1070	941	54	47	80-120	13	20	M1
trans-1,3-Dichloropropene	ug/L	ND	2000	2000	945	994	47	50	75-125	5	15	M1
Trichloroethene	ug/L	ND	2000	2000	2220	1970	111	99	80-125	12	20	
Vinyl chloride	ug/L	ND	2000	2000	1040	1070	52	53	65-140	3	25	M1
Xylene (Total)	ug/L	1960	6000	6000	4980	4840	50	48	80-120	3	30	MS
1,2-Dichlorobenzene-d4 (S)	%						103	105	80-120			
4-Bromofluorobenzene (S)	%						101	101	80-120			
Toluene-d8 (S)	%						98	99	80-120			
Preservation pH		1.0			1.0	1.0				0		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

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: 815718

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

Batch: 815883

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

ANALYTE QUALIFIERS

L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

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.

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60414073001	ITMW-18-202210	EPA 5030B/8260	816221		
60414073002	MW-202-202210	EPA 5030B/8260	815718		
60414073003	TMW-23-202210	EPA 5030B/8260	815718		
60414073003	TMW-23-202210	EPA 5030B/8260	816145		
60414073004	ITMW-19-202210	EPA 5030B/8260	815718		
60414073004	ITMW-19-202210	EPA 5030B/8260	816145		
60414073005	TMW-32-202210	EPA 5030B/8260	815718		
60414073006	TMW-12-202210	EPA 5030B/8260	815718		
60414073006	TMW-12-202210	EPA 5030B/8260	816145		
60414073007	DUP-07-202210	EPA 5030B/8260	815718		
60414073007	DUP-07-202210	EPA 5030B/8260	816145		
60414073008	MW-204-202210	EPA 5030B/8260	815718		
60414073009	TMW-34-202210	EPA 5030B/8260	815718		
60414073010	MW-185-202210	EPA 5030B/8260	815718		
60414073010	MW-185-202210	EPA 5030B/8260	816145		
60414073011	MW-25R-202210	EPA 5030B/8260	815718		
60414073011	MW-25R-202210	EPA 5030B/8260	816221		
60414073012	MW-58R-202210	EPA 5030B/8260	815718		
60414073012	MW-58R-202210	EPA 5030B/8260	816145		
60414073013	VP-12-202210	EPA 5030B/8260	815718		
60414073014	MW-179-202210	EPA 5030B/8260	815718		
60414073015	MW-57R-202210	EPA 5030B/8260	815718		
60414073015	MW-57R-202210	EPA 5030B/8260	816145		
60414073016	ITMW-5-202210	EPA 5030B/8260	815718		
60414073016	ITMW-5-202210	EPA 5030B/8260	816145		
60414073017	MW-93-202210	EPA 5030B/8260	815718		
60414073017	MW-93-202210	EPA 5030B/8260	816221		
60414073018	TB-04-202210	EPA 5030B/8260	815718		
60414073019	MW-189-202210	EPA 5030B/8260	815718		
60414073019	MW-189-202210	EPA 5030B/8260	816145		
60414073020	MW-46R-202210	EPA 5030B/8260	815718		
60414073020	MW-46R-202210	EPA 5030B/8260	816145		
60414073021	RW-1-202210	EPA 5030B/8260	815883		
60414073021	RW-1-202210	EPA 5030B/8260	816221		
60414073022	DUP-09-202210	EPA 5030B/8260	816145		

Pace Analytical Services, LLC
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Lenexa, KS 66219
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60414073

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60414073023	**DUP-04-202210**	EPA 5030B/8260	816145		
60414073024	**IW-77-202210**	EPA 5030B/8260	815883		
60414073024	**IW-77-202210**	EPA 5030B/8260	816145		
60414073025	**MW-24-202210**	EPA 5030B/8260	815883		
60414073026	**IW-78-202210**	EPA 5030B/8260	815883		
60414073027	**TMW-22R-202210**	EPA 5030B/8260	815883		
60414073027	**TMW-22R-202210**	EPA 5030B/8260	816145		
60414073028	**MW-87-202210**	EPA 5030B/8260	815883		
60414073029	**MW-199-202210**	EPA 5030B/8260	815883		
60414073030	**MW-56R-202210**	EPA 5030B/8260	815883		
60414073031	**EB-05-202210**	EPA 5030B/8260	815883		
60414073032	**MW-175-202210**	EPA 5030B/8260	815883		
60414073033	**VP-7-202210**	EPA 5030B/8260	815883		
60414073034	**VP-8-202210**	EPA 5030B/8260	815883		
60414073035	**MW-38-202210**	EPA 5030B/8260	816145		
60414073036	**TMW-24-202210**	EPA 5030B/8260	816145		

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sar	WO# : 60414073
	Revision: 2	Effective Date: 01/12/

60414073

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: T-299 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 0.5 **Corr. Factor** 0 **Corrected** 0.5

Date and initials of person examining contents: BC 10/26

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	
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) Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No ☐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

Page 1 of 1

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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 6

Section A Required Client Information:

Company:	Ramboll
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	Standard

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	

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	ITMW-18-202210	WT	G			10/20/22	0909		3				X					X		60414673
2	MW-202-202210	WT	G			10/20/22	0910		3				X					X		
3	MW-23-202210	WT	G				0909		3				X					X		
4	ITMW-19-202210	WT	G				1038		3				X					X		
5	TMW-32-202210	WT	G				0913		3				X					X		
6	TMW-12-202210	WT	G				1043		3				X					X		
7	Dup-07-202210	WT	G				1043		3				X					X		
8	MW-204-202210	WT	G				1115		3				X					X		
9	TMW-34-202210	WT	G				1109		3				X					X		
10	MW-185-202210	WT	G				1000		3				X					X		
11	MW-25R-202210	WT	G				1245		3				X					X		
12	MW-58R-202210	WT	G				1247		3				X					X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Ramboll	10-20-22	1750	Pace	10/21	0215	Y Y Y Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Ellmer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-20-22

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:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	

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

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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

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	~~IW-73-202210~~	WT	G			~~10/20/22~~	1455		3				X				X		
2	VP-12-202210	WT	G			10/20/22	1529		3				X				X		
3	MW-179-202210	WT	G			10/20/22	1551		3				X				X		
4	MW-57R-202210	WT	G				1557		3				X				X		
5	ITMW-5-202210	WT	G				1630		3				X				X		
6	MW-93-202210	WT	G				1619		3				X				X		
7	TB-04-202210	WT	G				1658		3				X				X		
8	MW-189-202210	WT	G				1645		3				X				X		
9	MW-46R-202210	WT	G				1709		3				X				X		
10	RW-1-202210	WT	G				1650		3				X				X		
11	DUP-09-202210	WT	G				0950		3				X				X		
12	Dup-04-202210	WT	G				1317		3				X				X		

G5414673

Pace Project No./ Lab I.D.

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Ramboll	10-20-22	1750	BC Pace	10/21	0215	4.1 X Y Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 10-20-22

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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	Overland Park, KS 66210
Email To:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B
Required Project Information:

Report To:	David Meyer
Copy To:	Caroline Chavers
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	

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

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WATER	WT
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1	IW-77-202210	WT	G			10/20/22	1340		3				X					X			60414073
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

GP

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ramboll	10-20-22	1750	Pace	10/21	0215	1.1	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Bellnier

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-20-22

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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Email To:	
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

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Copy To:	Caroline Chavers
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Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	

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Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

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PRODUCT	P
SOIL/SOLID	SL
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WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-24-202210	WT	G			10/20/22	1317		3				X					X		604/4073
2	IW-78-202210	WT	G			10/20/22	0950		3				X					X		
3	TMW-22R-202210	WT	G			10/20/22	1130		3				X					X		
4	MW-87-202210	WT	G				1228		3				X					X		
5	MW-199-202210	WT	G				1345		3				X					X		
6	MW-56R-202210	WT	G				1437		3				X					X		
7	EB-05-202210	WT	G				1652		3				X					X		
8	MW-175-202210	WT	G				1426		3				X					X		
9	VP-7-202210	WT	G				1430		3				X					X		
10	VP-8-202210	WT	G				1438		3				X					X		
11	MW-38-202210	WT	G				1435		3				X					X		
12	TMW-24-202210	WT	G				1506		3				X					X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Ramboll	10-20-22	1750	Pace	10/21	0215	1.1 Y X Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Tillman

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-21-22

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.

Client: Ramboll

Profile # 7444 Line 1

1/4

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																													
2			3																													
3			3																													
4			3																													
5			3																													
6			3																													
7			3																													
8			3																													
9			3																													
10			3																													
11			3																													
12			3																													

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: 60414033
60414073

24

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																																
2	WT		3																													
3	WT		3																													
4	WT		3																													
5	WT		3																													
6	WT		3																													
7	WT	2																														
8	WT		3																													
9	WT		3																													
10	WT		3																													
11	WT		3																													
12	WT		3																													

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: 60414673

Client: Ramboll

Profile # 7444 Line 1

3/4

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: 60414673

4/4

Client: Ramboll

Profile # 7444 Line 1

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			3																													
4			3																													
5			3																													
6			3																													
7			3																													
8			3																													
9			3																													
10			3																													
11			3																													
12	↓		3																													

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: 60414073

Appendix C

Data Validation Report

LEVEL II DATA VALIDATION REVIEW

Second Semi-Annual Groundwater Monitoring Event 2022

Whirlpool Corporation

Fort Smith, Arkansas

Laboratory Sample Delivery Groups (SDGs): 60413461, 60413474, 60413494, 60413692, 60413695, 60413699, 60413864, 60413912, 60413975, 60414073, 10632342, and 10632583

Laboratory: Pace Analytical Services, LLC located in Lenexa, Kansas, and Minneapolis, Minnesota

Reviewer: Kristin Drucquer

Date: December 18. 2022

This data validation report has been prepared by Ramboll US Consulting (Ramboll) to assess the validity and usability of laboratory analytical data generated from samples collected during the semi-annual groundwater sampling event at the Whirlpool Corporation, Fort Smith, Arkansas site (Site) from October 17-21 and November 1-2, 2022.

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 twenty-six (126) groundwater samples, 26 air samples, 11 groundwater field duplicates, three air field duplicates, five equipment rinsate blanks, one field blank, and five 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;
- 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 (acetylene, methane, ethane, ethene, and hydrogen) by Method AM20GAX; and
- Volatile fatty acids 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 located in Minneapolis, Minnesota.

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: 60413461			
MW-50R-202210	SA	60413461001	Aqueous
SDG: 60413474			
TMW-36B-202210	SA	60413474001	Aqueous
TMW-36-202210	SA	60413474002	Aqueous
TMW-16-202210	SA	60413474003	Aqueous
MW-186-202210	SA	60413474004	Aqueous
TMW-26-202210	SA	60413474005	Aqueous
TMW-21-202210	SA	60413474006	Aqueous
MW-89-202210	SA	60413474007	Aqueous
MW-91-202210	SA	60413474008	Aqueous
SDG: 60413494			
MW-29-202210	SA	60413494001	Aqueous
ITMW-20-202210	SA	60413494002	Aqueous
DUP-03-202210	FD	60413494003	Aqueous
MW-62R-202210	SA	60413494004	Aqueous
MW-60R-202210	SA	60413494005	Aqueous
MW-191-202210	SA	60413494006	Aqueous
MW-39R-202210	SA	60413494007	Aqueous
TMW-29-202210	SA	60413494008	Aqueous
MW-26-202210	SA	60413494009	Aqueous
MW-98-202210	SA	60413494010	Aqueous
MW-96-202210	SA	60413494011	Aqueous
DUP-08-202210	FD	60413494012	Aqueous
MW-97-202210	SA	60413494013	Aqueous
MW-68-202210	SA	60413494014	Aqueous
MW-22-202210	SA	60413494015	Aqueous
MW-184-202210	SA	60413494016	Aqueous
DUP-10-202210	FD	60413494017	Aqueous
TMW-36B-202210	SA	60413494018	Aqueous
MW-27-202210	SA	60413494019	Aqueous
TMW-36-202210	SA	60413494020	Aqueous
MW-196-202210	SA	60413494021	Aqueous
MW-195-202210	SA	60413494022	Aqueous
DUP-06-202210	FD	60413494023	Aqueous
TMW-35-202210	SA	60413494024	Aqueous
DUP-11-202210	FD	60413494025	Aqueous
MW-176-202210	SA	60413494026	Aqueous
MW-200-202210	SA	60413494027	Aqueous
TMW-27-202210	SA	60413494028	Aqueous
MW-91-202210	SA	60413494029	Aqueous
TMW-16-202210	SA	60413494030	Aqueous
MW-186-202210	SA	60413494031	Aqueous

Field ID	Sample Type	Lab ID	Matrix
MW-206-202210	SA	60413494032	Aqueous
MW-50R-202210	SA	60413494033	Aqueous
MW-28-202210	SA	60413494034	Aqueous
TMW-26-202210	SA	60413494035	Aqueous
ITMW-2R-202210	SA	60413494036	Aqueous
TMW-21-202210	SA	60413494037	Aqueous
TMW-20-202210	SA	60413494038	Aqueous
TMW-19-202210	SA	60413494039	Aqueous
MW-89-202210	SA	60413494040	Aqueous
MW-183R-202210	SA	60413494041	Aqueous
EB-02-202210	EB	60413494042	Aqueous
EB-01-202210	EB	60413494043	Aqueous
TB-02-202210	TB	60413494044	Aqueous
TB-01-202210	TB	60413494045	Aqueous
SDG: 60413692			
TMW-25-202210	SA	60413692001	Aqueous
MW-61R-202210	SA	60413692002	Aqueous
TMW-10-202210	SA	60413692003	Aqueous
MW-194-202210	SA	60413692004	Aqueous
TMW-11-202210	SA	60413692005	Aqueous
MW-99-202210	SA	60413692006	Aqueous
SDG: 60413695			
TMW-10-202210	SA	60413695001	Aqueous
TMW-11-202210	SA	60413695002	Aqueous
RW-69-202210	SA	60413695003	Aqueous
SDG: 60413699			
MW-40R-202210	SA	60413699001	Aqueous
TMW-14-202210	SA	60413699002	Aqueous
MW-182-202210	SA	60413699003	Aqueous
DUP-02-202210	FD	60413699004	Aqueous
ITMW-21-202210	SA	60413699005	Aqueous
TMW-25-202210	SA	60413699006	Aqueous
TMW-30-202210	SA	60413699007	Aqueous
DUP-01-202210	FD	60413699008	Aqueous
MW-61R-202210	SA	60413699009	Aqueous
MW-84-202210	SA	60413699010	Aqueous
MW-84-202210	SA	60413699011	Aqueous
TMW-10-202210	SA	60413699012	Aqueous
TMW-10-202210	SA	60413699013	Aqueous
MW-188-202210	SA	60413699014	Aqueous
MW-187-202210	SA	60413699015	Aqueous
MW-83-202210	SA	60413699016	Aqueous
MW-190-202210	SA	60413699017	Aqueous
MW-63R-202210	SA	60413699018	Aqueous
TMW-11-202210	SA	60413699019	Aqueous
EB-03-202210	EB	60413699020	Aqueous
MW-82-202210	SA	60413699021	Aqueous
TB-03-202210	TB	60413699022	Aqueous
MW-203-202210	SA	60413699023	Aqueous
ITMW-7-202210	SA	60413699024	Aqueous
MW-55R-202210	SA	60413699025	Aqueous

Field ID	Sample Type	Lab ID	Matrix
ITMW-1R-202210	SA	60413699026	Aqueous
MW-99-202210	SA	60413699027	Aqueous
RW-69-202210	SA	60413699028	Aqueous
DUP-05-202210	FD	60413699029	Aqueous
MW-205-202210	SA	60413699030	Aqueous
MW-201-202210	SA	60413699031	Aqueous
SDG: 60413864			
ITMW-9-202210	SA	60413864001	Aqueous
MW-95-202210	SA	60413864001	Aqueous
MW-198-202210	SA	60413864001	Aqueous
MW-25R-202210	SA	60413864001	Aqueous
SDG: 60413912			
IW-73-202210	SA	60413912001	Aqueous
ITMW-10-202210	SA	60413912002	Aqueous
EB-04-202210	EB	60413912003	Aqueous
ITMW-9-202210	SA	60413912004	Aqueous
MW-95-202210	SA	60413912005	Aqueous
MW-198-202210	SA	60413912006	Aqueous
TB-05-202210	TB	60413912007	Aqueous
SDG: 60413975			
MW-25R-202210	SA	60413975001	Aqueous
MW-38-202210	SA	60413975002	Aqueous
MW-89-202210	SA	60413975003	Aqueous
MW-87-202210	SA	60413975004	Aqueous
MW-58R-202210	SA	60413975005	Aqueous
IW-73-202210	SA	60413975006	Aqueous
SDG: 60414073			
ITMW-18-202210	SA	60414073001	Aqueous
MW-202-202210	SA	60414073002	Aqueous
TMW-23-202210	SA	60414073003	Aqueous
ITMW-19-202210	SA	60414073004	Aqueous
TMW-32-202210	SA	60414073005	Aqueous
TMW-12-202210	SA	60414073006	Aqueous
DUP-07-202210	FD	60414073007	Aqueous
MW-204-202210	SA	60414073008	Aqueous
TMW-34-202210	SA	60414073009	Aqueous
MW-185-202210	SA	60414073010	Aqueous
MW-25R-202210	SA	60414073011	Aqueous
MW-58R-202210	SA	60414073012	Aqueous
VP-12-202210	SA	60414073013	Aqueous
MW-179-202210	SA	60414073014	Aqueous
MW-57R-202210	SA	60414073015	Aqueous
ITMW-5-202210	SA	60414073016	Aqueous
MW-93-202210	SA	60414073017	Aqueous
TB-04-202210	TB	60414073018	Aqueous
MW-189-202210	SA	60414073019	Aqueous
MW-46R-202210	SA	60414073020	Aqueous
RW-1-202210	SA	60414073021	Aqueous
DUP-09-202210	FD	60414073022	Aqueous
DUP-04-202210	FD	60414073023	Aqueous
IW-77-202210	SA	60414073024	Aqueous

Field ID	Sample Type	Lab ID	Matrix
MW-24-202210	SA	60414073025	Aqueous
IW-78-202210	SA	60414073026	Aqueous
TMW-22R-202210	SA	60414073027	Aqueous
MW-87-202210	SA	60414073028	Aqueous
MW-199-202210	SA	60414073029	Aqueous
MW-56R-202210	SA	60414073030	Aqueous
EB-05-202210	EB	60414073031	Aqueous
MW-175-202210	SA	60414073032	Aqueous
VP-7-202210	SA	60414073033	Aqueous
VP-8-202210	SA	60414073034	Aqueous
MW-38-202210	SA	60414073035	Aqueous
TMW-24-202210	SA	60414073036	Aqueous
SDG: 10632342			
Z4-2-IA-112022	SA	10632342001	Air
Z3-1-IA-112022	SA	10632342002	Air
Z3-2-IA-112022	SA	10632342003	Air
Z2-1-IA-112022	SA	10632342004	Air
Z4-1-IA-112022	SA	10632342005	Air
Z5-2-IA-112022	SA	10632342006	Air
Z6-2-IA-112022	SA	10632342007	Air
DUP-Z6-2-IA-112022	FD	10632342008	Air
Z5-OF-IA-112022	SA	10632342009	Air
Z5-1-IA-112022	SA	10632342010	Air
Z6-1-IA-112022	SA	10632342011	Air
AA-1-IA-112022	SA	10632342012	Air
SDG: 10632583			
AA-2-11022022	SA	10632583001	Air
Z6-2-IA-11022022	SA	10632583002	Air
DUP-Z6-2-IA-11022022	FD	10632583003	Air
Z5-2-IA-11022022	SA	10632583004	Air
Z1-1-IA-11022022	SA	10632583005	Air
Z5-2-SS-11022022	SA	10632583006	Air
Z6-2-SS-11022022	SA	10632583007	Air
DUP-Z6-2-SS-11022022	FD	10632583008	Air
Z3-1-SS-11022022	SA	10632583009	Air
Z1-1-SS-11022022	SA	10632583010	Air
Z3-2-SS-11022022	SA	10632583011	Air
Z4-2-SS-11022022	SA	10632583012	Air
Z2-1-SS-11022022	SA	10632583013	Air
Z4-1-SS-11022022	SA	10632583014	Air
Z6-1-SS-11022022	SA	10632583015	Air
Z5-1-SS-11022022	SA	10632583016	Air
Z5-OF-SS-11022022	SA	10632583017	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).

_____ 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. Samples for TMW-1-202210 and TMW-11-202210 were submitted on two separate COCs for methane, ethane, ethene, sulfate, TOC, and iron analyses. The laboratory reported two sets of results for these parameters in SDGs 60413695 and 60413692. The percent completeness is 100% for all methods, with no data rejected as a result of the data validation.

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. One sample, MW-95-202210, was re-anlayzed outside the holding time to report trichloroethene within the calibration curve. The result for trichloroethene was qualified "J" as estimated. All other analyses were performed within the method required holding times for this sample.

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
60413461, 60413474, 60413692, 60413695	3238614	Method	Iron	8.7 J	µg/L
60413474, 60413494	3240849	Method	Chloride	0.58 J	mg/L
60413474, 60413494	3244778	Method	Chloride	0.60 J	mg/L
60413474	EB-02-202210	Equipment	Methylene Chloride	1.6	µg/L
60413474	EB-01-202210	Equipment	Methylene Chloride	1.2	µg/L
60413474	TB-02-202210	Trip	Methylene Chloride	0.98 J	µg/L

SDG	Blank ID	Blank Type	Analyte	Concentration	Units
60413474	TB-01-202210	Trip	Methylene Chloride	1.1	µg/L
60413692	3241636	Method	Chloride	0.56 J	mg/L
60413699	EB-03-202210	Equipment	Methylene Chloride	1.6	µg/L
60413699	TB-03-202210	Trip	Methylene Chloride	1.4	µg/L
60413864, 60413975	3242637	Method	Iron	5.6 J	µg/L
60413912	EB-04-202210	Equipment	Methylene Chloride	1.6	µg/L
60413912	EB-04-202210	Equipment	Trichloroethene	0.29 J	µg/L
60413912	TB-05-202210	Trip	Methylene Chloride	1.1	µg/L
60413912	3247951	Method	Trichloroethene	0.58 J	µg/L
60413912	3248891	Method	Trichloroethene	0.22 J	µg/L
60414073	TB-04-202210	Trip	Methylene Chloride	1.3	µg/L
60414073	EB-05-202210	Equipment	Methylene Chloride	0.49 J	µg/L

ID = Identification
J = Result was detected between the method detection limit and reporting limit and is considered estimated.
µg/L = Micrograms per liter
mg/L = Milligrams per liter
SDG = Sample delivery group

The results qualified for blank contamination are summarized in the table below.

SDG	Field ID	Analyte	Qualification
60413474	MW-91-202210	Chloride	J+
60413692	MW-99-202210	Chloride	J
60413692	TMW-11-202210	Chloride	J
60414073	ITMW-18-202210	Methylene Chloride	U
60414073	ITMW-19-202210	Methylene Chloride	U
60414073	MW-189-202210	Methylene Chloride	U
60414073	MW-25R-202210	Methylene Chloride	U
60414073	RW-1-202210	Methylene Chloride	U

ID = Identification
J = Estimated
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. LCS recoveries which were outside acceptance evaluation criteria are summarized in the table below.

SDG	LCS ID	Analyte	LCS Recovery (%) or RPD	LCS Recovery Criteria (%) or RPD Limit
60413461	2413833/ 2413834	Hydrogen	23% RPD	20%
60413461, 60413474, 60413695, 60413864, 60413975	2413842/ 2413843	Methane	41% RPD	20%
60413461, 60413474, 60413695, 60413864, 60413975	2413842/ 2413843	Acetylene	27% RPD	20%
60414073	3244132	1,2- Dichloroethane	78%	80-120%
60414073	3244132	trans-1,2-Dichloroethene	72%	80-120%

ID = Identification
LCS = Laboratory control sample
% = Percent
RPD = Relative percent difference
SDG = Sample delivery group

The results qualified for LCS recovery or LCS/LCSD RPD are summarized in the table below.

SDG	Field ID	Analyte	Qualification
60413461	MW-50R-202210	Hydrogen	J
60413461	MW-50R-202210	Methane	J
60413474	MW-89-202210	Methane	J
60413695	RW-69-202210	Methane	J
60413695	TMW-10-202210	Methane	J
60413695	TMW-11-202210	Methane	J
60413864	ITMW-9-202210	Methane	J
60413864	MW-198-202210	Methane	J
60413864	MW-198-202210	Acetylene	J
60413864	MW-95-202210	Methane	J
60413975	MW-25R-202210	Methane	J
60413975	MW-38-202210	Methane	J
60413975	MW-58R-202210	Methane	J
60414073	MW-179-202210	1,2-Dichloroethane	UJ
60414073	MW-179-202210	trans-1,2-Dichloroethene	J
60414073	MW-185-202210	1,2-Dichloroethane	UJ
60414073	MW-185-202210	trans-1,2-Dichloroethene	J
60414073	MW-202-202210	1,2-Dichloroethane	J
60414073	MW-202-202210	trans-1,2-Dichloroethene	J
60414073	MW-204-202210	1,2-Dichloroethane	UJ
60414073	MW-204-202210	trans-1,2-Dichloroethene	UJ
60414073	MW-57R-202210	1,2-Dichloroethane	UJ
60414073	MW-57R-202210	trans-1,2-Dichloroethene	J

SDG	Field ID	Analyte	Qualification
60414073	TB-04-202210	1,2-Dichloroethane	UJ
60414073	TB-04-202210	trans-1,2-Dichloroethene	UJ
60414073	TMW-23-202210	1,2-Dichloroethane	UJ
60414073	TMW-23-202210	trans-1,2-Dichloroethene	UJ
60414073	TMW-32-202210	1,2-Dichloroethane	UJ
60414073	TMW-32-202210	trans-1,2-Dichloroethene	UJ
60414073	TMW-34-202210	1,2-Dichloroethane	UJ
60414073	TMW-34-202210	trans-1,2-Dichloroethene	J
60414073	VP-12-202210	1,2-Dichloroethane	UJ
60414073	VP-12-202210	trans-1,2-Dichloroethene	UJ

ID = Identification
J = Estimated
UJ = Estimated non-detect
SDG = Sample delivery group

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
60413474	TMW-21-202210	Nitrogen	**54%**	90-110%
60413494	MW-29-202210	1,1,2-Trichloroethane	95/**74%** **26% RPD**	80-120% 20%
60413494	MW-29-202210	Dibromochloromethane	86/**62%** **33% RPD**	75-125% 20%
60413494	MW-29-202210	Methylene Chloride	**67%**/87% **26% RPD**	70-140% 26%
60413494	MW-29-202210	Styrene	**36%/31%**	80-120%
60413494	MW-29-202210	trans-1,3-Dichloropropene	88/**67%** **27% RPD**	75-125% 15%
60413494	MW-29-202210	2-Hexanone	**28% RPD**	20%
60413494	MW-29-202210	Acetone	**40% RPD**	25%
60413494	MW-29-202210	Bromoform	**27% RPD**	20%
60413494	MW-29-202210	Chloroethane	**23% RPD**	20%
60413494	MW-60R-202210	Styrene	**51/51%**	80-120%
60413494	MW-183R-202210	Bromomethane	**49%**/60%	50-140%
60413494	MW-183R-202210	Dibromochloromethane	75/**74%**	75-125%
60413494	MW-183R-202210	Methylene Chloride	70/**66%**	70-140%
60413692	MW-194-202210	Chloride	**50%**	80-120%
60413695	TMW-11-202210	Nitrogen	**82%**	90-110%
60413699	MW-187-202210	Dibromochloromethane	76/**71%**	75-125%
60413699	MW-187-202210	Methylene Chloride	70/**67%**	70-140%

SDG	Sample ID	Analyte	MS/MSD Recovery (%) or RPD	MS/MSD Recovery Criteria (%) or RPD Limit
60413699	MW-187-202210	Trichloroethene	**156%/154%**	80-125%
60413699	MW-187-202210	Styrene	81/**79%**	80-120%
60413975	MW-25R-202210	Sulfide	**64/64%**	75-125%
60413975	MW-38-202210	Nitrate/Nitrite	**82%**	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. Results associated with the high recoveries and/or RPDs that were non-detect were not qualified for a high bias. The results qualified for MS/MSD recoveries or RPDs are summarized in the table below.

SDG	Field ID	Analyte	Qualification
60413474	MW-89-202210	Nitrogen	J-
60413474	MW-91-202210	Nitrogen	UJ
60413474	TMW-21-202210	Nitrogen	UJ
60413494	MW-183R-202210	Dibromochloromethane	UJ
60413494	MW-183R-202210	Bromomethane	UJ
60413494	MW-183R-202210	Methylene Chloride	UJ
60413494	MW-29-202210	Styrene	UJ
60413494	MW-29-202210	trans-1,3-Dichloropropene	UJ
60413494	MW-29-202210	Dibromochloromethane	UJ
60413494	MW-29-202210	Methylene Chloride	UJ
60413494	MW-29-202210	1,1,2-Trichloroethane	UJ
60413494	MW-60R-202210	Styrene	UJ
60413692	MW-194-202210	Chloride	J-
60413692	MW-61R-202210	Chloride	J-
60413692	MW-99-202210	Chloride	J
60413692	TMW-10-202210	Chloride	J-
60413692	TMW-11-202210	Chloride	J
60413692	TMW-25-202210	Chloride	J-
60413695	RW-69-202210	Nitrogen	UJ
60413695	TMW-11-202210	Nitrogen	UJ
60413699	MW-187-202210	Styrene	UJ
60413699	MW-187-202210	Dibromochloromethane	UJ
60413699	MW-187-202210	Methylene Chloride	UJ
60413699	MW-187-202210	Trichloroethene	J+
60413975	IW-73-202210	Nitrate/Nitrite	J-
60413975	IW-73-202210	Sulfide (total)	UJ
60413975	MW-25R-202210	Nitrate/Nitrite	J-
60413975	MW-25R-202210	Sulfide (total)	UJ
60413975	MW-38-202210	Sulfide (total)	UJ
60413975	MW-58R-202210	Nitrate/Nitrite	J-
60413975	MW-58R-202210	Sulfide (total)	UJ
60413975	MW-87-202210	Nitrate/Nitrite	J-
60413975	MW-87-202210	Sulfide (total)	J

ID = Identification
J = Estimated
J+ = Estimated with a hight bias
J- = Estimated with a low bias
SDG = Sample delivery group

UJ = Estimated non-detect

8.0 Laboratory Duplicate Results

Were laboratory duplicate samples performed as part of this SDG?

Yes, project-specific laboratory duplicate of air samples Z5-2-SS-11022022 and Z3-1-SS-11022022 were analyzed for Method TO-15. The RPDs were within the acceptance criteria.

9.0 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
60413699	TMW-30-202210	DUP-01-202210
60413699	MW-182-202210	DUP-02-202210
60413494	ITMW-20-202210	DUP-03-202210
60414073	MW-24-202210	DUP-04-202210
60413699	ITMW-21-202210	DUP-05-202210
60413494	MW-195-202210	DUP-06-202210
60414073	TMW-12-202210	DUP-07-202210
60413494	MW-96-202210	DUP-08-202210
60414073	IW-78-202210	DUP-09-202210
60413494	MW-184-202210	DUP-10-202210
60413494	TMW-35-202210	DUP-11-202210
10632342	Z6-2-IA-112022	DUP-Z6-2-IA-112022
10632583	Z6-2-IA-11022022	DUP-Z6-2-IA-11022022
10632583	Z6-2-SS-11022022	DUP-Z6-2-SS-11022022

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 one exception. The RPD calculated for bromoform was 48% for the field duplicate pair IW-78-202210/ DUP-09-202210. The bromoform results we qualified “J” as estimated for the field sample and field duplicate for the precision nonconformance.

10.0 Detects and Calibration Range

For samples that were diluted and non-detect, were undiluted results also reported?

No. Several samples were analyzed at a dilution due to foaming of the sample in the purge vessel. In these cases, non-detect results were reported for some VOC parameters 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.

11.0 Additional Qualifications

Were additional qualifications applied?

No.

12.0 Overall Data Assessment

The data are usable as qualified for the intended purposes based on an evaluation of the QC parameters discussed in this report. No data were rejected as a result of the data validation. The table below summarizes the final qualifications for the analytical data.

Data Qualifier Summary:

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60413461001	MW-50R-202210	HYDROGEN (H2)	J	Result <RL; LCS/LCSD RPD high
60413461001	MW-50R-202210	Methane	J	LCS/LCSD RPD high
60413461001	MW-50R-202210	Organic Carbon (total)	J	Result <RL
60413474004	MW-186-202210	Ethane	J	Result <RL
60413474004	MW-186-202210	Butyric acid	J	Result <RL
60413474004	MW-186-202210	Lactic Acid	J	Result <RL
60413474004	MW-186-202210	Acetic acid	J	Result <RL
60413474007	MW-89-202210	Methane	J	LCS/LCSD RPD high
60413474007	MW-89-202210	Nitrogen	J-	MS recovery low
60413474007	MW-89-202210	Organic Carbon (total)	J	Result <RL
60413474008	MW-91-202210	Acetic acid	J	Result <RL
60413474008	MW-91-202210	Nitrogen	UJ	MS recovery low
60413474008	MW-91-202210	Chloride	J+	Method blank contamination
60413474003	TMW-16-202210	Butyric acid	J	Result <RL
60413474003	TMW-16-202210	Lactic Acid	J	Result <RL
60413474003	TMW-16-202210	Acetic acid	J	Result <RL
60413474006	TMW-21-202210	Lactic Acid	J	Result <RL
60413474006	TMW-21-202210	Acetic acid	J	Result <RL
60413474006	TMW-21-202210	Nitrogen	UJ	MS recovery low
60413474006	TMW-21-202210	Organic Carbon (total)	J	Result <RL
60413474005	TMW-26-202210	Butyric acid	J	Result <RL
60413474005	TMW-26-202210	Lactic Acid	J	Result <RL
60413474005	TMW-26-202210	Acetic acid	J	Result <RL
60413474002	TMW-36-202210	Ethane	J	Result <RL
60413474002	TMW-36-202210	Butyric acid	J	Result <RL
60413474002	TMW-36-202210	Lactic Acid	J	Result <RL
60413474002	TMW-36-202210	Acetic acid	J	Result <RL
60413474002	TMW-36-202210	Organic Carbon (total)	J	Result <RL
60413474001	TMW-36B-202210	Lactic Acid	J	Result <RL
60413474001	TMW-36B-202210	Acetic acid	J	Result <RL
60413474001	TMW-36B-202210	Organic Carbon (total)	J	Result <RL
60413474001	TMW-36B-202210	Organic Carbon (dissolved)	J	Result <RL
60413494023	DUP-06-202210	cis-1,2-Dichloroethene	J	Result <RL
60413494017	DUP-10-202210	Trichloroethene	J	Result <RL
60413494036	ITMW-2R-202210	Trichloroethene	J	Result <RL
60413494026	MW-176-202210	trans-1,2-	J	Result <RL

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
		Dichloroethene		
60413494041	MW-183R-202210	Dibromochloromethane	UJ	MSD recovery low
60413494041	MW-183R-202210	Bromomethane	UJ	MS recovery low
60413494041	MW-183R-202210	Methylene Chloride	UJ	MSD recovery low
60413494041	MW-183R-202210	Trichloroethene	J	Result <RL
60413494016	MW-184-202210	Trichloroethene	J	Result <RL
60413494021	MW-196-202210	Trichloroethene	J	Result <RL
60413494027	MW-200-202210	cis-1,2-Dichloroethene	J	Result <RL
60413494032	MW-206-202210	cis-1,2-Dichloroethene	J	Result <RL
60413494019	MW-27-202210	trans-1,2-Dichloroethene	J	Result <RL
60413494001	MW-29-202210	Styrene	UJ	MS and MSD recoveries low
60413494001	MW-29-202210	trans-1,3-Dichloropropene	UJ	MSD recovery low
60413494001	MW-29-202210	Dibromochloromethane	UJ	MSD recovery low
60413494001	MW-29-202210	Methylene Chloride	UJ	MS recovery low
60413494001	MW-29-202210	1,1,2-Trichloroethane	UJ	MSD recovery low
60413494005	MW-60R-202210	Styrene	UJ	MS and MSD recoveries low
60413494044	TB-02-202210	Methylene Chloride	J	Result <RL
60413494039	TMW-19-202210	Ethene	J	Result <RL
60413494039	TMW-19-202210	Lactic Acid	J	Result <RL
60413494039	TMW-19-202210	Acetic acid	J	Result <RL
60413494039	TMW-19-202210	Organic Carbon (total)	J	Result <RL
60413494039	TMW-19-202210	1,1-Dichloroethane	J	Result <RL
60413494039	TMW-19-202210	1,1-Dichloroethene	J	Result <RL
60413494038	TMW-20-202210	Trichloroethene	J	Result <RL
60413692004	MW-194-202210	Ethane	J	Result <RL
60413692004	MW-194-202210	Lactic Acid	J	Result <RL
60413692004	MW-194-202210	Acetic acid	J	Result <RL
60413692004	MW-194-202210	Chloride	J-	MS recovery low
60413692004	MW-194-202210	Organic Carbon (dissolved)	J	Result <RL
60413692004	MW-194-202210	Organic Carbon (total)	J	Result <RL
60413692002	MW-61R-202210	Butyric acid	J	Result <RL
60413692002	MW-61R-202210	Lactic Acid	J	Result <RL
60413692002	MW-61R-202210	Acetic acid	J	Result <RL
60413692002	MW-61R-202210	Chloride	J-	MS recovery low
60413692006	MW-99-202210	Ethene	J	Result <RL
60413692006	MW-99-202210	Butyric acid	J	Result <RL
60413692006	MW-99-202210	Acetic acid	J	Result <RL
60413692006	MW-99-202210	Chloride	J	Method blank contamination; MS recovery low
60413692003	TMW-10-202210	Butyric acid	J	Result <RL
60413692003	TMW-10-202210	Lactic Acid	J	Result <RL
60413692003	TMW-10-202210	Acetic acid	J	Result <RL
60413692003	TMW-10-202210	Chloride	J-	MS recovery low
60413692005	TMW-11-202210	Ethane	J	Result <RL
60413692005	TMW-11-202210	Butyric acid	J	Result <RL
60413692005	TMW-11-202210	Acetic acid	J	Result <RL
60413692005	TMW-11-202210	Chloride	J	Method blank contamination; MS recovery low
60413692001	TMW-25-202210	Butyric acid	J	Result <RL

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60413692001	TMW-25-202210	Lactic Acid	J	Result <RL
60413692001	TMW-25-202210	Acetic acid	J	Result <RL
60413692001	TMW-25-202210	Chloride	J-	MS recovery low
60413695003	RW-69-202210	HYDROGEN (H2)	J	Result <RL
60413695003	RW-69-202210	Methane	J	LCS/LCSD RPD high
60413695003	RW-69-202210	Nitrogen	UJ	MS recovery low
60413695001	TMW-10-202210	HYDROGEN (H2)	J	Result <RL
60413695001	TMW-10-202210	Methane	J	LCS/LCSD RPD high
60413695001	TMW-10-202210	Ethane	J	Result <RL
60413695002	TMW-11-202210	Methane	J	LCS/LCSD RPD high
60413695002	TMW-11-202210	Ethane	J	Result <RL
60413695002	TMW-11-202210	Nitrogen	UJ	MS recovery low
60413494031	MW-186-202210	Toluene	J	Result <RL
60413494031	MW-186-202210	cis-1,2-Dichloroethene	J	Result <RL
60413494031	MW-186-202210	Vinyl Chloride	J	Result <RL
60413494031	MW-186-202210	Trichloroethene	J	Result <RL
60413494040	MW-89-202210	cis-1,2-Dichloroethene	J	Result <RL
60413494029	MW-91-202210	Toluene	J	Result <RL
60413494029	MW-91-202210	trans-1,2-Dichloroethene	J	Result <RL
60413494029	MW-91-202210	Benzene	J	Result <RL
60413494029	MW-91-202210	Vinyl Chloride	J	Result <RL
60413494029	MW-91-202210	1,1-Dichloroethene	J	Result <RL
60413494030	TMW-16-202210	Toluene	J	Result <RL
60413494030	TMW-16-202210	cis-1,2-Dichloroethene	J	Result <RL
60413494030	TMW-16-202210	Benzene	J	Result <RL
60413494030	TMW-16-202210	Vinyl Chloride	J	Result <RL
60413494030	TMW-16-202210	Trichloroethene	J	Result <RL
60413494037	TMW-21-202210	Ethyl Benzene	J	Result <RL
60413494037	TMW-21-202210	Toluene	J	Result <RL
60413494037	TMW-21-202210	trans-1,2-Dichloroethene	J	Result <RL
60413494037	TMW-21-202210	Benzene	J	Result <RL
60413494035	TMW-26-202210	cis-1,2-Dichloroethene	J	Result <RL
60413494035	TMW-26-202210	Vinyl Chloride	J	Result <RL
60413494020	TMW-36-202210	trans-1,2-Dichloroethene	J	Result <RL
60413494020	TMW-36-202210	Vinyl Chloride	J	Result <RL
60413494020	TMW-36-202210	1,1-Dichloroethane	J	Result <RL
60413699008	DUP-01-202210	Trichloroethene	J	Result <RL
60413699004	DUP-02-202210	cis-1,2-Dichloroethene	J	Result <RL
60413699029	DUP-05-202210	cis-1,2-Dichloroethene	J	Result <RL
60413699026	ITMW-1R-202210	trans-1,2-Dichloroethene	J	Result <RL
60413699026	ITMW-1R-202210	Benzene	J	Result <RL
60413699026	ITMW-1R-202210	1,1-Dichloroethene	J	Result <RL
60413699005	ITMW-21-202210	cis-1,2-Dichloroethene	J	Result <RL
60413699024	ITMW-7-202210	Benzene	J	Result <RL
60413699003	MW-182-202210	cis-1,2-Dichloroethene	J	Result <RL
60413699015	MW-187-202210	Styrene	UJ	MSD recovery low
60413699015	MW-187-202210	Dibromochloromethane	UJ	MSD recovery low
60413699015	MW-187-202210	Vinyl Chloride	J	Result <RL
60413699015	MW-187-202210	Methylene Chloride	UJ	MSD recovery low

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60413699015	MW-187-202210	1,1-Dichloroethane	J	Result <RL
60413699015	MW-187-202210	1,1-Dichloroethene	J	Result <RL
60413699015	MW-187-202210	Trichloroethene	J+	MS and MSD recoveries high
60413699014	MW-188-202210	cis-1,2-Dichloroethene	J	Result <RL
60413699017	MW-190-202210	Vinyl Chloride	J	Result <RL
60413699017	MW-190-202210	1,1-Dichloroethane	J	Result <RL
60413699017	MW-190-202210	1,1-Dichloroethene	J	Result <RL
60413699023	MW-203-202210	1,1-Dichloroethane	J	Result <RL
60413699023	MW-203-202210	1,1-Dichloroethene	J	Result <RL
60413699030	MW-205-202210	Chlorobenzene	J	Result <RL
60413699030	MW-205-202210	trans-1,2-Dichloroethene	J	Result <RL
60413699030	MW-205-202210	Benzene	J	Result <RL
60413699030	MW-205-202210	Vinyl Chloride	J	Result <RL
60413699030	MW-205-202210	1,1-Dichloroethane	J	Result <RL
60413699030	MW-205-202210	1,1,2-Trichloroethane	J	Result <RL
60413699025	MW-55R-202210	cis-1,2-Dichloroethene	J	Result <RL
60413699018	MW-63R-202210	cis-1,2-Dichloroethene	J	Result <RL
60413699021	MW-82-202210	cis-1,2-Dichloroethene	J	Result <RL
60413699016	MW-83-202210	Dibromochloromethane	J	Result <RL
60413699016	MW-83-202210	cis-1,2-Dichloroethene	J	Result <RL
60413699016	MW-83-202210	trans-1,2-Dichloroethene	J	Result <RL
60413699016	MW-83-202210	Bromodichloromethane	J	Result <RL
60413699010	MW-84-202210	Dibromochloromethane	J	Result <RL
60413699010	MW-84-202210	Acetone	J	Result <RL
60413699010	MW-84-202210	Bromomethane	J	Result <RL
60413699010	MW-84-202210	Bromodichloromethane	J	Result <RL
60413699027	MW-99-202210	Ethyl Benzene	J	Result <RL
60413699027	MW-99-202210	4-Methyl-2-pentanone	J	Result <RL
60413699027	MW-99-202210	Benzene	J	Result <RL
60413699028	RW-69-202210	Vinyl Chloride	J	Result <RL
60413699012	TMW-10-202210	cis-1,2-Dichloroethene	J	Result <RL
60413699012	TMW-10-202210	trans-1,2-Dichloroethene	J	Result <RL
60413699002	TMW-14-202210	Toluene	J	Result <RL
60413699002	TMW-14-202210	trans-1,2-Dichloroethene	J	Result <RL
60413699006	TMW-25-202210	Toluene	J	Result <RL
60413699006	TMW-25-202210	cis-1,2-Dichloroethene	J	Result <RL
60413699006	TMW-25-202210	Vinyl Chloride	J	Result <RL
60413699007	TMW-30-202210	Trichloroethene	J	Result <RL
60413864001	ITMW-9-202210	Methane	J	Result <RL; LCS/LCSD RPD high
60413864001	ITMW-9-202210	HYDROGEN (H2)	J	Result <RL
60413864001	ITMW-9-202210	Organic Carbon (total)	J	Result <RL
60413864001	ITMW-9-202210	Iron	J	Result <RL
60413864003	MW-198-202210	Methane	J	LCS/LCSD RPD high
60413864003	MW-198-202210	Ethene	J	Result <RL
60413864003	MW-198-202210	Acetylene	J	Result <RL; LCS/LCSD RPD high
60413864003	MW-198-202210	HYDROGEN (H2)	J	Result <RL

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60413864003	MW-198-202210	Organic Carbon (total)	J	Result <RL
60413864003	MW-198-202210	Iron	J	Result <RL
60413864002	MW-95-202210	Methane	J	Result <RL; LCS/LCSD RPD high
60413864002	MW-95-202210	Ethane	J	Result <RL
60413864002	MW-95-202210	Iron	J	Result <RL
60413975006	IW-73-202210	Nitrate/Nitrite	J-	MS recovery <10%; MSD recovery low
60413975006	IW-73-202210	Sulfide (total)	UJ	MS and MSD recoveries low
60413975001	MW-25R-202210	Methane	J	LCS/LCSD RPD high
60413975001	MW-25R-202210	Ethene	J	Result <RL
60413975001	MW-25R-202210	Nitrate/Nitrite	J-	MS recovery <10%; MSD recovery low
60413975001	MW-25R-202210	Sulfide (total)	UJ	MS and MSD recoveries low
60413975001	MW-25R-202210	Organic Carbon (total)	J	Result <RL
60413975002	MW-38-202210	Methane	J	LCS/LCSD RPD high
60413975002	MW-38-202210	Ethane	J	Result <RL
60413975002	MW-38-202210	Nitrate/Nitrite	UJ	MS recovery low
60413975002	MW-38-202210	Sulfide (total)	UJ	MS and MSD recoveries low
60413975005	MW-58R-202210	Methane	J	LCS/LCSD RPD high
60413975005	MW-58R-202210	HYDROGEN (H2)	J	Result <RL
60413975005	MW-58R-202210	Nitrate/Nitrite	J-	MS recovery <10%; MSD recovery low
60413975005	MW-58R-202210	Sulfide (total)	UJ	MS and MSD recoveries low
60413975004	MW-87-202210	HYDROGEN (H2)	J	Result <RL
60413975004	MW-87-202210	Nitrate/Nitrite	J-	MS recovery <10%; MSD recovery low
60413975004	MW-87-202210	Sulfide (total)	J	Result <RL; MS and MSD recoveries low
60413975003	MW-89-202210	HYDROGEN (H2)	J	Result <RL
60414073023	DUP-04-202210	cis-1,2-Dichloroethene	J	Result <RL
60414073007	DUP-07-202210	Vinyl Chloride	J	Result <RL
60414073022	DUP-09-202210	Dibromochloromethane	J	Result <RL
60414073022	DUP-09-202210	cis-1,2-Dichloroethene	J	Result <RL
60414073022	DUP-09-202210	Acetone	J	Result <RL
60414073022	DUP-09-202210	Bromoform	J	Field duplicate RPD
60414073022	DUP-09-202210	Bromodichloromethane	J	Result <RL
60414073031	EB-05-202210	Methylene Chloride	J	Result <RL
60414073001	ITMW-18-202210	Benzene	J	Result <RL
60414073001	ITMW-18-202210	Methylene Chloride	U	TB and EB contamination; Qualify U at concentration

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
				reported (raise RL)
60414073001	ITMW-18-202210	Bromodichloromethane	J	Result <RL
60414073001	ITMW-18-202210	1,1-Dichloroethane	J	Result <RL
60414073001	ITMW-18-202210	1,1,2-Trichloroethane	J	Result <RL
60414073001	ITMW-18-202210	1,1,2,2-Tetrachloroethane	J	Result <RL
60414073004	ITMW-19-202210	Dibromochloromethane	J	Result <RL
60414073004	ITMW-19-202210	Tetrachloroethene	J	Result <RL
60414073004	ITMW-19-202210	Bromomethane	J	Result <RL
60414073004	ITMW-19-202210	Chloromethane	J	Result <RL
60414073004	ITMW-19-202210	Methylene Chloride	U	TB and EB contamination; Qualify U at RL
60414073004	ITMW-19-202210	Bromodichloromethane	J	Result <RL
60414073004	ITMW-19-202210	1,1,2,2-Tetrachloroethane	J	Result <RL
60414073016	ITMW-5-202210	trans-1,2-Dichloroethene	J	Result <RL
60414073016	ITMW-5-202210	Chloroform	J	Result <RL
60414073016	ITMW-5-202210	1,1-Dichloroethane	J	Result <RL
60414073016	ITMW-5-202210	1,1,2-Trichloroethane	J	Result <RL
60414073024	IW-77-202210	trans-1,2-Dichloroethene	J	Result <RL
60414073024	IW-77-202210	1,1-Dichloroethene	J	Result <RL
60414073026	IW-78-202210	Dibromochloromethane	J	Result <RL
60414073026	IW-78-202210	cis-1,2-Dichloroethene	J	Result <RL
60414073026	IW-78-202210	Bromoform	J	Field duplicate RPD
60414073014	MW-179-202210	1,2-Dichloroethane	UJ	LCS recovery low
60414073014	MW-179-202210	trans-1,2-Dichloroethene	J	Result <RL; LCS recovery low
60414073010	MW-185-202210	1,2-Dichloroethane	UJ	LCS recovery low
60414073010	MW-185-202210	trans-1,2-Dichloroethene	J	Result <RL; LCS recovery low
60414073010	MW-185-202210	1,1-Dichloroethane	J	Result <RL
60414073019	MW-189-202210	Chlorobenzene	J	Result <RL
60414073019	MW-189-202210	Chloroform	J	Result <RL
60414073019	MW-189-202210	Vinyl Chloride	J	Result <RL
60414073019	MW-189-202210	Methylene Chloride	U	TB and EB contamination; Qualify U at RL
60414073019	MW-189-202210	1,1-Dichloroethane	J	Result <RL
60414073019	MW-189-202210	1,1-Dichloroethene	J	Result <RL
60414073029	MW-199-202210	Chlorobenzene	J	Result <RL
60414073029	MW-199-202210	1,1-Dichloroethane	J	Result <RL
60414073002	MW-202-202210	1,2-Dichloroethane	J	Result <RL; LCS recovery low
60414073002	MW-202-202210	trans-1,2-Dichloroethene	J	Result <RL; LCS recovery low
60414073002	MW-202-202210	1,1-Dichloroethane	J	Result <RL
60414073008	MW-204-202210	1,2-Dichloroethane	UJ	LCS recovery low
60414073008	MW-204-202210	Chlorobenzene	J	Result <RL
60414073008	MW-204-202210	trans-1,2-Dichloroethene	UJ	LCS recovery low
60414073011	MW-25R-202210	1,2-Dichloroethane	J	Result <RL
60414073011	MW-25R-202210	Toluene	J	Result <RL
60414073011	MW-25R-202210	Benzene	J	Result <RL

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60414073011	MW-25R-202210	Methylene Chloride	U	TB and EB contamination; Qualify U at concentration reported (raise RL)
60414073011	MW-25R-202210	1,1,2-Trichloroethane	J	Result <RL
60414073035	MW-38-202210	Toluene	J	Result <RL
60414073020	MW-46R-202210	trans-1,2-Dichloroethene	J	Result <RL
60414073020	MW-46R-202210	Vinyl Chloride	J	Result <RL
60414073030	MW-56R-202210	trans-1,2-Dichloroethene	J	Result <RL
60414073015	MW-57R-202210	trans-1,3-Dichloropropene	J	Result <RL
60414073015	MW-57R-202210	1,2-Dichloroethane	UJ	LCS recovery low
60414073015	MW-57R-202210	trans-1,2-Dichloroethene	J	Result <RL; LCS recovery low
60414073015	MW-57R-202210	1,3-Dichloropropene (total)	J	Result <RL
60414073012	MW-58R-202210	Vinyl Chloride	J	Result <RL
60414073028	MW-87-202210	trans-1,2-Dichloroethene	J	Result <RL
60414073028	MW-87-202210	1,1-Dichloroethane	J	Result <RL
60414073017	MW-93-202210	Benzene	J	Result <RL
60414073017	MW-93-202210	1,1,1-Trichloroethane	J	Result <RL
60414073017	MW-93-202210	1,1-Dichloroethane	J	Result <RL
60414073017	MW-93-202210	1,1,2-Trichloroethane	J	Result <RL
60414073021	RW-1-202210	Ethyl Benzene	J	Result <RL
60414073021	RW-1-202210	1,2-Dichloroethane	J	Result <RL
60414073021	RW-1-202210	Xylenes (total)	J	Result <RL
60414073021	RW-1-202210	Methylene Chloride	U	TB and EB contamination; Qualify U at concentration reported (raise RL)
60414073021	RW-1-202210	Bromodichloromethane	J	Result <RL
60414073018	TB-04-202210	1,2-Dichloroethane	UJ	LCS recovery low
60414073018	TB-04-202210	trans-1,2-Dichloroethene	UJ	LCS recovery low
60414073006	TMW-12-202210	trans-1,2-Dichloroethene	J	Result <RL
60414073006	TMW-12-202210	Vinyl Chloride	J	Result <RL
60414073027	TMW-22R-202210	Toluene	J	Result <RL
60414073027	TMW-22R-202210	Benzene	J	Result <RL
60414073027	TMW-22R-202210	1,1-Dichloroethene	J	Result <RL
60414073003	TMW-23-202210	1,2-Dichloroethane	UJ	LCS recovery low
60414073003	TMW-23-202210	trans-1,2-Dichloroethene	UJ	LCS recovery low
60414073005	TMW-32-202210	trans-1,3-Dichloropropene	J	Result <RL
60414073005	TMW-32-202210	1,2-Dichloroethane	UJ	LCS recovery low
60414073005	TMW-32-202210	trans-1,2-Dichloroethene	UJ	LCS recovery low
60414073005	TMW-32-202210	1,3-Dichloropropene (total)	J	Result <RL
60414073005	TMW-32-202210	Vinyl Chloride	J	Result <RL

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60414073009	TMW-34-202210	1,2-Dichloroethane	UJ	LCS recovery low
60414073009	TMW-34-202210	trans-1,2-Dichloroethene	J	Result <RL; LCS recovery low
60414073009	TMW-34-202210	1,1-Dichloroethane	J	Result <RL
60414073013	VP-12-202210	1,2-Dichloroethane	UJ	LCS recovery low
60414073013	VP-12-202210	trans-1,2-Dichloroethene	UJ	LCS recovery low
60414073033	VP-7-202210	Benzene	J	Result <RL
60414073034	VP-8-202210	Toluene	J	Result <RL
60414073034	VP-8-202210	cis-1,2-Dichloroethene	J	Result <RL
60414073034	VP-8-202210	Benzene	J	Result <RL
60414073034	VP-8-202210	Chloromethane	J	Result <RL
60413912003	EB-04-202210	Trichloroethene	J	Result <RL
60413912002	ITMW-10-202210	Tetrachloroethene	J	Result <RL
60413912002	ITMW-10-202210	Vinyl Chloride	J	Result <RL
60413912002	ITMW-10-202210	1,1-Dichloroethane	J	Result <RL
60413912002	ITMW-10-202210	1,1-Dichloroethene	J	Result <RL
60413912001	IW-73-202210	1,1-Dichloroethene	J	Result <RL
60413912004	ITMW-9-202210	Tetrachloroethene	J	Result <RL
60413912004	ITMW-9-202210	Chloroform	J	Result <RL
60413912004	ITMW-9-202210	Benzene	J	Result <RL
60413912004	ITMW-9-202210	Vinyl Chloride	J	Result <RL
60413912004	ITMW-9-202210	1,1-Dichloroethane	J	Result <RL
60413912006	MW-198-202210	Toluene	J	Result <RL
60413912006	MW-198-202210	Carbon Tetrachloride	J	Result <RL
60413912006	MW-198-202210	Benzene	J	Result <RL
60413912006	MW-198-202210	Chloromethane	J	Result <RL
60413912006	MW-198-202210	Methylene Chloride	U	Equipment and trip blank contamination; qualify U at concentration reported (raise RL)
60413912006	MW-198-202210	Bromoform	J	Result <RL
60413912006	MW-198-202210	Bromodichloromethane	J	Result <RL
60413912006	MW-198-202210	1,1,2-Trichloroethane	J	Result <RL
60413912005	MW-95-202210	Trichloroethene	J	Initial calibration exceeded
60413912005	MW-95-202210	1,2-Dichloroethane	J	Result <RL
60413912005	MW-95-202210	Carbon Tetrachloride	J	Result <RL
60413912005	MW-95-202210	Benzene	J	Result <RL
60413912005	MW-95-202210	Methylene Chloride	U	Equipment and trip blank contamination; qualify U at concentration reported (raise RL)
60413912005	MW-95-202210	Bromodichloromethane	J	Result <RL
60413912005	MW-95-202210	1,1-Dichloroethane	J	Result <RL
60413912005	MW-95-202210	1,1,2,2-Tetrachloroethane	J	Result <RL
60413912005	MW-95-202210	Trichloroethene	J	Hold time exceeded.

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 DATA SUMMARY
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	< 1.0 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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
IW-72	IW-72-20090116	1/16/2009	N	0.027	< 0.005 U	< 0.005 U
IW-72	IW-72-20090423	4/23/2009	N	0.04	< 0.005 U	< 0.005 U
IW-72	IW-72-20090508	5/8/2009	N	0.04	< 0.005 U	< 0.005 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	10/24/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
IW-72	IW-72-20120417	4/17/2012	N	0.0038 J	< 0.005 U	< 0.005 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	4/23/2009	N	0.4	0.016	< 0.005 U
IW-73	IW-73-20110519-FS	5/19/2011	N	160	3.6 J	
IW-73	IW-73-20111025	10/25/2011	N	0.25	0.0049 J	< 0.005 U
IW-73	IW-73-20120417	4/17/2012	N	0.18	0.0058	< 0.005 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-73-20130424-FD	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-73-202210	10/21/2022	N	187	6.4	< 1.0 U
IW-74	IW-74-20090423	4/23/2009	N	0.26	0.0081	< 0.005 U
IW-74	IW-74-20110519-FS	5/19/2011	N	74	< 5.0 U	
IW-74	IW-74-20111025	10/25/2011	N	0.15	0.0031 J	< 0.005 U
IW-74	IW-74-20120417	4/17/2012	N	0.13	0.0024 J	< 0.005 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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	IW-74-201403-FD	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	1/16/2009	N	0.14	0.0024 J	< 0.005 U
IW-75	IW-75-20111025	10/25/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
IW-75	IW-75-20120417	4/17/2012	N	0.0029 J	< 0.005 U	< 0.005 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	4/23/2009	N	0.73	0.028	< 0.005 U
IW-76	IW-76-20090507	5/7/2009	N	0.46	0.028	< 0.005 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	10/25/2011	N	0.13	0.0022 J	< 0.005 U
IW-76	IW-76-20120417	4/17/2012	N	0.4	0.0089	< 0.005 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	4/23/2009	N	0.57	0.02	< 0.005 U
IW-77	IW-77-20090507	5/7/2009	N	0.3	0.017	< 0.005 U
IW-77	IW-77-20090527	5/27/2009	N	0.25	0.013	< 0.005 U
IW-77	IW-77-20091028	10/28/2009	N	0.38	0.013	< 0.005 U
IW-77	IW-77-20091221-FS	12/21/2009	N	250	12	< 5.0 U
IW-77	IW-77-20100513	5/13/2010	N	0.26	0.011	< 0.005 U
IW-77	IW-77-20101105	11/5/2010	N	1.4	0.041	< 0.005 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	10/25/2011	N	1.4	0.032	< 0.005 U
IW-77	IW-77-20120417-FD	4/17/2012	FD	0.52	0.02	< 0.005 U
IW-77	IW-77-20120417	4/17/2012	N	0.51	0.023	< 0.005 U
IW-77	IW-77-20121019	10/19/2012	N	1000	32	0.65 J

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-77-20131016-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
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-78	IW-78-20111025	10/25/2011	N	0.35	0.012	< 0.005 U
IW-78	IW-78-20120418	4/18/2012	N	0.12	0.0023 J	< 0.005 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-79	IW-79-20111025	10/25/2011	N	0.57	0.013	< 0.005 U
IW-79	IW-79-20120417	4/17/2012	N	0.43	0.0021 J	< 0.005 U
IW-79	IW-79-20121020	10/20/2012	N	670	20	0.45 J
IW-79	IW-79-20121020-FD	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

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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
IW-79	IW-79-201605	5/4/2016	N	55.0	1.0	< 1.0 U
IW-80	IW-80-20090423	4/23/2009	N	0.17	0.004 J	< 0.005 U
IW-80	IW-80-20090507	5/7/2009	N	0.069	< 0.005 U	< 0.005 U
IW-80	IW-80-20110519-FS	5/19/2011	N	27	< 5.0 U	
IW-80	IW-80-20111025	10/25/2011	N	0.0097	< 0.005 U	< 0.005 U
IW-80	IW-80-20120417	4/17/2012	N	0.055	0.0022 J	< 0.005 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-80-20131017-FD	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
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

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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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
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

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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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
ITMW-1	ITMW-1-19891101	11/1/1989	N	< ND		< ND
ITMW-1	ITMW-1-19900101	1/1/1990	N	< ND		< ND
ITMW-1	ITMW-1-19931101	11/1/1993	N	0.01		< ND
ITMW-1	ITMW-1-19961201	12/1/1996	N	0.021		< ND
ITMW-1	ITMW-1-19990201	2/1/1999	N	0.037	< ND	< ND
ITMW-1	ITMW-1-20000301	3/1/2000	N	0.125	0.008	< ND
ITMW-1	ITMW-1-20000919	9/19/2000	N	0.0307	0.00745	< 0.01 U
ITMW-1	ITMW-1-20010327	3/27/2001	N	0.03	0.006	< 0.01 U
ITMW-1	ITMW-1-20010911	9/11/2001	N	0.027	0.009	< 0.01 U
ITMW-1	ITMW-1-20020910	9/10/2002	N	0.035	0.009	< 0.01 U
ITMW-1	ITMW-1-20030227	2/27/2003	N	0.0296	0.00714	< 0.01 U
ITMW-1	ITMW-1-20030923	9/23/2003	N	0.025	0.012	< 0.01 U
ITMW-1	ITMW-1-20040413	4/13/2004	N	0.0422	0.0111	< 0.01 U
ITMW-1	ITMW-1-20040921	9/21/2004	N	0.026	0.0167	< 0.01 U
ITMW-1	ITMW-1-20040921-FD	9/21/2004	FD	0.0261	0.0158	< 0.01 U
ITMW-1	ITMW-1-20050928	9/28/2005	N	0.0347	0.0113	< 0.01 U
ITMW-1	ITMW-1-20061014	10/14/2006	N	0.02	0.011	< 0.01 UJ
ITMW-1	ITMW-1-20070920	9/20/2007	N	0.018	0.013	< 0.01 U
ITMW-1	ITMW-1-20081209	12/9/2008	N	0.014	0.0073	< 0.005 U
ITMW-1	ITMW-1-20111027	10/27/2011	N	0.017	0.0082	< 0.005 U
ITMW-1	ITMW-1-20120418	4/18/2012	N	0.032	0.013	< 0.005 U
ITMW-1	ITMW-1-20121019	10/19/2012	N	10	8.3	< 2.0 U
ITMW-1	ITMW-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-1R	ITMW-1R-201910	10/23/2019	N	11.4	8.9	0.14 J

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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-2	ITMW-2-19891001	10/1/1989	N	< ND		< ND
ITMW-2	ITMW-2-19891101	11/1/1989	N	< ND		< ND
ITMW-2	ITMW-2-19900101	1/1/1990	N	< ND		< ND
ITMW-2	ITMW-2-19900101-FD	1/1/1990	FD	< ND		< ND
ITMW-2	ITMW-2-19910301	3/1/1991	N	< ND		< ND
ITMW-2	ITMW-2-19931101	11/1/1993	N	0.004		< ND
ITMW-2	ITMW-2-19961201	12/1/1996	N	0.0034		< ND
ITMW-2	ITMW-2-20000301	3/1/2000	N	< ND	< ND	< ND
ITMW-2	ITMW-2-20000919	9/19/2000	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-2	ITMW-2-20010327	3/27/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-2	ITMW-2-20010913	9/13/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-2	ITMW-2-20020911	9/11/2002	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-2	ITMW-2-20030227	2/27/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-2	ITMW-2-20030923	9/23/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-2	ITMW-2-20040413	4/13/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-2	ITMW-2-20040413-FD	4/13/2004	FD	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-2	ITMW-2-20040921	9/21/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-2	ITMW-2-20040921-FD	9/21/2004	FD	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-2	ITMW-2-20050929	9/29/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-2	ITMW-2-20061014	10/14/2006	N	0.004 J	< 0.005 U	< 0.01 U
ITMW-2	ITMW-2-20070920	9/20/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-2	ITMW-2-20081209	12/9/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
ITMW-2	ITMW-2-20101103	11/3/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
ITMW-2	ITMW-2-20111026	10/26/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
ITMW-2	ITMW-2-20120417	4/17/2012	N	< 0.005 U	< 0.005 U	< 0.005 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	ITMW-2-201403-FD	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-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-3	ITMW-3-19891001	10/1/1989	N	< ND		< ND
ITMW-3	ITMW-3-19900101	1/1/1990	N	< ND		< ND
ITMW-3	ITMW-3-19931101	11/1/1993	N	0.003		< ND
ITMW-3	ITMW-3-19961201	12/1/1996	N	0.0017		< ND
ITMW-3	ITMW-3-19990201	2/1/1999	N	< ND	< ND	< ND
ITMW-3	ITMW-3-20000301	3/1/2000	N	< ND	< ND	< ND
ITMW-3	ITMW-30-20000301-FD	3/1/2000	FD	< ND	< ND	< ND
ITMW-3	ITMW-3-20000919	9/19/2000	N	< 0.005 U	< 0.005 U	< 0.01 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-3	ITMW-3-20010327	3/27/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-3	ITMW-3-20010911	9/11/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-3	ITMW-3-20020910	9/10/2002	N	0.015	< 0.005 U	< 0.01 U
ITMW-3	ITMW-3-20030227	2/27/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-3	ITMW-3-20030923	9/23/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-3	ITMW-3-20040413	4/13/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-3	ITMW-3-20040921	9/21/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-3	ITMW-3-20050928	9/28/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-3	ITMW-3-20061014	10/14/2006	N	< 0.005 U	< 0.005 U	< 0.01 UJ
ITMW-3	ITMW-3-20070920	9/20/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-3	ITMW-3-20081209	12/9/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
ITMW-3	ITMW-3-20101104	11/4/2010	N	0.19	0.0039 J	< 0.005 U
ITMW-3	ITMW-3-20111027	10/27/2011	N	0.0041 J	< 0.005 U	< 0.005 U
ITMW-3	ITMW-3-20120417	4/17/2012	N	< 0.005 U	< 0.005 U	< 0.005 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	10/1/1989	N	< ND		< ND
ITMW-4	ITMW-4-19891101	11/1/1989	N	< ND		< ND
ITMW-4	ITMW-4-19900101	1/1/1990	N	< ND		< ND
ITMW-4	ITMW-4-19931101	11/1/1993	N	< ND		< ND
ITMW-4	ITMW-4-19961201	12/1/1996	N	0.075		< ND
ITMW-4	ITMW-4-19990201	2/1/1999	N	0.093	0.054	< ND
ITMW-4	ITMW-4-20000301	3/1/2000	N	0.022	0.016	< ND
ITMW-4	ITMW-4-20000920	9/20/2000	N	0.0139	0.0106	< 0.01 U
ITMW-4	ITMW-4-20010328	3/28/2001	N	0.009	< 0.005 U	< 0.01 U
ITMW-4	ITMW-4-20010913	9/13/2001	N	0.006	0.008	< 0.01 U
ITMW-4	ITMW-4-20020910	9/10/2002	N	0.009	< 0.005 U	< 0.01 U
ITMW-4	ITMW-4-20030228	2/28/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-4	ITMW-4-20030923	9/23/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-4	ITMW-4-20040414	4/14/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-4	ITMW-4-20040922	9/22/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-4	ITMW-4-20050927	9/27/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-4	ITMW-4-20061011	10/11/2006	N	0.006	0.008	< 0.01 U
ITMW-4	ITMW-4-20070920	9/20/2007	N	0.005 J	0.005 J	< 0.01 U
ITMW-4	ITMW-4-20081209	12/9/2008	N	< 0.005 U	0.0032 J	< 0.005 U
ITMW-4	ITMW-4-20111025	10/25/2011	N	0.0048 J	0.0051	< 0.005 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	10/1/1989	N	< ND		< ND
ITMW-5	ITMW-5-19900101	1/1/1990	N	< ND		< ND
ITMW-5	ITMW-5-19961201	12/1/1996	N	0.021		< ND
ITMW-5	ITMW-5-19990201	2/1/1999	N	0.086	0.039	< ND
ITMW-5	ITMW-5-20000301	3/1/2000	N	0.073	0.059	< ND
ITMW-5	ITMW-5-20000920	9/20/2000	N	0.085	0.0644	< 0.01 U
ITMW-5	ITMW-5-20010328	3/28/2001	N	0.1	0.046	< 0.01 U
ITMW-5	ITMW-5-20010913	9/13/2001	N	0.072	0.064	< 0.01 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-5	ITMW-5-20020910	9/10/2002	N	0.108	0.072	< 0.01 U
ITMW-5	ITMW-5-20030228	2/28/2003	N	0.0904	0.0687	< 0.01 U
ITMW-5	ITMW-5-20030924	9/24/2003	N	0.0973	0.0737	< 0.01 U
ITMW-5	ITMW-5-20040414	4/14/2004	N	0.0839	0.0554	< 0.01 U
ITMW-5	ITMW-5-20040922	9/22/2004	N	0.105	0.0758	< 0.01 U
ITMW-5	ITMW-5-20050406	4/6/2005	N	0.0932	0.0726	< 0.01 U
ITMW-5	ITMW-5-20050406-FD	4/6/2005	FD	0.087	0.071	< 0.01 U
ITMW-5	ITMW-5-20050928	9/28/2005	N	0.079	0.0535	< 0.01 U
ITMW-5	ITMW-5-20050928-FD	9/28/2005	FD	0.0821	0.0544	< 0.01 U
ITMW-5	ITMW-5-20060314	3/14/2006	N	0.092	0.0661	< 0.01 U
ITMW-5	ITMW-5-20060314-FD	3/14/2006	FD	0.0984	0.0661	< 0.01 U
ITMW-5	ITMW-5-20061010	10/10/2006	N	0.11	0.051	0.004 J
ITMW-5	ITMW-5-20070418	4/18/2007	N	0.115	0.0393	< 0.01 U
ITMW-5	ITMW-5-20070920	9/20/2007	N	0.12	0.049	0.004 J
ITMW-5	ITMW-5-20080429	4/29/2008	N	0.12 0	0.043 0	< 0.01 U
ITMW-5	ITMW-5-20081209	12/9/2008	N	0.2 E	0.042	< 0.005 U
ITMW-5	ITMW-5-20090427	4/27/2009	N	0.16	0.034	< 0.005 U
ITMW-5	ITMW-5-20100511	5/11/2010	N	0.19 EF	0.04	< 0.005 U
ITMW-5	ITMW-5-20101106	11/6/2010	N	0.35	0.05	< 0.005 U
ITMW-5	ITMW-5-20110322	3/22/2011	N	0.37	0.039	< 0.005 U
ITMW-5	ITMW-5-20111025	10/25/2011	N	0.15	0.035	< 0.005 U
ITMW-5	ITMW-5-20120417	4/17/2012	N	0.29	0.026	< 0.005 U
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-6	ITMW-6-19891001	10/1/1989	N	< ND		< ND
ITMW-6	ITMW-6-19900101	1/1/1990	N	< ND		< ND
ITMW-6	ITMW-6-19961201	12/1/1996	N	0.0068		< ND
ITMW-6	ITMW-6-19970501	5/1/1997	N	0.007	< ND	< ND
ITMW-6	ITMW-6-19990201	2/1/1999	N	0.025	< ND	< ND
ITMW-6	ITMW-6-19990201-FD	2/1/1999	FD	0.006	< ND	< ND
ITMW-6	ITMW-6-20000301	3/1/2000	N	< ND	< ND	< ND
ITMW-6	ITMW-6-20000920	9/20/2000	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-6	ITMW-6-20010328	3/28/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-6	ITMW-6-20010913	9/13/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-6	ITMW-6-20020910	9/10/2002	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-6	ITMW-6-20020910-FD	9/10/2002	FD	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-6	ITMW-6-20030227	2/27/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-6	ITMW-6-20030924	9/24/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-6	ITMW-6-20040414	4/14/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-6	ITMW-6-20040922	9/22/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-6	ITMW-6-20050928	9/28/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-6	ITMW-6-20061011	10/11/2006	N	< 0.005 U	0.004 J	< 0.01 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-6	ITMW-6-20070920	9/20/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-6	ITMW-6-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
ITMW-6	ITMW-6-20091028	10/28/2009	N	< 0.005 U	0.0021 J	< 0.005 U
ITMW-6	ITMW-6-20100510	5/10/2010	N	< 0.005 U	0.0019 J	< 0.005 U
ITMW-6	ITMW-6-20111025-FD	10/25/2011	FD	< 0.005 U	0.0027 J	< 0.005 U
ITMW-6	ITMW-6-20111025	10/25/2011	N	< 0.005 U	0.0024 J	< 0.005 U
ITMW-6	ITMW-6-20120417	4/17/2012	N	< 0.005 U	0.0029 J	< 0.005 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	ITMW-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-7	ITMW-7-19891101	11/1/1989	N	< ND		< ND
ITMW-7	ITMW-7-19900101	1/1/1990	N	< ND		< ND
ITMW-7	ITMW-7-19961201	12/1/1996	N	0.29		0.003
ITMW-7	ITMW-7-19970501	5/1/1997	N	0.38	0.18	< ND
ITMW-7	ITMW-7-19990201	2/1/1999	N	< ND	< ND	< ND
ITMW-7	ITMW-7-19990601	6/1/1999	N	0.32	0.144	< ND
ITMW-7	ITMW-7-19990601-FD	6/1/1999	FD	0.3	0.14	< ND
ITMW-7	ITMW-7-20000301	3/1/2000	N	0.262	0.1	< ND
ITMW-7	ITMW-7-20000301-FD	3/1/2000	FD	0.207	0.092	< ND
ITMW-7	ITMW-7-20000919	9/19/2000	N	0.207	0.1	< 0.01 U
ITMW-7	ITMW-7-20000921-FD	9/21/2000	FD	0.109	< 0.005 U	< 0.01 U
ITMW-7	ITMW-7-20010328	3/28/2001	N	0.161	0.066	< 0.01 U
ITMW-7	ITMW-7-20010913	9/13/2001	N	0.139	0.068	< 0.01 U
ITMW-7	ITMW-7-20020910	9/10/2002	N	0.137	0.056	< 0.01 U
ITMW-7	ITMW-7-20020910-FD	9/10/2002	FD	0.128	0.054	< 0.01 U
ITMW-7	ITMW-7-20030227	2/27/2003	N	0.172	0.0925	< 0.01 U
ITMW-7	ITMW-7-20030924	9/24/2003	N	0.125	0.0573	< 0.01 U
ITMW-7	ITMW-7-20040414	4/14/2004	N	0.201	0.0807	< 0.01 U
ITMW-7	ITMW-7-20040922	9/22/2004	N	0.132	0.0484	< 0.01 U
ITMW-7	ITMW-7-20050407	4/7/2005	N	0.122	0.039	< 0.01 U
ITMW-7	ITMW-7-20050928	9/28/2005	N	0.1	0.0305	< 0.01 U
ITMW-7	ITMW-7-20060314	3/14/2006	N	0.153	0.0595	< 0.01 U
ITMW-7	ITMW-7-20061010	10/10/2006	N	0.14	0.044	0.001 J
ITMW-7	ITMW-7-20070417	4/17/2007	N	0.083	0.0294	< 0.01 U
ITMW-7	ITMW-7-20070921	9/21/2007	N	0.072	0.022	< 0.01 U
ITMW-7	ITMW-7-20080430	4/30/2008	N	0.07 0	0.018 0	< 0.01 U
ITMW-7	ITMW-7-20081211	12/11/2008	N	0.066	0.019	< 0.005 U
ITMW-7	ITMW-7-20090427	4/27/2009	N	0.087	0.026	< 0.005 U
ITMW-7	ITMW-7-20091028	10/28/2009	N	0.06	0.02	< 0.005 U
ITMW-7	ITMW-7-20100510	5/10/2010	N	0.073	0.018	< 0.005 U
ITMW-7	ITMW-7-20110323	3/23/2011	N	0.225 EF	0.0932	0.0565
ITMW-7	ITMW-7-20111025	10/25/2011	N	0.099	0.026	< 0.005 U
ITMW-7	ITMW-7-20120418	4/18/2012	N	0.1	0.02	< 0.005 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

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HISTORICAL DATA SUMMARY
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-9	ITMW-9-19900101	1/1/1990	N	< ND		< ND
ITMW-9	ITMW-9-19961201	12/1/1996	N	0.23		< ND
ITMW-9	ITMW-9-19970501	5/1/1997	N	0.007	< ND	< ND
ITMW-9	ITMW-9-19990201	2/1/1999	N	0.04	0.024	< ND
ITMW-9	ITMW-9-20000301	3/1/2000	N	0.069	0.045	< ND
ITMW-9	ITMW-9-20000920	9/20/2000	N	0.0573	0.0143	< 0.01 U
ITMW-9	ITMW-9-20000920-FD	9/20/2000	FD	0.0548	0.014	< 0.01 U
ITMW-9	ITMW-9-20010328	3/28/2001	N	0.04	0.012	< 0.01 U
ITMW-9	ITMW-9-20010913	9/13/2001	N	0.04	0.012	< 0.01 U
ITMW-9	ITMW-9-20020910	9/10/2002	N	0.061	0.021	< 0.01 U
ITMW-9	ITMW-9-20030228	2/28/2003	N	0.0542	0.0372	< 0.01 U
ITMW-9	ITMW-9-20030923	9/23/2003	N	0.091	0.0495	< 0.01 U
ITMW-9	ITMW-9-20030923-FD	9/23/2003	FD	0.0976	0.0539	< 0.01 U
ITMW-9	ITMW-9-20040414	4/14/2004	N	0.0718	0.0388	< 0.01 U
ITMW-9	ITMW-9-20040922	9/22/2004	N	0.0807	0.0211	< 0.01 U
ITMW-9	ITMW-9-20050406	4/6/2005	N	0.079	0.0304	< 0.01 U
ITMW-9	ITMW-9-20050927	9/27/2005	N	0.0988	0.0546	< 0.01 U
ITMW-9	ITMW-9-20060314	3/14/2006	N	0.101	0.0787	< 0.01 U
ITMW-9	ITMW-9-20061011	10/11/2006	N	0.11	0.077	0.006 J
ITMW-9	ITMW-9-20070417	4/17/2007	N	0.079	0.0396	< 0.01 U
ITMW-9	ITMW-9-20070920	9/20/2007	N	0.076	0.026	< 0.01 U
ITMW-9	ITMW-9-20080428	4/28/2008	N	0.082 0	0.037 0	< 0.01 U
ITMW-9	ITMW-9-20081209	12/9/2008	N	0.09	0.062	< 0.005 U
ITMW-9	ITMW-9-20090427	4/27/2009	N	0.11	0.051	< 0.005 U
ITMW-9	ITMW-9-20091027	10/27/2009	N	0.12	0.067	0.0057
ITMW-9	ITMW-9-20091027-FD	10/27/2009	FD	0.12	0.071	0.0061
ITMW-9	ITMW-9-20100511	5/11/2010	N	0.13	0.038	< 0.005 U
ITMW-9	ITMW-9-20110322	3/22/2011	N	0.12	0.048	0.0024 J
ITMW-9	ITMW-9-20111025	10/25/2011	N	0.09	0.057	< 0.005 U
ITMW-9	ITMW-9-20120417	4/17/2012	N	0.15	0.05	0.0025 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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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	10/21/2022	N	802	39.3	0.91 J
ITMW-10	ITMW-10-19900101	1/1/1990	N	< ND		< ND
ITMW-10	ITMW-10-19961201	12/1/1996	N	0.004		< ND
ITMW-10	ITMW-10-19990201	2/1/1999	N	0.025	0.013	< ND
ITMW-10	ITMW-10-20000301	3/1/2000	N	0.023	0.017	< ND
ITMW-10	ITMW-10-20000920	9/20/2000	N	0.0181	0.0159	< 0.01 U
ITMW-10	ITMW-10-20010328	3/28/2001	N	0.04	0.021	< 0.01 U
ITMW-10	ITMW-10-20010913	9/13/2001	N	0.029	0.028	< 0.01 U
ITMW-10	ITMW-10-20010913-FD	9/13/2001	FD	0.03	0.027	< 0.01 U
ITMW-10	ITMW-10-20020910	9/10/2002	N	0.055	0.038	< 0.01 U
ITMW-10	ITMW-10-20030228	2/28/2003	N	0.0576	0.0509	< 0.01 U
ITMW-10	ITMW-10-20030716	7/16/2003	N	0.0553	0.0492	< 0.01 U
ITMW-10	ITMW-10-20030923	9/23/2003	N	0.0659	0.0565	< 0.01 U
ITMW-10	ITMW-10-20040414	4/14/2004	N	0.08	0.0574	< 0.01 U
ITMW-10	ITMW-10-20040922	9/22/2004	N	0.0596	0.05	< 0.01 U
ITMW-10	ITMW-10-20050406	4/6/2005	N	0.0721	0.0577	< 0.01 U
ITMW-10	ITMW-10-20050928	9/28/2005	N	0.0576	0.0416	< 0.01 U
ITMW-10	ITMW-10-20060314	3/14/2006	N	0.082	0.0672	< 0.01 U
ITMW-10	ITMW-10-20061010	10/10/2006	N	0.088	0.054	0.005 J
ITMW-10	ITMW-10-20070417	4/17/2007	N	0.076	0.0524	< 0.01 U
ITMW-10	ITMW-10-20070920	9/20/2007	N	0.067	0.048	0.005 J
ITMW-10	ITMW-10-20080428	4/28/2008	N	0.061 0	0.046 0	< 0.01 U
ITMW-10	ITMW-10-20081209	12/9/2008	N	0.078	0.05	< 0.005 U
ITMW-10	ITMW-10-20090427	4/27/2009	N	0.087	0.052	0.0044 J
ITMW-10	ITMW-10-20091027	10/27/2009	N	0.11	0.05	0.0042 J
ITMW-10	ITMW-10-20100511	5/11/2010	N	0.085	0.046	0.0024 J
ITMW-10	ITMW-10-20110322	3/22/2011	N	0.092	0.042	0.0027 J
ITMW-10	ITMW-10-20111025	10/25/2011	N	0.094	0.039	0.0025 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

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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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
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	10/21/2022	N	326	5.7	0.29 J
ITMW-11	ITMW-11-19900101	1/1/1990	N	19		0.18
ITMW-11	ITMW-11-19901101	11/1/1990	N	4.7		0.093
ITMW-11	ITMW-11-19910201	2/1/1991	N	3.4		< ND
ITMW-11	ITMW-11-19931101	11/1/1993	N	2.3		0.043
ITMW-11	ITMW-11-19961201	12/1/1996	N	0.51		< ND
ITMW-11	ITMW-11-19990201	2/1/1999	N	0.65	0.01	< ND
ITMW-11	ITMW-11-20000301	3/1/2000	N	3.37	0.206	< ND
ITMW-11	ITMW-11-20000919	9/19/2000	N	8.03	0.327	0.0117
ITMW-11	ITMW-11-20010327	3/27/2001	N	7	0.2	< 0.01 U
ITMW-11	ITMW-11-20010913	9/13/2001	N	6	0.183	< 0.01 U
ITMW-11	ITMW-11-20011120	11/20/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-11	ITMW-11L-20020909	9/9/2002	N	7.1	0.206	0.01
ITMW-11	ITMW-11T-20020909	9/9/2002	N	0.8	0.072	< 0.01 U
ITMW-11	ITMW-11-20030226	2/26/2003	N	4.11	0.346	0.0588
ITMW-11	ITMW-11-20030226-FD	2/26/2003	FD	3.63	0.306	0.0607
ITMW-11	ITMW-11-20030924	9/24/2003	N	3.99	0.269	0.0118
ITMW-11	ITMW-11-20040413	4/13/2004	N	3.16	0.24	0.0378
ITMW-11	ITMW-11-20040921	9/21/2004	N	3.45	0.204	< 0.01 U
ITMW-11	ITMW-11-20050407	4/7/2005	N	4.21	0.282	0.0667
ITMW-11	ITMW-11-20050929	9/29/2005	N	3.91	0.199	0.018
ITMW-11	ITMW-11-20060316	3/16/2006	N	14.6	1.29	0.482
ITMW-11	ITMW-11-20060316-FD	3/16/2006	FD	12.8	1.21	0.381
ITMW-11	ITMW-11-20061013	10/13/2006	N	8	0.34	0.047
ITMW-11	ITMW-11-20070419	4/19/2007	N	3.97	0.199	< 0.2 U
ITMW-11	ITMW-11-20070921	9/21/2007	N	7.6	0.18	0.021
ITMW-11	ITMW-11-20080430	4/30/2008	N	4.5 0	0.21 0	0.058 0
ITMW-11	ITMW-11-20081210	12/10/2008	N	5.8	0.19	0.027
ITMW-11	ITMW-11-20090427	4/27/2009	N	2.5	0.2	0.024
ITMW-11	ITMW-11-20100511-FD	5/11/2010	FD	6.2	0.29	0.028
ITMW-11	ITMW-11-20100511	5/11/2010	N	6.2	0.29	0.045
ITMW-11	ITMW-11-20110323	3/23/2011	N	9.7	0.52	0.13
ITMW-11	ITMW-11-20111026	10/26/2011	N	8.8	0.31	0.016

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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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	11/1/1990	N	2.4		0.14
ITMW-12	ITMW-12-19910201	2/1/1991	N	2.1		< ND
ITMW-12	ITMW-12-19931101	11/1/1993	N	2.5		0.035
ITMW-12	ITMW-12-19961201	12/1/1996	N	1.2		< ND
ITMW-12	ITMW-12-19990201	2/1/1999	N	3.1	0.48	0.034
ITMW-12	ITMW-12-20000301	3/1/2000	N	3.11	0.32	0.019
ITMW-12	ITMW-12-20000919	9/19/2000	N	3.35	0.18	0.012
ITMW-12	ITMW-12-20010327	3/27/2001	N	3.9	0.2	0.02
ITMW-12	ITMW-12-20010913	9/13/2001	N	3.1	0.159	< 0.01 U
ITMW-12	ITMW-12-20011120	11/20/2001	N	2.4	0.3	0.02
ITMW-12	ITMW-12-20020911	9/11/2002	N	4.2	0.3	< 0.01 U
ITMW-12	ITMW-12-20030226	2/26/2003	N	3.46	0.287	< 0.01 U
ITMW-12	ITMW-12-20030226-FD	2/26/2003	FD	3.94	0.308	< 0.01 U
ITMW-12	ITMW-12-20030924	9/24/2003	N	2.92	0.242	< 0.01 U
ITMW-12	ITMW-12-20040413	4/13/2004	N	2.41	0.245	< 0.01 U
ITMW-12	ITMW-12-20040921	9/21/2004	N	1.78	0.238	< 0.01 U
ITMW-12	ITMW-12-20050929	9/29/2005	N	2.12	0.273	< 0.01 U
ITMW-12	ITMW-12-20061013	10/13/2006	N	3.5	0.31	0.009 J
ITMW-12	ITMW-12-20070921	9/21/2007	N	2.1	0.22	< 0.01 U
ITMW-12	ITMW-12-20081209	12/9/2008	N	1.5	0.18	< 0.005 U
ITMW-12	ITMW-12-20111026	10/26/2011	N	1.6	0.23	0.0018 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	ITMW-12-20131017-FD	10/17/2013	FD	2300	160	4.1
ITMW-12	ITMW-12-201403	3/8/2014	N	1910	148	3.4
ITMW-12	ITMW-12-201403-FD	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

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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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	11/1/1990	N	0.034		0.018
ITMW-13	ITMW-13-19910201	2/1/1991	N	0.032		0.035
ITMW-13	ITMW-13-19931101	11/1/1993	N			0.029
ITMW-13	ITMW-13-19961201	12/1/1996	N	0.036		0.036
ITMW-13	ITMW-13-19990201	2/1/1999	N	0.036	0.14	0.048
ITMW-13	ITMW-13-20000301	3/1/2000	N	0.037	0.121	0.053
ITMW-13	ITMW-13-20000919	9/19/2000	N	0.0224	0.112	0.0505
ITMW-13	ITMW-13-20010328	3/28/2001	N	0.044	0.092	0.04
ITMW-13	ITMW-13-20010913	9/13/2001	N	0.035	0.111	0.08
ITMW-13	ITMW-13L-20020909	9/9/2002	N	0.099	0.11	0.01
ITMW-13	ITMW-13T-20020909	9/9/2002	N	0.081	0.086	0.02
ITMW-13	ITMW-13-20030226	2/26/2003	N	0.0702	0.0855	< 0.01 U
ITMW-13	ITMW-13-20030924	9/24/2003	N	0.159	0.13	< 0.01 U
ITMW-13	ITMW-13-20040413	4/13/2004	N	0.0484	0.0872	< 0.01 U
ITMW-13	ITMW-13-20040921	9/21/2004	N	0.0255	0.0716	< 0.01 U
ITMW-13	ITMW-13-20050407	4/7/2005	N	0.0718	0.103	< 0.01 U
ITMW-13	ITMW-13-20050930	9/30/2005	N	0.0727	0.114	0.0179
ITMW-13	ITMW-13-20060316	3/16/2006	N	0.141	0.187	< 0.01 U
ITMW-13	ITMW-13-20061014	10/14/2006	N	0.1	0.15	0.017
ITMW-13	ITMW-13-20070418	4/18/2007	N	0.0831	0.078	0.0043 J
ITMW-13	ITMW-13-20070920	9/20/2007	N	0.028	0.04	< 0.01 U
ITMW-13	ITMW-13-20080429	4/29/2008	N	0.069 0	0.072 0	< 0.01 U
ITMW-13	ITMW-13-20081210	12/10/2008	N	0.026	0.023	< 0.005 U
ITMW-13	ITMW-13-20090427	4/27/2009	N	0.079	0.078	< 0.005 U
ITMW-13	ITMW-13-20091027	10/27/2009	N	0.018	0.022	< 0.005 U
ITMW-13	ITMW-13-20100512	5/12/2010	N	0.097	0.072	< 0.005 U
ITMW-13	ITMW-13-20110323	3/23/2011	N	0.13	0.083	< 0.005 U
ITMW-13	ITMW-13-20111027-FD	10/27/2011	FD	0.064	0.04	< 0.005 U
ITMW-13	ITMW-13-20111027	10/27/2011	N	0.065	0.041	< 0.005 U
ITMW-13	ITMW-13-20120419	4/19/2012	N	0.097	0.063	< 0.005 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-13-201410	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	11/1/1990	N	< ND		0.013
ITMW-14	ITMW-14-19910201	2/1/1991	N	< ND		< ND
ITMW-14	ITMW-14-19931101	11/1/1993	N	0.006		< ND
ITMW-14	ITMW-14-19961201	12/1/1996	N	< ND		< ND
ITMW-14	ITMW-14-19990201	2/1/1999	N	< ND	0.029	0.02
ITMW-14	ITMW-14-20000301	3/1/2000	N	< ND	0.024	0.012
ITMW-14	ITMW-14-20000919	9/19/2000	N	< 0.005 U	0.0136	< 0.01 U
ITMW-14	ITMW-14-20010327	3/27/2001	N	< 0.005 U	0.024	0.01
ITMW-14	ITMW-14-20010913	9/13/2001	N	< 0.005 U	0.005	< 0.01 U

APPENDIX D
HISTORICAL DATA SUMMARY
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-14	ITMW-14-20020911	9/11/2002	N	0.041	0.006	< 0.01 U
ITMW-14	ITMW-14-20030226	2/26/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-14	ITMW-14-20030924	9/24/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-14	ITMW-14-20040413	4/13/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-14	ITMW-14-20040921	9/21/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-14	ITMW-14-20050930	9/30/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-14	ITMW-14-20061014	10/14/2006	N	0.004 J	0.008	< 0.01 UJ
ITMW-14	ITMW-14-20070921	9/21/2007	N	0.005 J	0.009	< 0.01 U
ITMW-14	ITMW-14-20081210	12/10/2008	N	0.0057	0.0093	< 0.005 U
ITMW-14	ITMW-14-20101104	11/4/2010	N	0.11	0.014	< 0.005 U
ITMW-14	ITMW-14-20111027	10/27/2011	N	0.0063	0.011	< 0.005 U
ITMW-14	ITMW-14-20120419	4/19/2012	N	0.0076	0.016	< 0.005 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	11/1/1990	N	2.5		0.055
ITMW-15	ITMW-15-19910201	2/1/1991	N	1.7		< ND
ITMW-15	ITMW-15-19910415	4/15/1991	N	2		< ND
ITMW-15	ITMW-15-19910419	4/19/1991	N	2.1		< ND
ITMW-15	ITMW-15-19910420	4/20/1991	N	2.4		< ND
ITMW-15	ITMW-15-19931101	11/1/1993	N	4.3		0.01
ITMW-15	ITMW-15-19961201	12/1/1996	N	0.24		< ND
ITMW-15	ITMW-15-19990201	2/1/1999	N	0.4	0.12	< ND
ITMW-15	ITMW-15-20000301	3/1/2000	N	0.339	0.097	< ND
ITMW-15	ITMW-15-20000919	9/19/2000	N	0.362	0.0927	< 0.01 U
ITMW-15	ITMW-15-20000919-FD	9/19/2000	FD	0.376	0.091	< 0.01 U
ITMW-15	ITMW-15-20010328	3/28/2001	N	0.29	0.057	< 0.01 U
ITMW-15	ITMW-15-20010913	9/13/2001	N	0.38	0.087	< 0.01 U
ITMW-15	ITMW-15-20010913-FD	9/13/2001	FD	0.37	0.08	< 0.01 U
ITMW-15	ITMW-15-20011120	11/20/2001	N	0.157	0.03	< 0.01 U
ITMW-15	ITMW-15-20020911	9/11/2002	N	0.32	0.075	< 0.01 U
ITMW-15	ITMW-15-20030226	2/26/2003	N	0.301	0.0987	< 0.01 U
ITMW-15	ITMW-15-20030925	9/25/2003	N	0.49	0.0919	< 0.01 U
ITMW-15	ITMW-15-20040414	4/14/2004	N	0.334	0.126	< 0.01 U
ITMW-15	ITMW-15-20040921	9/21/2004	N	0.774	0.118	< 0.01 U
ITMW-15	ITMW-15-20050407	4/7/2005	N	0.685	0.133	< 0.01 U
ITMW-15	ITMW-15-20050929	9/29/2005	N	0.862	0.189	< 0.01 U
ITMW-15	ITMW-15-20060316	3/16/2006	N	0.908	0.183	0.012
ITMW-15	ITMW-15-20061013	10/13/2006	N	0.68	0.14	0.007 J
ITMW-15	ITMW-15-20070419	4/19/2007	N	0.591	0.11	0.0085 J
ITMW-15	ITMW-15-20070921	9/21/2007	N	1	0.19	0.027
ITMW-15	ITMW-15-20080429	4/29/2008	N	0.1 0	0.018 0	< 0.01 U
ITMW-15	ITMW-15-20081210	12/10/2008	N	1.1	0.15	< 0.005 U
ITMW-15	ITMW-15-20090427	4/27/2009	N	2.8	0.13	0.017
ITMW-15	ITMW-15-20100511	5/11/2010	N	2.8	0.16	0.011
ITMW-15	ITMW-15-20111026	10/26/2011	N	1.1	0.074	< 0.005 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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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
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	2/1/1991	N	0.031		< ND
ITMW-16	ITMW-16-19931101	11/1/1993	N	0.041		0.007
ITMW-16	ITMW-16-19961201	12/1/1996	N	< ND		< ND
ITMW-16	ITMW-16-19990201	2/1/1999	N	< ND	< ND	< ND
ITMW-16	ITMW-16-20000301	3/1/2000	N	0.007	< ND	< ND
ITMW-16	ITMW-16-20000921	9/21/2000	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-16	ITMW-16-20010326	3/26/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-16	ITMW-16-20010913	9/13/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-16	ITMW-16-20020911	9/11/2002	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-16	ITMW-16-20030227	2/27/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-16	ITMW-16-20030925	9/25/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-16	ITMW-16-20040415	4/15/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-16	ITMW-16-20040923	9/23/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-16	ITMW-16-20050929	9/29/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-16	ITMW-16-20050929-FD	9/29/2005	FD	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-16	ITMW-16-20061014	10/14/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-16	ITMW-16-20070920	9/20/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-16	ITMW-16-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
ITMW-16	ITMW-16-20101106	11/6/2010	N	0.017	< 0.005 U	< 0.005 U
ITMW-16	ITMW-16-20111027	10/27/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
ITMW-16	ITMW-16-20120418	4/18/2012	N	< 0.005 U	< 0.005 U	< 0.005 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	2/1/1991	N	21		< ND
ITMW-17	ITMW-17-19910415	4/15/1991	N	21		< ND

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-17	ITMW-17-19910424	4/24/1991	N	21		< ND
ITMW-17	ITMW-17-19931101	11/1/1993	N	18		0.015
ITMW-17	ITMW-17-19961201	12/1/1996	N	9.3		< ND
ITMW-17	ITMW-17-19990201	2/1/1999	N	11	0.24	< ND
ITMW-17	ITMW-17-20000301	3/1/2000	N	6.78	0.171	< ND
ITMW-17	ITMW-17-20000919	9/19/2000	N	5.5	0.18	< 0.01 U
ITMW-17	ITMW-17-20010105	1/5/2001	N	8.31	0.179	< 0.01 U
ITMW-17	ITMW-17-20010328	3/28/2001	N	6.7	0.134	< 0.01 U
ITMW-17	ITMW-17-20010913	9/13/2001	N	6.3	0.158	< 0.01 U
ITMW-17	ITMW-17-20020911	9/11/2002	N	6.5	0.153	< 0.01 U
ITMW-17	ITMW-17-20030226	2/26/2003	N	4.38	0.134	< 0.01 U
ITMW-17	ITMW-17-20030925	9/25/2003	N	6.09	0.136	< 0.01 U
ITMW-17	ITMW-17-20040414	4/14/2004	N	5.05	0.184	< 0.01 U
ITMW-17	ITMW-17-20040414-FD	4/14/2004	FD	4.92	0.182	< 0.01 U
ITMW-17	ITMW-17-20040921	9/21/2004	N	5.76	0.156	< 0.01 U
ITMW-17	ITMW-17-20050407	4/7/2005	N	5.75	0.156	< 0.01 U
ITMW-17	ITMW-17-20050929	9/29/2005	N	5.46	0.111	< 0.01 U
ITMW-17	ITMW-17-20060315	3/15/2006	N	15.9	0.211 E	0.0263
ITMW-17	ITMW-17-20061012	10/12/2006	N	19	0.22	0.021
ITMW-17	ITMW-17-20070418	4/18/2007	N	13	0.298	< 0.01 U
ITMW-17	ITMW-17-20070921	9/21/2007	N	11	0.21	0.003 J
ITMW-17	ITMW-17-20080429	4/29/2008	N	6.2 0	0.14 0	< 0.01 U
ITMW-17	ITMW-17-20081210	12/10/2008	N	5.6	0.13	< 0.005 U
ITMW-17	ITMW-17-20090427	4/27/2009	N	5.2	0.13	< 0.005 U
ITMW-17	ITMW-17-20100511	5/11/2010	N	4.5	0.085	< 0.005 U
ITMW-17	ITMW-17-20101104	11/4/2010	N	5.4	0.11	< 0.005 U
ITMW-17	ITMW-17-20110322	3/22/2011	N	5.3	0.1	< 0.005 U
ITMW-17	ITMW-17-20111026	10/26/2011	N	4.5	0.098	< 0.005 U
ITMW-17	ITMW-17-20120419	4/19/2012	N	4.7	0.11	< 0.005 U
ITMW-17	ITMW-17-20121019	10/19/2012	N	3500	100	0.48 J
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	ITMW-17-201403-FD	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	2/1/1991	N	3.7		< ND
ITMW-18	ITMW-18-19931101	11/1/1993	N	4.5		0.006
ITMW-18	ITMW-18-19961201	12/1/1996	N	1.6		< ND
ITMW-18	ITMW-18-19990201	2/1/1999	N	6.3	0.48	< ND
ITMW-18	ITMW-18-20000301	3/1/2000	N	3.56	0.401	< ND
ITMW-18	ITMW-18-20000919	9/19/2000	N	4.08	0.409	< 0.01 U
ITMW-18	ITMW-18-20010327	3/27/2001	N	4	0.4	< 0.01 U
ITMW-18	ITMW-18-20010327-FD	3/27/2001	FD	4.2	0.37	< 0.1 U
ITMW-18	ITMW-18-20010911	9/11/2001	N	4.1	0.3	< 0.01 U
ITMW-18	ITMW-18-20020911	9/11/2002	N	6.7	0.3	< 0.01 U
ITMW-18	ITMW-18-20030226	2/26/2003	N	5.11	0.29	< 0.01 U
ITMW-18	ITMW-18-20030924	9/24/2003	N	7.7	0.415	< 0.01 U
ITMW-18	ITMW-18-20040413	4/13/2004	N	7.74	0.41	< 0.01 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-18	ITMW-18-20040921	9/21/2004	N	7.05	0.38	< 0.01 U
ITMW-18	ITMW-18-20050408	4/8/2005	N	7.08	0.389	< 0.01 U
ITMW-18	ITMW-18-20050929	9/29/2005	N	4.66	0.241	< 0.01 U
ITMW-18	ITMW-18-20060315	3/15/2006	N	5.75	0.373	< 0.05 U
ITMW-18	ITMW-18-20061013	10/13/2006	N	6.6	0.3	< 0.01 U
ITMW-18	ITMW-18-20070418	4/18/2007	N	15	0.387	< 0.01 U
ITMW-18	ITMW-18-20070921	9/21/2007	N	8.3	0.31	< 0.1 U
ITMW-18	ITMW-18-20080430	4/30/2008	N	9 0	0.35 0	< 0.01 U
ITMW-18	ITMW-18-20081209	12/9/2008	N	7.2	0.32	< 0.005 U
ITMW-18	ITMW-18-20090427	4/27/2009	N	7.1	0.32	< 0.005 U
ITMW-18	ITMW-18-20091027	10/27/2009	N	7.8	0.36	< 0.005 U
ITMW-18	ITMW-18-20100511	5/11/2010	N	11	0.36	< 0.005 U
ITMW-18	ITMW-18-20111026	10/26/2011	N	8.5	0.29	< 0.005 U
ITMW-18	ITMW-18-20120419	4/19/2012	N	9.8	0.36	0.0029 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	ITMW-18-201403-FD	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-19	ITMW-19-19910201	2/1/1991	N	9.9		< ND
ITMW-19	ITMW-19-19931101	11/1/1993	N	27		0.007
ITMW-19	ITMW-19-19961201	12/1/1996	N	25		< ND
ITMW-19	ITMW-19-19990201	2/1/1999	N	33	0.15	< ND
ITMW-19	ITMW-19-20000301	3/1/2000	N	33.1	0.128	< ND
ITMW-19	ITMW-19-20000919	9/19/2000	N	35.7	0.197	< 0.01 U
ITMW-19	ITMW-19-20010105	1/5/2001	N	34	0.166	< 0.01 U
ITMW-19	ITMW-19-20010328	3/28/2001	N	38	0.119	< 0.01 U
ITMW-19	ITMW-19-20010913	9/13/2001	N	19	0.132	< 0.01 U
ITMW-19	ITMW-19-20020911	9/11/2002	N	27	0.167	< 0.01 U
ITMW-19	ITMW-19-20030226	2/26/2003	N	16.2	0.126	< 0.01 U
ITMW-19	ITMW-19-20030924	9/24/2003	N	27.3	0.186	< 0.01 U
ITMW-19	ITMW-19-20040413	4/13/2004	N	19.4	0.186	< 0.01 U
ITMW-19	ITMW-19-20040921	9/21/2004	N	20	0.148	< 0.01 U
ITMW-19	ITMW-19-20050407	4/7/2005	N	18.3	0.146	< 0.01 U
ITMW-19	ITMW-19-20050407-FD	4/7/2005	FD	16.2	0.145	< 0.01 U
ITMW-19	ITMW-19-20050929	9/29/2005	N	25.7	0.144	< 0.01 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-19	ITMW-19-20060315	3/15/2006	N	21.3	0.177	< 0.1 U
ITMW-19	ITMW-19-20061012	10/12/2006	N	16	0.15	0.002 J
ITMW-19	ITMW-19-20070418	4/18/2007	N	20	0.131	< 0.01 U
ITMW-19	ITMW-19-20070921	9/21/2007	N	19	0.11	< 0.2 U
ITMW-19	ITMW-19-20080429	4/29/2008	N	17 0	0.098 0	< 0.1 U
ITMW-19	ITMW-19-20081210	12/10/2008	N	11	0.093	< 0.005 U
ITMW-19	ITMW-19-20090427	4/27/2009	N	13	0.1	< 0.005 U
ITMW-19	ITMW-19-20100511	5/11/2010	N	19	0.13	< 0.005 U
ITMW-19	ITMW-19-20101104-FD	11/4/2010	FD	19	0.15	< 0.005 U
ITMW-19	ITMW-19-20101104	11/4/2010	N	18	0.14	< 0.005 U
ITMW-19	ITMW-19-20110322	3/22/2011	N	16	0.11	0.001 J
ITMW-19	ITMW-19-20111026	10/26/2011	N	17	0.12	< 0.005 U
ITMW-19	ITMW-19-20120419-FD	4/19/2012	FD	15	0.11	< 0.005 U
ITMW-19	ITMW-19-20120419	4/19/2012	N	18	0.11	< 0.005 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-19-101813	10/18/2013	N	16000	91 J	< 2.0 U
ITMW-19	ITMW-19-10182013-FD	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	ITMW-19-201403-FD	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-20	ITMW-20-19910301	3/1/1991	N	< ND		< ND
ITMW-20	ITMW-20-19931101	11/1/1993	N	< ND		< ND
ITMW-20	ITMW-20-19961201	12/1/1996	N	0.29		< ND
ITMW-20	ITMW-20-19970501	5/1/1997	N	< ND	< ND	< ND
ITMW-20	ITMW-20-19990201	2/1/1999	N	< ND	< ND	< ND
ITMW-20	ITMW-20-20000301	3/1/2000	N	< ND	< ND	< ND
ITMW-20	MW-20-20000921-FS	9/21/2000	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-20	MW-20-20010327-FS	3/27/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-20	MW-20-20010911-FS	9/11/2001	N	0.021	< 0.005 U	< 0.01 U
ITMW-20	ITMW-20-20020910	9/10/2002	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-20	ITMW-20-20030227	2/27/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-20	ITMW-20-20030924	9/24/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-20	ITMW-20-20040414	4/14/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-20	ITMW-20-20040922	9/22/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-20	ITMW-20-20050929	9/29/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-20	ITMW-20-20061012	10/12/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-20	ITMW-20-20070919	9/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
ITMW-20	ITMW-20-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
ITMW-20	ITMW-20-20091029	10/29/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
ITMW-20	ITMW-20-20100512	5/12/2010	N	< 0.005 U	< 0.005 U	< 0.005 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-20	ITMW-20-20101105	11/5/2010	N	0.015	< 0.005 U	< 0.005 U
ITMW-20	ITMW-20-20111026-FD	10/26/2011	FD	< 0.005 U	< 0.005 U	< 0.005 U
ITMW-20	ITMW-20-20111026	10/26/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
ITMW-20	ITMW-20-20120418	4/18/2012	N	< 0.005 U	< 0.005 U	< 0.005 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-21	ITMW-21-19910301	3/1/1991	N	0.021		< ND
ITMW-21	ITMW-21-19931101	11/1/1993	N	0.037		< ND
ITMW-21	ITMW-21-19961201	12/1/1996	N	0.15		< ND
ITMW-21	ITMW-21-19990201	2/1/1999	N	0.19	< ND	< ND
ITMW-21	ITMW-21-20000301	3/1/2000	N	0.196	< ND	< ND
ITMW-21	ITMW-21-20000919	9/19/2000	N	0.192	< 0.005 U	< 0.01 U
ITMW-21	ITMW-21-20010328	3/28/2001	N	0.123	< 0.005 U	< 0.01 U
ITMW-21	ITMW-21-20010913	9/13/2001	N	0.116	< 0.005 U	< 0.01 U
ITMW-21	ITMW-21-20020910	9/10/2002	N	0.013	< 0.005 U	< 0.01 U
ITMW-21	ITMW-21-20030226	2/26/2003	N	0.0395	< 0.005 U	< 0.01 U
ITMW-21	ITMW-21-20030923	9/23/2003	N	0.00909	< 0.005 U	< 0.01 U
ITMW-21	ITMW-21-20040414	4/14/2004	N	0.0529	< 0.005 U	< 0.01 U
ITMW-21	ITMW-21-20040922	9/22/2004	N	0.0078	< 0.005 U	< 0.01 U
ITMW-21	ITMW-21-20050928	9/28/2005	N	0.00645	< 0.005 U	< 0.01 U
ITMW-21	ITMW-21-20061012	10/12/2006	N	0.009	< 0.005 U	< 0.01 U
ITMW-21	ITMW-21-20070921	9/21/2007	N	0.01	< 0.005 U	< 0.01 U
ITMW-21	ITMW-21-20081209	12/9/2008	N	0.015	< 0.005 U	< 0.005 U
ITMW-21	ITMW-21-20091027	10/27/2009	N	0.014	< 0.005 U	< 0.005 U
ITMW-21	ITMW-21-20101104	11/4/2010	N	1.1	0.0044 J	< 0.005 U
ITMW-21	ITMW-21-20110322	3/22/2011	N	0.024	< 0.005 U	< 0.005 U
ITMW-21	ITMW-21-20111025	10/25/2011	N	0.011	< 0.005 U	< 0.005 U
ITMW-21	ITMW-21-20120417	4/17/2012	N	0.03	< 0.005 U	< 0.005 U
ITMW-21	ITMW-21-20121019	10/19/2012	N	7.7	< 5.0 U	< 2.0 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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
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
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	12/1/1996	N	< ND		< ND
MW-22	MW-22-19970501	5/1/1997	N	< ND	0.005	< ND
MW-22	MW-22-19990201	2/1/1999	N	< ND	0.005	< ND
MW-22	MW-22-20000301	3/1/2000	N	< ND	< ND	< ND
MW-22	MW-22-20000919	9/19/2000	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-22	MW-22-20010327	3/27/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-22	MW-22-20010913	9/13/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-22	MW-22-20020910	9/10/2002	N	0.009	< 0.005 U	< 0.01 U
MW-22	MW-22-20030227	2/27/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-22	MW-22-20030923	9/23/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-22	MW-22-20030923-FD	9/23/2003	FD	< 0.005 U	< 0.005 U	< 0.01 U
MW-22	MW-22-20040413	4/13/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-22	MW-22-20040921	9/21/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-22	MW-22-20050930	9/30/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-22	MW-22-20061014	10/14/2006	N	< 0.005 U	< 0.005 U	< 0.01 UJ
MW-22	MW-22-20070920	9/20/2007	N	< 0.005 U	< 0.005 U	< 0.01 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-22	MW-22-20081209	12/9/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-22	MW-22-20091027	10/27/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-22	MW-22-20101103	11/3/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-22	MW-22-20111027	10/27/2011	N	0.0021 J	< 0.005 U	< 0.005 U
MW-22	MW-22-20120418	4/18/2012	N	< 0.005 U	< 0.005 U	< 0.005 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
MW-22	MW-22-202210	10/18/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-23	MW-23-19961201	12/1/1996	N	0.21		< ND
MW-23	MW-23-19970501	5/1/1997	N	2.4		< ND
MW-23	MW-23-19990201	2/1/1999	N	0.35	0.01	< ND
MW-23	MW-23-19990201-FD	2/1/1999	FD	0.44	0.01	< ND
MW-23	MW-23-20000301-FD	3/1/2000	FD	0.147	< ND	< ND
MW-23	ITMW-23-20000921	9/21/2000	N	0.067	< 0.005 U	< 0.01 U
MW-23	ITMW-23-20010105	1/5/2001	N	0.137	< 0.005 U	< 0.01 U
MW-23	ITMW-23-20010326	3/26/2001	N	0.087	< 0.005 U	< 0.01 U
MW-23	ITMW-23-20010911	9/11/2001	N	0.023	< 0.005 U	< 0.01 U
MW-23	ITMW-23-20020911	9/11/2002	N	0.111	< 0.005 U	< 0.01 U
MW-23	MW-23-20020911-FD	9/11/2002	FD	0.105	< 0.005 U	< 0.01 U
MW-23	ITMW-23-20030227	2/27/2003	N	0.054	< 0.005 U	< 0.01 U
MW-23	ITMW-23-20030925	9/25/2003	N	0.0839	< 0.005 U	< 0.01 U
MW-23	ITMW-23-20040415	4/15/2004	N	0.0703	< 0.005 U	< 0.01 U
MW-23	ITMW-23-20040922	9/22/2004	N	0.0734	< 0.005 U	< 0.01 U
MW-23	ITMW-23-20050405	4/5/2005	N	0.0555	< 0.005 U	< 0.01 U
MW-23	ITMW-23-20050929	9/29/2005	N	0.0658	< 0.005 U	< 0.01 U
MW-23	ITMW-23-20060317	3/17/2006	N	0.0471	< 0.005 U	< 0.01 U
MW-23	ITMW-23-20061014	10/14/2006	N	0.059	< 0.005 U	< 0.01 UJ
MW-23	ITMW-23-20070419	4/19/2007	N	0.0399	0.00979	< 0.01 U
MW-23	ITMW-23-20070919	9/19/2007	N	0.047	< 0.005 U	< 0.01 U
MW-23	ITMW-23-20080429	4/29/2008	N	0.029 0	< 0.005 U	< 0.01 U
MW-23	ITMW-23-20081210	12/10/2008	N	0.069	< 0.005 U	< 0.005 U
MW-23	ITMW-23-20090427	4/27/2009	N	0.032	< 0.005 U	< 0.005 U
MW-23	ITMW-23-20091029	10/29/2009	N	0.045	< 0.005 U	< 0.005 U
MW-23	MW-23-20100512-FD	5/12/2010	FD	0.055	< 0.005 U	< 0.005 U
MW-23	ITMW-23-20100512	5/12/2010	N	0.052	< 0.005 U	< 0.005 U
MW-23	ITMW-23-20101105	11/5/2010	N	0.076	< 0.005 U	< 0.005 U
MW-23	ITMW-23-20110323	3/23/2011	N	0.046	< 0.005 U	< 0.005 U
MW-23	ITMW-23-20111027	10/27/2011	N	0.041	< 0.005 U	< 0.005 U
MW-23	ITMW-23-20120418	4/18/2012	N	0.036	< 0.005 U	< 0.005 U
MW-23	ITMW-23-20121019	10/19/2012	N	43	< 5.0 U	< 2.0 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-23	ITMW-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	2/1/1999	N	1.4	0.049	< ND
MW-24	MW-24-20000301	3/1/2000	N	0.403	0.025	< ND
MW-24	MW-24-20000301-FD	3/1/2000	FD	0.595	0.024	< ND
MW-24	MW-24-20000921	9/21/2000	N	0.128	0.011	< 0.01 U
MW-24	MW-24-20010105	1/5/2001	N	0.247	0.012	< 0.01 U
MW-24	MW-24-20010326	3/26/2001	N	0.33	0.011	< 0.01 U
MW-24	MW-24-20010911	9/11/2001	N	0.124	0.006	< 0.01 U
MW-24	MW-24-20020911	9/11/2002	N	0.199	0.006	< 0.01 U
MW-24	MW-24-20030227	2/27/2003	N	0.253	0.00701	< 0.01 U
MW-24	MW-24-20030925	9/25/2003	N	0.155	< 0.005 U	< 0.01 U
MW-24	MW-24-20040415	4/15/2004	N	0.181	0.00512	< 0.01 U
MW-24	MW-24-20040923	9/23/2004	N	0.116	< 0.005 U	< 0.01 U
MW-24	MW-24-20050406	4/6/2005	N	0.152	0.00604	< 0.01 U
MW-24	MW-24-20050929	9/29/2005	N	0.161	< 0.005 U	< 0.01 U
MW-24	MW-24-20060316	3/16/2006	N	0.347	0.00757	< 0.01 U
MW-24	MW-24-20061014	10/14/2006	N	0.62	0.011	0.002 J
MW-24	MW-24-20070419	4/19/2007	N	0.196	0.0116	< 0.01 U
MW-24	MW-24-20070920	9/20/2007	N	0.14	< 0.005 U	< 0.01 U
MW-24	MW-24-20070920-FD	9/20/2007	FD	0.15	< 0.005 U	< 0.01 U
MW-24	MW-24-20080429	4/29/2008	N	0.15 0	0.003 J	< 0.01 U
MW-24	MW-24-20081210	12/10/2008	N	0.15	0.0034 J	< 0.005 U
MW-24	MW-24-20081210-FD	12/10/2008	FD	0.13	0.0034 J	< 0.005 U
MW-24	MW-24-20090427	4/27/2009	N	0.12	< 0.005 U	< 0.005 U
MW-24	MW-24-20091029	10/29/2009	N	0.11	0.0026 J	< 0.005 U
MW-24	MW-24-20100512	5/12/2010	N	0.15	0.0043 J	< 0.005 U
MW-24	MW-24-20110323	3/23/2011	N	0.17	0.0036 J	< 0.005 U
MW-24	MW-24-20111027	10/27/2011	N	0.17	0.0019 J	< 0.005 U
MW-24	MW-24-20111027-FD	10/27/2011	FD	0.17	0.0014 J	< 0.005 U
MW-24	MW-24-20120418	4/18/2012	N	0.15	0.0029 J	< 0.005 U
MW-24	MW-24-20121019	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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-25	MW-25-19990201	2/1/1999	N	29	0.17	0.1
MW-25	MW-25-19990201-FD	2/1/1999	FD	27	0.18	0.11
MW-25	MW-25-19991201	12/1/1999	N	94.5	< ND	< ND
MW-25	MW-25-20000301	3/1/2000	N	35.9	0.245	0.063
MW-25	MW-25-20000921	9/21/2000	N	59	0.3	0.05
MW-25	MW-25-20010328	3/28/2001	N	34	0.117	0.06
MW-25	MW-25-20010913	9/13/2001	N	60	0.3	< 0.2 U
MW-25	MW-25L-20020909	9/9/2002	N	157	0.44	0.18
MW-25	MW-25T-20020909	9/9/2002	N	56	0.37	0.2
MW-25	MW-25-20030226	2/26/2003	N	45.9	0.557	0.0757
MW-25	MW-25-20030717	7/17/2003	N	62.2	0.621	0.243
MW-25	MW-25-20030924	9/24/2003	N	103	0.775	< 0.5 U
MW-25	MW-25-20040414	4/14/2004	N	25.6	0.255	0.0318
MW-25	MW-25-20040921	9/21/2004	N	85.2	0.819	0.422
MW-25	MW-25-20050407	4/7/2005	N	21.1	0.353	0.0611
MW-25	MW-25-20050928	9/28/2005	N	136	0.837	< 0.5 U
MW-25	MW-25-20060315	3/15/2006	N	36.3	0.774	< 0.2 U
MW-25	MW-25-20061012	10/12/2006	N	64	1.3	0.61
MW-25	MW-25-20061012-FD	10/12/2006	FD	65	1.4	0.6
MW-25	MW-25-20070418	4/18/2007	N	19	0.321	0.02
MW-25	MW-25-20070418-FD	4/18/2007	FD	18	0.319	0.02
MW-25	MW-25-20070921	9/21/2007	N	54	1.2	0.8
MW-25	MW-25-20070921-FD	9/21/2007	FD	55	1.2	0.78
MW-25	MW-25-20080429	4/29/2008	N	23 0	0.47 0	0.01 J
MW-25	MW-25-20080429-FD	4/29/2008	FD	25 0	0.51 0	0.01 J
MW-25	MW-25-20081210	12/10/2008	N	100	1.2	0.43
MW-25	MW-25-20090427	4/27/2009	N	36	2.1	0.14
MW-25	MW-25-20090427-FD	4/27/2009	FD	39	2	0.19
MW-25	MW-25-20091027	10/27/2009	N	140	1.5	0.57
MW-25	MW-25-20100511	5/11/2010	N	81	1.4	0.011
MW-25	MW-25-20101104	11/4/2010	N	270	1.5	0.4
MW-25	MW-25-20110322	3/22/2011	N	57	2.4	0.034
MW-25	MW-25-20111026	10/26/2011	N	120	2.1	< 0.25 U
MW-25	MW-25-20120417	4/17/2012	N	18	0.69	0.018
MW-25	MW-25-20121019	10/19/2012	N	56000	4200	1500
MW-25	MW-25-20121019-FD	10/19/2012	FD	49000	3600	1500
MW-25	MW-25-20130425	4/25/2013	N	9100	330	7.9
MW-25	MW-25-20130425-FD	4/25/2013	FD	9500	380	11
MW-25	MW-25-101813	10/18/2013	N	43000	2900	1300
MW-25	MW-25-201403	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

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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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
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	10/20/2022	N	7530	< 1.0 U	26.4
MW-26	MW-26-19990201	2/1/1999	N	0.36	0.15	< ND
MW-26	MW-26-19990601	6/1/1999	N	< ND	< ND	< ND
MW-26	MW-26-20000301	3/1/2000	N	< ND	< ND	< ND
MW-26	MW-26-20000921	9/21/2000	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-26	MW-26-20010326	3/26/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-26	MW-26-20010911	9/11/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-26	MW-26-20010911-FD	9/11/2001	FD	< 0.005 U	< 0.005 U	< 0.01 U
MW-26	MW-26-20020910	9/10/2002	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-26	MW-26-20030227	2/27/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-26	MW-26-20030924	9/24/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-26	MW-26-20040414	4/14/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-26	MW-26-20040922	9/22/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-26	MW-26-20050929	9/29/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-26	MW-26-20061012	10/12/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-26	MW-26-20070919	9/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-26	MW-26-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-26	MW-26-20091029	10/29/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-26	MW-26-20100512	5/12/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-26	MW-26-20101105	11/5/2010	N	0.022	< 0.005 U	< 0.005 U
MW-26	MW-26-20111026	10/26/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-26	MW-26-20120418	4/18/2012	N	< 0.005 U	< 0.005 U	< 0.005 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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-27	MW-27-19991201	12/1/1999	N	< ND	< ND	< ND
MW-27	MW-27-19991207	12/7/1999	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-27	MW-27-19991209	12/9/1999	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-27	MW-27-20000301	3/1/2000	N	< ND	< ND	< ND
MW-27	MW-27-20000921	9/21/2000	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-27	MW-27-20010105	1/5/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-27	MW-27-20010105-FD	1/5/2001	FD	0.00555	< 0.005 U	< 0.01 U
MW-27	MW-27-20010326	3/26/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-27	MW-27-20010911	9/11/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-27	MW-27-20020911	9/11/2002	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-27	MW-27-20020911-FD	9/11/2002	FD	< 0.005 U	< 0.005 U	< 0.01 U
MW-27	MW-27-20030227	2/27/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-27	MW-27-20030925	9/25/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-27	MW-27-20040415	4/15/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-27	MW-27-20040922	9/22/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-27	MW-27-20050929	9/29/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-27	MW-27-20061014	10/14/2006	N	0.002 J	< 0.005 U	< 0.01 U
MW-27	MW-27-20070919	9/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-27	MW-27-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-27	MW-27-20100512	5/12/2010	N	0.0031 J	< 0.005 U	< 0.005 U
MW-27	MW-27-20101105	11/5/2010	N	0.042	< 0.005 U	< 0.005 U
MW-27	MW-27-20111027	10/27/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-27	MW-27-20120418	4/18/2012	N	0.0026 J	< 0.005 U	< 0.005 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-28	MW-28-19991201	12/1/1999	N	< ND	< ND	< ND
MW-28	MW-28-19991209	12/9/1999	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-28	MW-28-19991209-FD	12/9/1999	FD	< 0.005 U	< 0.005 U	< 0.01 U
MW-28	MW-28-20000301	3/1/2000	N	< ND	< ND	< ND
MW-28	MW-28-20000921	9/21/2000	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-28	MW-28-20010327	3/27/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-28	MW-28-20010327-FD	3/27/2001	FD	< 0.005 U	< 0.005 U	< 0.01 U
MW-28	MW-28-20010911	9/11/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-28	MW-28-20020911	9/11/2002	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-28	MW-28-20030227	2/27/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-28	MW-28-20030925	9/25/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-28	MW-28-20040415	4/15/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-28	MW-28-20040922	9/22/2004	N	< 0.005 U	< 0.005 U	< 0.01 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-28	MW-28-20050930	9/30/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-28	MW-28-20061014	10/14/2006	N	< 0.005 U	< 0.005 U	< 0.01 UJ
MW-28	MW-28-20070919	9/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-28	MW-28-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-28	MW-28-20091029	10/29/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-28	MW-28-20100512	5/12/2010	N	0.0026 J	< 0.005 U	< 0.005 U
MW-28	MW-28-20101105	11/5/2010	N	0.054	< 0.005 U	< 0.005 U
MW-28	MW-28-20110323	3/23/2011	N	0.0016 J	< 0.005 U	< 0.005 U
MW-28	MW-28-20111027	10/27/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-28	MW-28-20120419	4/19/2012	N	< 0.005 U	< 0.005 U	< 0.005 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-29	MW-29-19991201	12/1/1999	N	< ND	< ND	< ND
MW-29	MW-29-19991209	12/9/1999	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-29	MW-29-20000301	3/1/2000	N	< ND	< ND	< ND
MW-29	MW-29-20000920	9/20/2000	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-29	MW-29-20010327	3/27/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-29	MW-29-20010911	9/11/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-29	MW-29-20020910	9/10/2002	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-29	MW-29-20030227	2/27/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-29	MW-29-20030924	9/24/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-29	MW-29-20040414	4/14/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-29	MW-29-20040922	9/22/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-29	MW-29-20050928	9/28/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-29	MW-29-20061012	10/12/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-29	MW-29-20070919	9/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-29	MW-29-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-29	MW-29-20081210-FD	12/10/2008	FD	< 0.005 U	< 0.005 U	< 0.005 U
MW-29	MW-29-20091029	10/29/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-29	MW-29-20111025	10/25/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-29	MW-29-20120418	4/18/2012	N	< 0.005 U	< 0.005 U	< 0.005 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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-30	MW-30-19991201	12/1/1999	N	0.115	0.034	< ND
MW-30	MW-30-19991209	12/9/1999	N	0.115	0.034	< 0.01 U
MW-30	MW-30-20000301	3/1/2000	N	0.086	0.025	< ND
MW-30	MW-30-20000920	9/20/2000	N	0.102	0.025	< 0.01 U
MW-30	MW-30-20010327	3/27/2001	N	0.043	0.011	< 0.01 U
MW-30	MW-30-20010911	9/11/2001	N	0.063	0.018	< 0.01 U
MW-30	MW-30-20020910	9/10/2002	N	0.048	0.014	< 0.01 U
MW-30	MW-30-20030227	2/27/2003	N	0.06	0.0203	< 0.01 U
MW-30	MW-30-20030924	9/24/2003	N	0.0468	0.0137	< 0.01 U
MW-30	MW-30-20040414	4/14/2004	N	0.0366	0.0118	< 0.01 U
MW-30	MW-30-20040922	9/22/2004	N	0.0362	0.0121	< 0.01 U
MW-30	MW-30-20050928	9/28/2005	N	0.0596	0.0156	< 0.01 U
MW-30	MW-30-20061012	10/12/2006	N	0.053	0.015	< 0.01 U
MW-30	MW-30-20070920	9/20/2007	N	0.039	0.011	< 0.01 U
MW-30	MW-30-20081210	12/10/2008	N	0.037	0.011	< 0.005 U
MW-30	MW-30-20101103	11/3/2010	N	0.05	0.015	< 0.005 U
MW-30	MW-30-20111026	10/26/2011	N	0.057	0.016	< 0.005 U
MW-30	MW-30-20120418	4/18/2012	N	0.15	0.032	< 0.005 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	1/5/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-31	MW-31-20010326	3/26/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-31	MW-31-20010913	9/13/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-31	MW-31-20020911	9/11/2002	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-31	MW-31-20030228	2/28/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-31	MW-31-20030925	9/25/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-31	MW-31-20040415	4/15/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-31	MW-31-20040923	9/23/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-31	MW-31-20050405	4/5/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-31	MW-31-20050927	9/27/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-31	MW-31-20060315	3/15/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-31	MW-31-20061011	10/11/2006	N	0.003 J	< 0.005 U	< 0.01 U
MW-31	MW-31-20070419	4/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-31	MW-31-20070918	9/18/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-31	MW-31-20080430	4/30/2008	N	0.002 J	< 0.005 U	< 0.01 U
MW-31	MW-31-20081211	12/11/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-31	MW-31-20090425	4/25/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-31	MW-31-20100512	5/12/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-31	MW-31-20101107	11/7/2010	N	0.048	< 0.005 U	< 0.005 U
MW-31	MW-31-20110323	3/23/2011	N	< 0.005 U	< 0.005 U	< 0.005 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-31	MW-31-20111026	10/26/2011	N	< 0.005 U	< 0.005 U	< 0.005 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	1/5/2001	N	0.108	< 0.005 U	< 0.01 U
MW-32	MW-32-20010327	3/27/2001	N	0.174	< 0.005 U	< 0.01 U
MW-32	MW-32-20010913	9/13/2001	N	0.095	< 0.005 U	< 0.01 U
MW-32	MW-32-20020911	9/11/2002	N	0.109	< 0.005 U	< 0.01 U
MW-32	MW-32-20030228	2/28/2003	N	0.133	< 0.005 U	< 0.01 U
MW-32	MW-32-20030925	9/25/2003	N	0.0323	< 0.005 U	< 0.01 U
MW-32	MW-32-20040415	4/15/2004	N	0.0769	< 0.005 U	< 0.01 U
MW-32	MW-32-20040923	9/23/2004	N	0.0514	< 0.005 U	< 0.01 U
MW-32	MW-32-20050405	4/5/2005	N	0.158	< 0.005 U	< 0.01 U
MW-32	MW-32-20050927	9/27/2005	N	0.0976	< 0.005 U	< 0.01 U
MW-32	MW-32-20060315	3/15/2006	N	0.111	< 0.005 U	< 0.01 U
MW-32	MW-32-20061012	10/12/2006	N	0.085	0.004 J	< 0.01 U
MW-32	MW-32-20070419	4/19/2007	N	0.0663	0.0101	< 0.01 U
MW-32	MW-32-20070918	9/18/2007	N	0.078	< 0.005 U	< 0.01 U
MW-32	MW-32-20080430	4/30/2008	N	0.07 0	0.002 J	< 0.01 U
MW-32	MW-32-20081211	12/11/2008	N	0.06	< 0.005 U	< 0.005 U
MW-32	MW-32-20090425	4/25/2009	N	0.047	< 0.005 U	< 0.005 U
MW-32	MW-32-20091028	10/28/2009	N	0.068	0.0018 J	< 0.005 U
MW-32	MW-32-20100512	5/12/2010	N	0.058	< 0.005 U	< 0.005 U
MW-32	MW-32-20101106	11/6/2010	N	0.12	< 0.005 U	< 0.005 U
MW-32	MW-32-20110324	3/24/2011	N	0.066	0.0014 J	< 0.005 U
MW-32	MW-32-20111026	10/26/2011	N	0.073	< 0.005 U	< 0.005 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-32-201403	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	1/5/2001	N	0.12	< 0.005 U	< 0.01 U
MW-33	MW-33-20010327	3/27/2001	N	0.26	0.007	< 0.01 U
MW-33	MW-33-20010913	9/13/2001	N	0.31	0.008	< 0.01 U
MW-33	MW-33-20020911	9/11/2002	N	0.45	0.008	< 0.01 U
MW-33	MW-33-20030228	2/28/2003	N	0.274	0.00662	< 0.01 U
MW-33	MW-33-20030925	9/25/2003	N	0.198	0.00595	< 0.01 U
MW-33	MW-33-20040415	4/15/2004	N	0.871	0.0213	< 0.01 U
MW-33	MW-33-20040923	9/23/2004	N	0.798	0.0153	< 0.01 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-33	MW-33-20050405	4/5/2005	N	1.43	0.0245	< 0.01 U
MW-33	MW-33-20050927	9/27/2005	N	1.03	0.0152	< 0.01 U
MW-33	MW-33-20060315	3/15/2006	N	1.61	0.0205	< 0.01 U
MW-33	MW-33-20061012	10/12/2006	N	1.3	0.019	< 0.01 U
MW-33	MW-33-20070419	4/19/2007	N	1.43	0.0092 J	< 0.05 U
MW-33	MW-33-20070918	9/18/2007	N	1.7	0.025	< 0.01 U
MW-33	MW-33-20080430	4/30/2008	N	1.1 0	0.016 0	< 0.01 U
MW-33	MW-33-20081211	12/11/2008	N	1.2	0.018	< 0.005 U
MW-33	MW-33-20090425	4/25/2009	N	1.2	0.019	< 0.005 U
MW-33	MW-33-20090527	5/27/2009	N	1	0.019	< 0.005 U
MW-33	MW-33-20091028	10/28/2009	N	1.2	0.02	< 0.005 U
MW-33	MW-33-20100512	5/12/2010	N	1.1	0.021	< 0.005 U
MW-33	MW-33-20101106	11/6/2010	N	1.2	0.017	< 0.005 U
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	10/26/2011	N	1	0.016	< 0.005 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	3/28/2001	N	0.083	< 0.005 U	< 0.01 U
MW-34	MW-34-20010913	9/13/2001	N	0.061	< 0.005 U	< 0.01 U
MW-34	MW-34L-20020909	9/9/2002	N	0.084	< 0.005 U	< 0.01 U
MW-34	MW-34-20030228	2/28/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-34	MW-34-20030925	9/25/2003	N	0.0284	< 0.005 U	< 0.01 U
MW-34	MW-34-20031114	11/14/2003	N	0.121	< 0.005 U	< 0.01 U
MW-34	MW-34-20040415	4/15/2004	N	0.119	< 0.005 U	< 0.01 U
MW-34	MW-34-20040923	9/23/2004	N	0.0811	< 0.005 U	< 0.01 U
MW-34	MW-34-20041209	12/9/2004	N	0.0933	< 0.005 U	< 0.01 U
MW-34	MW-34-20050405	4/5/2005	N	0.0658	< 0.005 U	< 0.01 U
MW-34	MW-34-20050930	9/30/2005	N	0.0837	< 0.005 U	< 0.01 U
MW-34	MW-34-20060314	3/14/2006	N	0.0771	< 0.005 U	< 0.01 U
MW-34	MW-34-20061011	10/11/2006	N	0.063	0.004 J	< 0.01 U
MW-34	MW-34-20070418	4/18/2007	N	0.041	0.00979	< 0.01 U
MW-34	MW-34-20070919	9/19/2007	N	0.061	< 0.005 U	< 0.01 U
MW-34	MW-34-20080430	4/30/2008	N	0.032 0	< 0.005 U	< 0.01 U
MW-34	MW-34-20081210	12/10/2008	N	0.053	< 0.005 U	< 0.005 U
MW-34	MW-34-20090424	4/24/2009	N	0.043	< 0.005 U	< 0.005 U
MW-34	MW-34-20090527	5/27/2009	N	0.012	< 0.005 U	< 0.005 U
MW-34	MW-34-20091028	10/28/2009	N	0.034	< 0.005 U	< 0.005 U
MW-34	MW-34-20100512	5/12/2010	N	0.038	< 0.005 U	< 0.005 U
MW-34	MW-34-20101107-FD	11/7/2010	FD	0.07	< 0.005 U	< 0.005 U
MW-34	MW-34-20101107	11/7/2010	N	0.073	< 0.005 U	< 0.005 U
MW-34	MW-34-20110324-FD	3/24/2011	FD	0.04	< 0.005 U	< 0.005 U

APPENDIX D
HISTORICAL DATA SUMMARY
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-34	MW-34-20110324	3/24/2011	N	0.042	< 0.005 U	< 0.005 U
MW-34	MW-34-20111026	10/26/2011	N	0.056	< 0.005 U	< 0.005 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-34-201403	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-35R-20010328	3/28/2001	N	0.96	0.034	< 0.01 U
MW-35R	MW-35R-20010913	9/13/2001	N	1.03	0.04	< 0.02 U
MW-35R	MW-35L-20020909	9/9/2002	N	0.9	0.031	< 0.01 U
MW-35R	MW-35R-20030228	2/28/2003	N	0.246	0.0151	< 0.01 U
MW-35R	MW-35R-20030925	9/25/2003	N	0.297	0.0198	< 0.01 U
MW-35R	MW-35R-20031114	11/14/2003	N	0.99	0.0349	< 0.01 U
MW-35R	MW-35R-20040415	4/15/2004	N	1.15	0.0458	< 0.01 U
MW-35R	MW-35R-20040923	9/23/2004	N	0.685	0.0284	< 0.01 U
MW-35R	MW-35R-20041209	12/9/2004	N	0.88	0.042	< 0.01 U
MW-35R	MW-35R-20050406	4/6/2005	N	0.886	0.035	< 0.01 U
MW-35R	MW-35R-20050930	9/30/2005	N	0.804	0.0293	< 0.01 U
MW-35R	MW-35R-20060314	3/14/2006	N	0.858	0.0242	< 0.01 U
MW-35R	MW-35R-20060406	4/6/2006	N	1.54	0.0525	< 0.01 U
MW-35R	MW-35R-20061011	10/11/2006	N	0.91	0.029	< 0.01 U
MW-35R	MW-35R-20070418	4/18/2007	N	0.9	0.0276	< 0.01 U
MW-35R	MW-35R-20070919	9/19/2007	N	1.1	0.028	< 0.01 U
MW-35R	MW-35R-20080430	4/30/2008	N	1.1 0	0.033 0	< 0.01 U
MW-35R	MW-35R-20081211	12/11/2008	N	0.79	0.027	< 0.005 U
MW-35R	MW-35R-20090424	4/24/2009	N	1.1	0.037	< 0.005 U
MW-35R	MW-35R-20090507	5/7/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-35R	MW-35R-20090527	5/27/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-35R	MW-35R-20101105	11/5/2010	N	0.24	0.0099	< 0.005 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	10/25/2011	N	0.28	0.012	< 0.005 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-20131017-FD	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	3/28/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-36	MW-36-20010913	9/13/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-36	MW-36L-20020909	9/9/2002	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-36	MW-36-20030228	2/28/2003	N	< 0.005 U	< 0.005 U	< 0.01 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-36	MW-36-20030925	9/25/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-36	MW-36-20031114	11/14/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-36	MW-36-20040415	4/15/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-36	MW-36-20040923	9/23/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-36	MW-36-20050406	4/6/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-36	MW-36-20050930	9/30/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-36	MW-36-20060317	3/17/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-36	MW-36-20061011	10/11/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-36	MW-36-20070418	4/18/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-36	MW-36-20070920	9/20/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-36	MW-36-20080430	4/30/2008	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-36	MW-36-20081211	12/11/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-36	MW-36-20090424	4/24/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-36	MW-36-20090507	5/7/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-36	MW-36-20090508	5/8/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-36	MW-36-20090528	5/28/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-36	MW-36-20091028	10/28/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-36	MW-36-20100512	5/12/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-36	MW-36-20101107	11/7/2010	N	0.0099	< 0.005 U	< 0.005 U
MW-36	MW-36-20110324	3/24/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-36	MW-36-20111026	10/26/2011	N	< 0.005 U	< 0.005 U	< 0.005 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	9/14/2001	N	5	0.34	< 0.1 U
MW-37	MW-37-20011120	11/20/2001	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-37	MW-37-20020911	9/11/2002	N	1.4	10	0.3
MW-37	MW-37-20030227	2/27/2003	N	4.05	5.66	2.5
MW-37	MW-37-20030717	7/17/2003	N	2.56	1.71	0.316
MW-37	MW-37-20030924	9/24/2003	N	3.7	7.02	0.973
MW-37	MW-37-20040413	4/13/2004	N	5.19	3.16	1.18
MW-37	MW-37-20040921	9/21/2004	N	5.03	5.65	1.37
MW-37	MW-37-20050405	4/5/2005	N	5.31	2.36	1.03 E
MW-37	MW-37-20050929	9/29/2005	N	6.78	3.21	0.91 E
MW-37	MW-37-20060316	3/16/2006	N	11.2	5.02	1.73
MW-37	MW-37-20061013	10/13/2006	N	13	5.3	1.2
MW-37	MW-37-20061013-FD	10/13/2006	FD	13	5	1.2
MW-37	MW-37-20070419	4/19/2007	N	9.49	3.01	0.78
MW-37	MW-37-20070921	9/21/2007	N	22	9.1	2.8
MW-37	MW-37-20080430	4/30/2008	N	16 0	3.3 0	1.8 0
MW-37	MW-37-20081210	12/10/2008	N	24	6.3	1.8
MW-37	MW-37-20090427	4/27/2009	N	11	3.2	1.2
MW-37	MW-37-20091027	10/27/2009	N	37	7.4	2.2
MW-37	MW-37-20100511	5/11/2010	N	33	7.2	2.4
MW-37	MW-37-20101104	11/4/2010	N	54	10	2.2
MW-37	MW-37-20110322	3/22/2011	N	36	6	2.3
MW-37	MW-37-20111026	10/26/2011	N	57	9.7	2.5
MW-37	MW-37-20120418	4/18/2012	N	29	5.3	2.1
MW-37	MW-37-20121019	10/19/2012	N	4800	1100	230

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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	9/14/2001	N	0.62	0.09	< 0.02 U
MW-38	MW-38-20050929	9/29/2005	N	< 0.005 U	0.0989	2.15
MW-38	MW-38-20061013	10/13/2006	N	0.026	0.13	2 J
MW-38	MW-38-20081210	12/10/2008	N	0.044	0.11	1.4
MW-38	MW-38-20111026	10/26/2011	N	0.58	0.87	1.1
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	10/20/2022	N	1250	695	541
MW-39	MW-39-20030718	7/18/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-39	MW-39-20030925	9/25/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-39	MW-39-20031114	11/14/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-39	MW-39-20040415	4/15/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-39	MW-39-20040923	9/23/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-39	MW-39-20050408	4/8/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-39	MW-39-20050930	9/30/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-39	MW-39-20060317	3/17/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-39	MW-39-20061011	10/11/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-39	MW-39-20070418	4/18/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-39	MW-39-20070919	9/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-39	MW-39-20080430	4/30/2008	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-39	MW-39-20081209	12/9/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-39	MW-39-20090424	4/24/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-39	MW-39-20091027	10/27/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-39	MW-39-20100511	5/11/2010	N	< 0.005 U	< 0.005 U	< 0.005 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-39	MW-39-20101107	11/7/2010	N	0.02	< 0.005 U	< 0.005 U
MW-39	MW-39-20110324	3/24/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-39	MW-39-20111026	10/26/2011	N	< 0.005 U	< 0.005 U	< 0.005 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
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-40	MW-40-20030718	7/18/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-40	MW-40-20030925	9/25/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-40	MW-40-20031114	11/14/2003	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-40	MW-40-20031114-FD	11/14/2003	FD	< 0.005 U	< 0.005 U	< 0.01 U
MW-40	MW-40-20040415	4/15/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-40	MW-40-20040923	9/23/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-40	MW-40-20050407	4/7/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-40	MW-40-20050929	9/29/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-40	MW-40-20060314	3/14/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-40	MW-40-20061010	10/10/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-40	MW-40-20070418	4/18/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-40	MW-40-20070918	9/18/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-40	MW-40-20080428	4/28/2008	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-40	MW-40-20081211	12/11/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-40	MW-40-20090424	4/24/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-40	MW-40-20090527	5/27/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-40	MW-40-20091029	10/29/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-40	MW-40-20100512	5/12/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-40	MW-40-20101104	11/4/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-40	MW-40-20110323	3/23/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-40	MW-40-20111026	10/26/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-40	MW-40-20120418	4/18/2012	N	0.0039 J	< 0.005 U	< 0.005 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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-41	MW-41-20030718	7/18/2003	N	0.972	0.0506	< 0.01 U
MW-41	MW-41-20030718-FD	7/18/2003	FD	0.964	0.0455	< 0.01 U
MW-41	MW-41-20030925	9/25/2003	N	0.722	0.0378	< 0.01 U
MW-41	MW-41-20031114	11/14/2003	N	0.331	0.205	< 0.01 U
MW-41	MW-41-20040415	4/15/2004	N	0.76	0.0542	< 0.01 U
MW-41	MW-41-20040923	9/23/2004	N	1.06	0.048	< 0.01 U
MW-41	MW-41-20050407	4/7/2005	N	1.17	0.058	< 0.01 U
MW-41	MW-41-20050930	9/30/2005	N	1.12	0.0558	< 0.01 U
MW-41	MW-41-20060317	3/17/2006	N	0.917	0.0525	< 0.01 U
MW-41	MW-41-20061013	10/13/2006	N	0.97	0.043	< 0.01 UJ
MW-41	MW-41-20070418	4/18/2007	N	0.9	0.0301	< 0.01 U
MW-41	MW-41-20070920	9/20/2007	N	0.85	0.032	< 0.01 U
MW-41	MW-41-20080430	4/30/2008	N	0.73 0	0.031 0	< 0.01 U
MW-41	MW-41-20081211	12/11/2008	N	0.82	0.029	< 0.005 U
MW-41	MW-41-20090424	4/24/2009	N	0.66	0.025	< 0.005 U
MW-41	MW-41-20090507	5/7/2009	N	0.18	0.0047 J	< 0.005 U
MW-41	MW-41-20090508	5/8/2009	N	0.18	0.0047 J	< 0.005 U
MW-41	MW-41-20090527	5/27/2009	N	0.23	0.016	< 0.005 U
MW-41	MW-41-20091028	10/28/2009	N	0.18	0.004 J	< 0.005 U
MW-41	MW-41-20100513	5/13/2010	N	0.61	0.019	< 0.005 U
MW-41	MW-41-20101105	11/5/2010	N	0.93	0.031	< 0.005 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	10/25/2011	N	0.42	0.018	< 0.005 U
MW-41	MW-41-20121020	10/20/2012	N	620	23	< 2.0 U
MW-41	MW-41-20121020-FD	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

APPENDIX D
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-42B-20031114	11/14/2003	N	0.481	0.0211	< 0.01 U
MW-42B	MW-42B-20040415	4/15/2004	N	0.856	0.0293	< 0.01 U
MW-42B	MW-42B-20040923	9/23/2004	N	0.4	0.0198	< 0.01 U
MW-42B	MW-42B-20050405	4/5/2005	N	1.31	0.032	< 0.01 U
MW-42B	MW-42B-20050927	9/27/2005	N	1.47	0.0273	< 0.01 U
MW-42B	MW-42B-20060315	3/15/2006	N	2.27	0.0372	< 0.01 U
MW-42B	MW-42B-20061010	10/10/2006	N	2	0.035	0.002 J
MW-42B	MW-42B-20070417	4/17/2007	N	1.6	0.0368	< 0.01 U
MW-42B	MW-42B-20070918	9/18/2007	N	2.1	0.039	0.004 J
MW-42B	MW-42B-20080429	4/29/2008	N	1.6 0	0.033 0	0.003 J
MW-42B	MW-42B-20081209	12/9/2008	N	1.1	0.03	< 0.005 U
MW-42B	MW-42B-20090425	4/25/2009	N	1.5	0.035	< 0.005 U
MW-43	MW-43-20031114	11/14/2003	N	0.223	0.0185	< 0.01 U
MW-43	MW-43-20040415	4/15/2004	N	0.51	0.0121	< 0.01 U
MW-43	MW-43-20040923	9/23/2004	N	0.0647	0.00631	< 0.01 U
MW-43	MW-43-20050405	4/5/2005	N	0.304	0.0119	< 0.01 U
MW-43	MW-43-20050927	9/27/2005	N	0.518	0.0213	< 0.01 U
MW-43	MW-43-20060315	3/15/2006	N	1.3	0.035	< 0.01 U
MW-43	MW-43-20061011	10/11/2006	N	0.92	0.03	< 0.01 U
MW-43	MW-43-20070417	4/17/2007	N	0.22	0.0141	< 0.01 U
MW-43	MW-43-20070918	9/18/2007	N	0.35	0.013	< 0.01 U
MW-43	MW-43-20080428	4/28/2008	N	0.12 0	0.004 J	< 0.01 U
MW-43	MW-43-20081209	12/9/2008	N	0.15	0.0053	< 0.005 U
MW-43	MW-43-20090425	4/25/2009	N	0.12	< 0.005 U	< 0.005 U
MW-43	MW-43-20090507	5/7/2009	N	0.18	0.006	< 0.005 U
MW-43	MW-43-20090508	5/8/2009	N	0.18	0.006	< 0.005 U
MW-46R	MW-46R-20031114	11/14/2003	N	0.0399	< 0.005 U	< 0.01 U
MW-46R	MW-46R-20040415	4/15/2004	N	0.0771	0.0272	< 0.01 U
MW-46R	MW-46R-20040923	9/23/2004	N	0.142	0.0212	< 0.01 U
MW-46R	MW-46R-20050406	4/6/2005	N	0.21	0.0284	< 0.01 U
MW-46R	MW-46R-20050928	9/28/2005	N	0.222	0.0156	< 0.01 U
MW-46R	MW-46R-20060316	3/16/2006	N	0.111	0.00637	< 0.01 U
MW-46R	MW-46R-20060406	4/6/2006	N	0.3	< 0.005 U	< 0.01 U
MW-46R	MW-46R-20061011	10/11/2006	N	0.45	0.008	< 0.01 U
MW-46R	MW-46R-20070417	4/17/2007	N	0.44	0.0125	< 0.01 U
MW-46R	MW-46R-20070918	9/18/2007	N	0.42	0.009	< 0.01 U
MW-46R	MW-46R-20080429	4/29/2008	N	0.43 0	0.008 0	< 0.01 U
MW-46R	MW-46R-20081209	12/9/2008	N	0.31	0.019	< 0.005 U
MW-46R	MW-46R-20090425	4/25/2009	N	0.46	0.011	< 0.005 U
MW-46R	MW-46R-20090527	5/27/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-46R	MW-46R-20091027	10/27/2009	N	0.39	0.012	< 0.005 U
MW-46R	MW-46R-20091221-FS	12/21/2009	N	410	10	< 5.0 U
MW-46R	MW-46R-20100511	5/11/2010	N	0.61	0.013	< 0.005 U
MW-46R	MW-46R-20101105	11/5/2010	N	0.65	0.012	< 0.005 U
MW-46R	MW-46R-20110307-FS	3/7/2011	N	670	14	< 5.0 U
MW-46R	MW-46R-20110322	3/22/2011	N	0.68	0.011	< 0.005 U
MW-46R	MW-46R-20110523-FS	5/23/2011	N	610	13	
MW-46R	MW-46R-20111026	10/26/2011	N	0.46	0.01	< 0.005 U
MW-46R	MW-46R-20120418	4/18/2012	N	0.68	0.014	< 0.005 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-101813	10/18/2013	N	410	11	< 2.0 U

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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-50	MW-50-20040415	4/15/2004	N	0.00651	< 0.005 U	< 0.01 U
MW-50	MW-50-20040923	9/23/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-50	MW-50-20041210	12/10/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-50	MW-50-20050406	4/6/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-50	MW-50-20050928	9/28/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-50	MW-50-20060317	3/17/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-50	MW-50-20061012	10/12/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-50	MW-50-20070419	4/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-50	MW-50-20070919	9/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-50	MW-50-20080429	4/29/2008	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-50	MW-50-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-50	MW-50-20090424	4/24/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-50	MW-50-20091027	10/27/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-50	MW-50-20100511	5/11/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-50	MW-50-20101105	11/5/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-50	MW-50-20110323	3/23/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-50	MW-50-20111025	10/25/2011	N	< 0.005 U	< 0.005 U	< 0.005 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

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HISTORICAL DATA SUMMARY
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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
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	10/18/2022	N	1.1	< 1.0 U	< 1.0 U
MW-55	MW-55-20041209	12/9/2004	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-55	MW-55-20050408	4/8/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-55	MW-55-20050928	9/28/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-55	MW-55-20060316	3/16/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-55	MW-55-20061013	10/13/2006	N	0.002 J	< 0.005 U	< 0.01 UJ
MW-55	MW-55-20070419	4/19/2007	N	0.0026 J	< 0.005 U	< 0.01 U
MW-55	MW-55-20070919	9/19/2007	N	0.005 J	< 0.005 U	< 0.01 U
MW-55	MW-55-20080429	4/29/2008	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-55	MW-55-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-55	MW-55-20090424	4/24/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-55	MW-55-20091027	10/27/2009	N	0.0036 J	< 0.005 U	< 0.005 U
MW-55	MW-55-20100512	5/12/2010	N	0.0042 J	< 0.005 U	< 0.005 U
MW-55	MW-55-20101106	11/6/2010	N	0.014	< 0.005 U	< 0.005 U
MW-55	MW-55-20110323	3/23/2011	N	0.0055	< 0.005 U	< 0.005 U
MW-55	MW-55-20111025	10/25/2011	N	0.007	< 0.005 U	< 0.005 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-56	MW-56-20041210	12/10/2004	N	0.0902	< 0.005 U	< 0.01 U
MW-56	MW-56-20050408	4/8/2005	N	0.0882	< 0.005 U	< 0.01 U
MW-56	MW-56-20050928	9/28/2005	N	0.207	< 0.005 U	< 0.01 U
MW-56	MW-56-20060316	3/16/2006	N	0.0087	< 0.005 U	< 0.01 U
MW-56	MW-56-20061014	10/14/2006	N	0.11	0.002 J	< 0.01 UJ
MW-56	MW-56-20070419	4/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-56	MW-56-20070919	9/19/2007	N	0.038	< 0.005 U	< 0.01 U

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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-56	MW-56-20080429	4/29/2008	N	0.004 J	< 0.005 U	< 0.01 U
MW-56	MW-56-20081210	12/10/2008	N	0.093	< 0.005 U	< 0.005 U
MW-56	MW-56-20090424	4/24/2009	N	0.014	< 0.005 U	< 0.005 U
MW-56	MW-56-20091027	10/27/2009	N	0.0087	< 0.005 U	< 0.005 U
MW-56	MW-56-20100512	5/12/2010	N	0.23	0.0064	< 0.005 U
MW-56	MW-56-20110323	3/23/2011	N	0.071	0.0026 J	< 0.005 U
MW-56	MW-56-20111025	10/25/2011	N	0.15	0.011	0.0019 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
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-57	MW-57-20041210	12/10/2004	N	0.207	0.00672	< 0.01 U
MW-57	MW-57-20050408	4/8/2005	N	0.282	0.00683	< 0.01 U
MW-57	MW-57-20050928	9/28/2005	N	0.096	< 0.005 U	< 0.01 U
MW-57	MW-57-20060316	3/16/2006	N	0.254	0.00756	< 0.01 U
MW-57	MW-57-20061013	10/13/2006	N	0.064	< 0.005 U	< 0.01 UJ
MW-57	MW-57-20070419	4/19/2007	N	0.201	0.00377 J	< 0.01 U
MW-57	MW-57-20070920	9/20/2007	N	0.25	0.005 J	< 0.01 U
MW-57	MW-57-20080430	4/30/2008	N	0.014 0	< 0.005 U	< 0.01 U
MW-57	MW-57-20081210	12/10/2008	N	0.13	0.0074	< 0.005 U
MW-57	MW-57-20090424	4/24/2009	N	0.096	0.0042 J	< 0.005 U
MW-57	MW-57-20091027	10/27/2009	N	0.1	0.0026 J	< 0.005 U
MW-57	MW-57-20100512	5/12/2010	N	0.21	0.006	< 0.005 U
MW-57	MW-57-20110323	3/23/2011	N	0.11	0.0023 J	< 0.005 U
MW-57	MW-57-20111025	10/25/2011	N	0.059	0.002 J	< 0.005 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

APPENDIX D
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-58	MW-58-20041209	12/9/2004	N	0.526	0.0145	< 0.01 U
MW-58	MW-58-20050407	4/7/2005	N	0.809	0.0188	< 0.01 U
MW-58	MW-58-20050928	9/28/2005	N	0.486	0.0109	< 0.01 U
MW-58	MW-58-20060316	3/16/2006	N	0.421	0.00866	< 0.01 U
MW-58	MW-58-20061013	10/13/2006	N	0.62	0.014	< 0.01 UJ
MW-58	MW-58-20070419	4/19/2007	N	0.784	0.0307	< 0.025 U
MW-58	MW-58-20070419-FD	4/19/2007	FD	0.717	0.00954 J	< 0.025 U
MW-58	MW-58-20070919	9/19/2007	N	0.65	0.017	< 0.01 U
MW-58	MW-58-20070919-FD	9/19/2007	FD	0.64	0.016	< 0.01 U
MW-58	MW-58-20080430	4/30/2008	N	0.63 0	0.015 0	< 0.01 U
MW-58	MW-58-20080430-FD	4/30/2008	FD	0.58 0	0.014 0	< 0.01 U
MW-58	MW-58-20081211	12/11/2008	N	0.53	0.012	< 0.005 U
MW-58	MW-58-20081211-FD	12/11/2008	FD	0.51	0.013	< 0.005 U
MW-58	MW-58-20090425	4/25/2009	N	0.59	0.014	< 0.005 U
MW-58	MW-58-20090425-FD	4/25/2009	FD	0.58	0.015	< 0.005 U
MW-58	MW-58-20091028	10/28/2009	N	0.48	0.011	< 0.005 U
MW-58	MW-58-20091028-FD	10/28/2009	FD	0.48	0.011	< 0.005 U
MW-58	MW-58-20100512	5/12/2010	N	0.66	0.014	< 0.005 U
MW-58	MW-58-20101106-FD	11/6/2010	FD	0.56	0.011	< 0.005 U
MW-58	MW-58-20101106	11/6/2010	N	0.58	0.012	< 0.005 U
MW-58	MW-58-20110324	3/24/2011	N	0.71	0.012	< 0.005 U
MW-58	MW-58-20110324-FD	3/24/2011	FD	0.7	0.014	0.0011 J
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-58-20131017-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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-58R	MW-58R-202210	10/20/2022	N	226	6.9	0.45 J
MW-60	MW-60-20050401	4/1/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-60	MW-60-20050930	9/30/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-60	MW-60-20060317	3/17/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-60	MW-60-20061012	10/12/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-60	MW-60-20070419	4/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-60	MW-60-20070919	9/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-60	MW-60-20080429	4/29/2008	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-60	MW-60-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-60	MW-60-20090424	4/24/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-60	MW-60-20091027	10/27/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-60	MW-60-20100511	5/11/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-60	MW-60-20101104	11/4/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-60	MW-60-20110323	3/23/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-60	MW-60-20111025	10/25/2011	N	< 0.005 U	< 0.005 U	< 0.005 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-61	MW-61-20050401	4/1/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-61	MW-61-20050401-FD	4/1/2005	FD	< 0.005 U	< 0.005 U	< 0.01 U
MW-61	MW-61-20050930	9/30/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-61	MW-61-20060317	3/17/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-61	MW-61-20061012	10/12/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-61	MW-61-20070419	4/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-61	MW-61-20070919	9/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-61	MW-61-20080429	4/29/2008	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-61	MW-61-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-61	MW-61-20090424	4/24/2009	N	0.004 J	< 0.005 U	< 0.005 U
MW-61	MW-61-20091027	10/27/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-61	MW-61-20100511	5/11/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-61	MW-61-20101104	11/4/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-61	MW-61-20110323	3/23/2011	N	0.0018 J	< 0.005 U	< 0.005 U
MW-61	MW-61-20111025	10/25/2011	N	< 0.005 U	< 0.005 U	< 0.005 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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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	10/19/2022	N	2.8	2.0	1.4
MW-62	MW-62-20050401	4/1/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-62	MW-62-20050930	9/30/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-62	MW-62-20060316	3/16/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-62	MW-62-20061012	10/12/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-62	MW-62-20070419	4/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-62	MW-62-20070919	9/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-62	MW-62-20080429	4/29/2008	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-62	MW-62-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-62	MW-62-20090424	4/24/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-62	MW-62-20091027	10/27/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-62	MW-62-20100511	5/11/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-62	MW-62-20110323	3/23/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-62	MW-62-20111025	10/25/2011	N	0.0019 J	< 0.005 U	< 0.005 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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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
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-63	MW-63-20050401	4/1/2005	N	0.00814	< 0.005 U	< 0.01 U
MW-63	MW-63-20050930	9/30/2005	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-63	MW-63-20060316	3/16/2006	N	0.00976	< 0.005 U	< 0.01 U
MW-63	MW-63-20060406	4/6/2006	N	0.0116	< 0.005 U	< 0.01 U
MW-63	MW-63-20061012	10/12/2006	N	0.004 J	< 0.005 U	< 0.01 U
MW-63	MW-63-20070419	4/19/2007	N	0.00408 J	< 0.005 U	< 0.01 U
MW-63	MW-63-20070919	9/19/2007	N	0.008	< 0.005 U	< 0.01 U
MW-63	MW-63-20080430	4/30/2008	N	0.003 J	< 0.005 U	< 0.01 U
MW-63	MW-63-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-63	MW-63-20090424	4/24/2009	N	0.0043 J	< 0.005 U	< 0.005 U
MW-63	MW-63-20091027	10/27/2009	N	0.0077	< 0.005 U	< 0.005 U
MW-63	MW-63-20100511	5/11/2010	N	0.0076	< 0.005 U	< 0.005 U
MW-63	MW-63-20101106	11/6/2010	N	0.011	< 0.005 U	< 0.005 U
MW-63	MW-63-20110323	3/23/2011	N	0.012	< 0.005 U	< 0.005 U
MW-63	MW-63-20111025	10/25/2011	N	0.0098	< 0.005 U	< 0.005 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-65	MW-65-20061011	10/11/2006	N	0.47	0.019	< 0.01 U
MW-65	MW-65-20061011-FD	10/11/2006	FD	0.56	0.018	< 0.01 U
MW-65	MW-65-20070419	4/19/2007	N	1.35	0.0234	< 0.01 U
MW-65	MW-65-20070920	9/20/2007	N	0.58	0.017	< 0.01 U
MW-65	MW-65-20080430	4/30/2008	N	0.57 0	0.016 0	< 0.01 U
MW-65	MW-65-20081211	12/11/2008	N	0.46	0.011	< 0.005 U

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-65	MW-65-20090424	4/24/2009	N	0.62	0.019	< 0.005 U
MW-65	MW-65-20101107	11/7/2010	N	0.4	0.011	< 0.005 U
MW-65	MW-65-20110304-FS	3/4/2011	N	370	13	< 5.0 U
MW-65	MW-65-20111025	10/25/2011	N	0.31	0.01	< 0.005 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-65-201403	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	4/6/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-66	MW-66-20061012	10/12/2006	N	0.002 J	< 0.005 U	< 0.01 U
MW-66	MW-66-20070418	4/18/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-66	MW-66-20070919	9/19/2007	N	0.004 J	< 0.005 U	< 0.01 U
MW-66	MW-66-20080429	4/29/2008	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-66	MW-66-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-66	MW-66-20090425	4/25/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-66	MW-66-20091028	10/28/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-66	MW-66-20100511	5/11/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-66	MW-66-20101103	11/3/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-66	MW-66-20110324	3/24/2011	N	0.0016 J	< 0.005 U	< 0.005 U
MW-66	MW-66-20111026	10/26/2011	N	0.0018 J	< 0.005 U	< 0.005 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	4/6/2006	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-67	MW-67-20061012	10/12/2006	N	0.001 J	< 0.005 U	< 0.01 U
MW-67	MW-67-20070419	4/19/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-67	MW-67-20070918	9/18/2007	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-67	MW-67-20080429	4/29/2008	N	< 0.005 U	< 0.005 U	< 0.01 U
MW-67	MW-67-20081210	12/10/2008	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-67	MW-67-20090425	4/25/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-67	MW-67-20091028	10/28/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-67	MW-67-20100511	5/11/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-67	MW-67-20101103	11/3/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-67	MW-67-20110324	3/24/2011	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-67	MW-67-20111026	10/26/2011	N	< 0.005 U	< 0.005 U	< 0.005 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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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	1/15/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-68	MW-68-20090424	4/24/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-68	MW-68-20091028	10/28/2009	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-68	MW-68-20100513	5/13/2010	N	< 0.005 U	< 0.005 U	< 0.005 U
MW-68	MW-68-20101106	11/6/2010	N	0.0095	< 0.005 U	< 0.005 U
MW-68	MW-68-20111026	10/26/2011	N	< 0.005 U	< 0.005 U	< 0.005 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
MW-70	MW-70-20101104	11/4/2010	N	0.54	0.014	< 0.005 U
MW-70	MW-70-20110322	3/22/2011	N	0.17	0.0092	0.0012 J
MW-70	MW-70-20111026	10/26/2011	N	0.32	0.0077	< 0.005 U
MW-70	MW-70-20120418	4/18/2012	N	0.33	0.011	< 0.005 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	10/28/2009	N	0.19	0.0063	< 0.005 U
MW-71	MW-71-20100513	5/13/2010	N	0.16	0.0074	< 0.005 U
MW-71	MW-71-20101104	11/4/2010	N	0.25	0.0072	< 0.005 U
MW-71	MW-71-20110322	3/22/2011	N	0.076	0.0016 J	< 0.005 U
MW-71	MW-71-20111026	10/26/2011	N	0.13	0.0027 J	< 0.005 U
MW-71	MW-71-20120418	4/18/2012	N	0.16	0.0053	< 0.005 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

APPENDIX D
HISTORICAL DATA SUMMARY
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-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
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

APPENDIX D
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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	10/20/2022	N	242	20.9	< 1.0 U
MW-88	20140624-GW-MW-88	6/24/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
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	10/18/2022	N	4.8	0.25 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

APPENDIX D
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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	10/18/2022	N	14.9	41.2	0.20 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-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
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-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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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	10/21/2022	N	36200 J	674	5.3
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-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

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HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-97	MW-97-202210	10/17/2022	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-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	10/19/2022	N	2.2	1.9	< 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
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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-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-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

APPENDIX D
HISTORICAL DATA SUMMARY
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-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-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-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

APPENDIX D
HISTORICAL DATA SUMMARY
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-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
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-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-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

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-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	10/18/2022	N	0.49 J	0.76 J	0.43 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
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-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-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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-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-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
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-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

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HISTORICAL DATA SUMMARY
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-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	10/19/2022	N	3.8	1.8	< 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-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
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-197	MW-197-WG-2020922	9/22/2020	N	17.0	7.8	0.99 J

APPENDIX D
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-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	10/21/2022	N	18800	1720	95.4
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-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-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-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-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-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-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-206	MW-206-202110	10/20/2021	N	1.2	0.41 J	< 1.0 U
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
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-69	RW-69-20090115	1/15/2009	N	0.17	0.0071	< 0.005 U
RW-69	RW-69-20090424	4/24/2009	N	0.062	< 0.005 U	< 0.005 U
RW-69	RW-69-20090527	5/27/2009	N	0.29	0.01	< 0.005 U
RW-69	RW-69-20091221-FS	12/21/2009	N	200	6.3	< 5.0 U

APPENDIX D
HISTORICAL DATA SUMMARY
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
RW-69	RW-69-20100513	5/13/2010	N	0.17	0.0082	< 0.005 U
RW-69	RW-69-20101104	11/4/2010	N	0.32	0.009	< 0.005 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	10/26/2011	N	0.21	0.0057	< 0.005 U
RW-69	RW-69-20120418	4/18/2012	N	0.15	0.0036 J	< 0.005 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-69-201407	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	10/19/2022	N	97.6	7.8	0.30 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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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
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	10/19/2022	N	2.1	0.71 J	3.8
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	10/19/2022	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-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-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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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	10/18/2022	N	0.54 J	0.57 J	0.62 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
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-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-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	10/18/2022	N	2.8	1.3	2.0
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

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HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-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-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
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-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	10/19/2022	N	2.4	0.81 J	0.60 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	10/18/2022	N	1.8	0.53 J	0.74 J

APPENDIX D
HISTORICAL DATA SUMMARY
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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-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-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
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-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-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

APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
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-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-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	10/18/2022	N	86.7	81.5	0.37 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	10/18/2022	N	< 1.0 U	< 1.0 U	< 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-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 DATA SUMMARY
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-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-9	VP-09-201507	7/30/2015	N	2.4	< 1.0 U	< 1.0 U
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
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

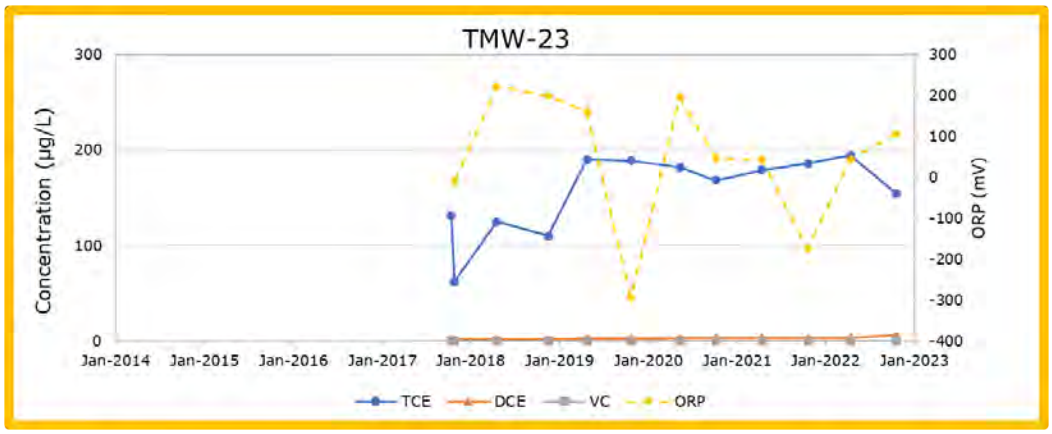
APPENDIX D
HISTORICAL DATA SUMMARY
Whirlpool Facility - Fort Smith, Arkansas

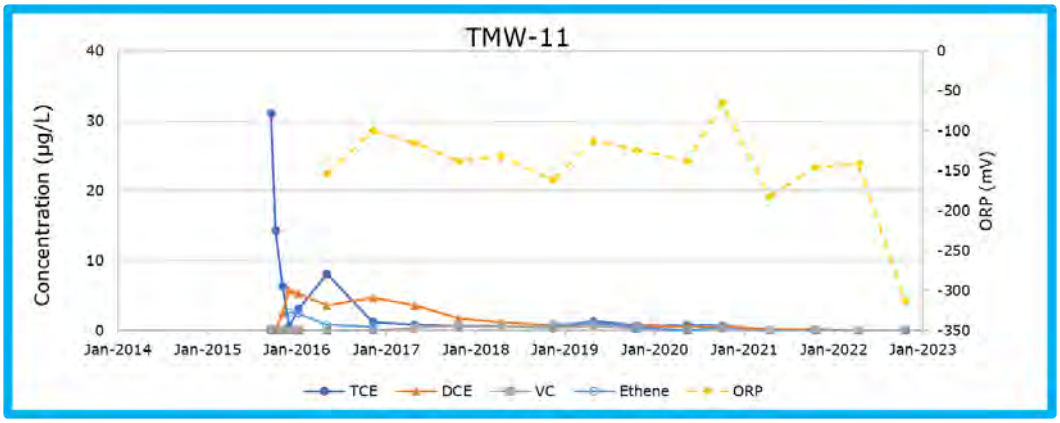
Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
VP-12	VP-12-202104	4/14/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-202110	10/20/2021	N	0.31 J	< 1.0 U	< 1.0 U
VP-12	VP-12-202204	4/14/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-202210	10/20/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-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-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
WEST-SW	WEST-SW-20140818	8/18/2014	N	< 5.0 U	< 5.0 U	< 2.0 U

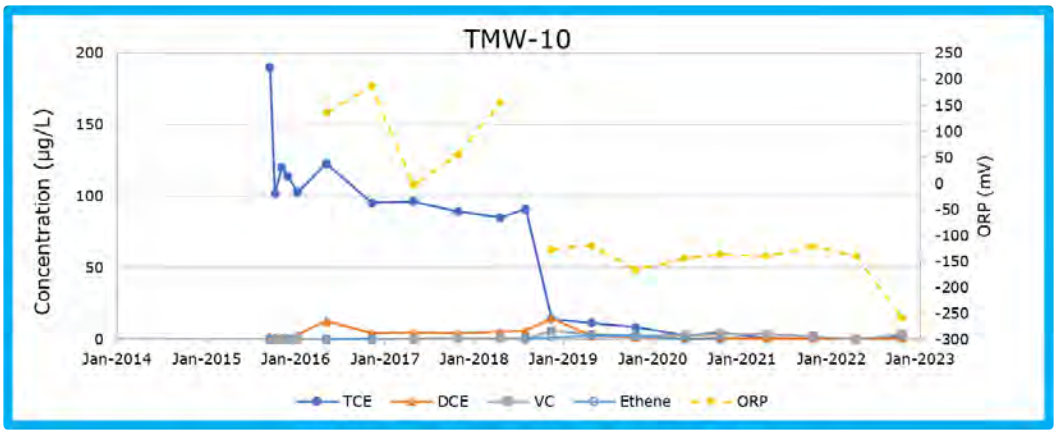
Appendix E

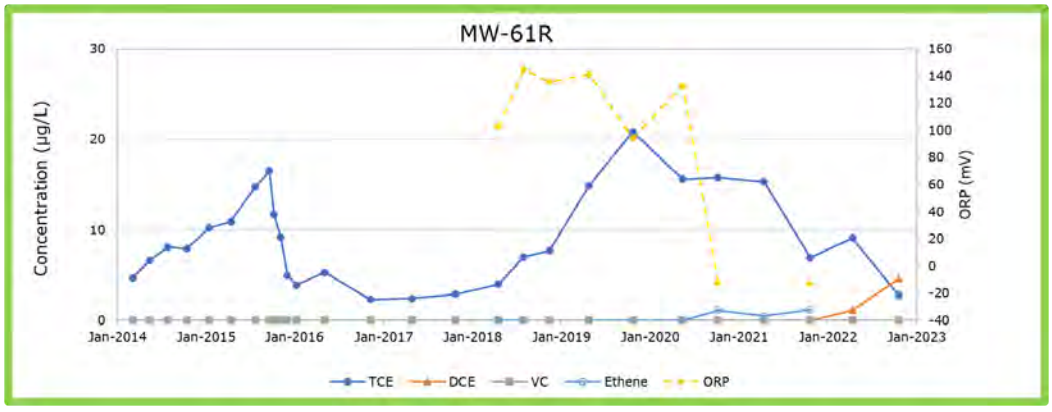
ISCR Data Graphs

North Plume – 61R-PH II Array



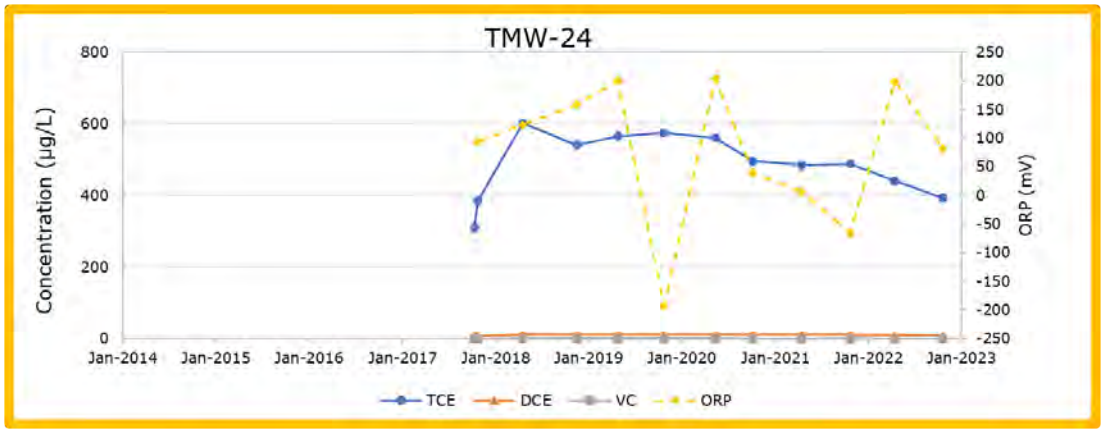


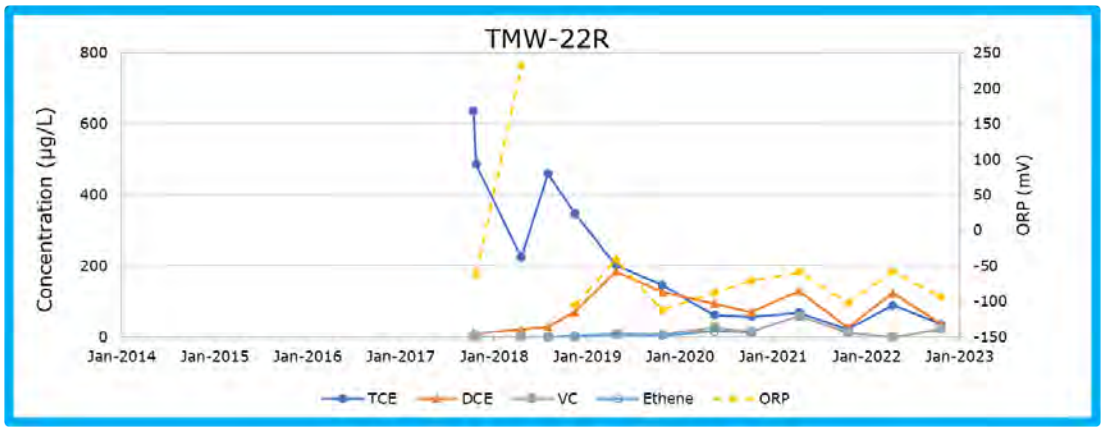


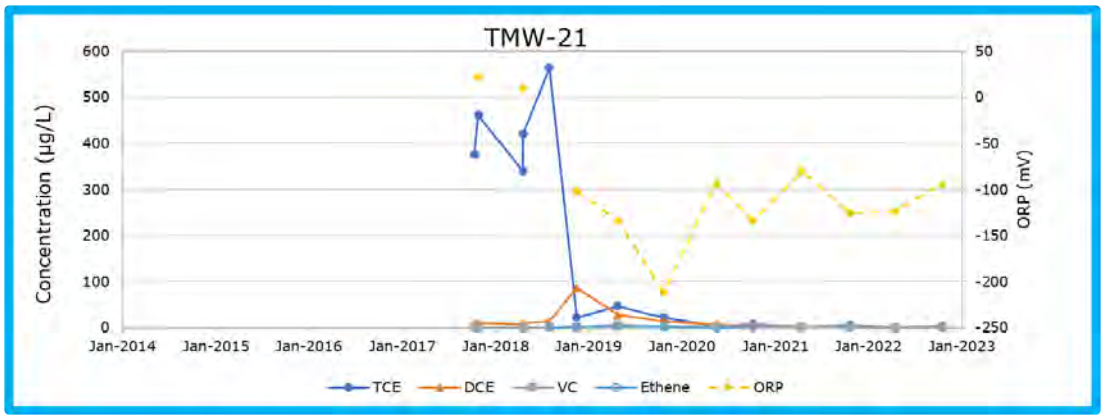


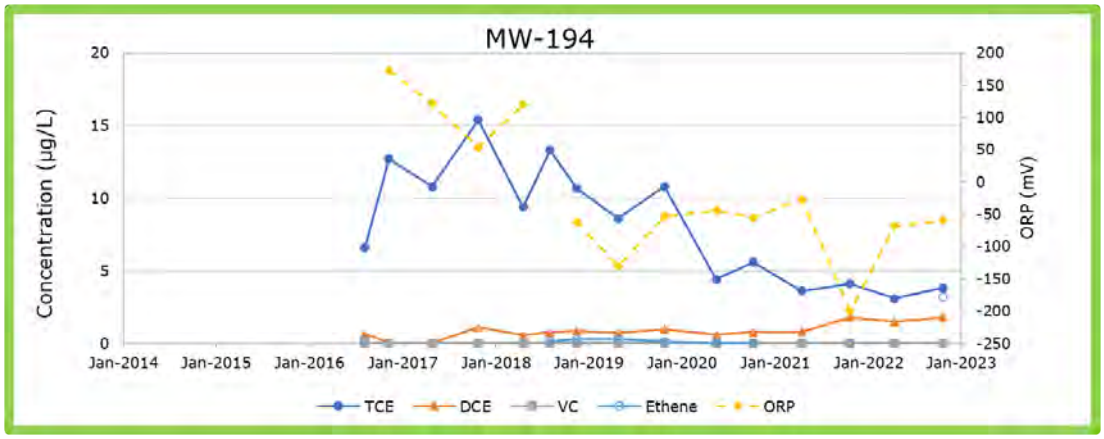
Orange – Upgradient, Blue – Plume Treatment Area, Green - Downgradient

North Plume – N1 and N3 Array



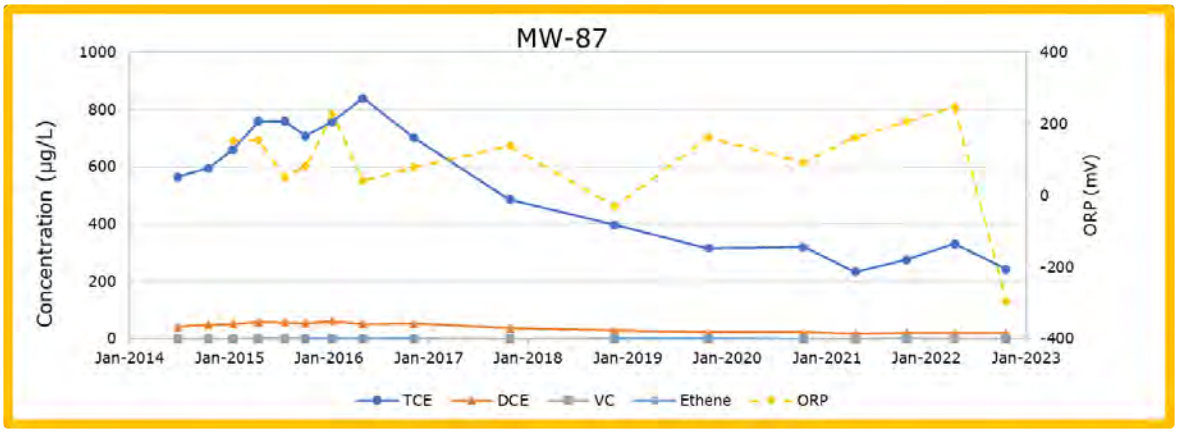


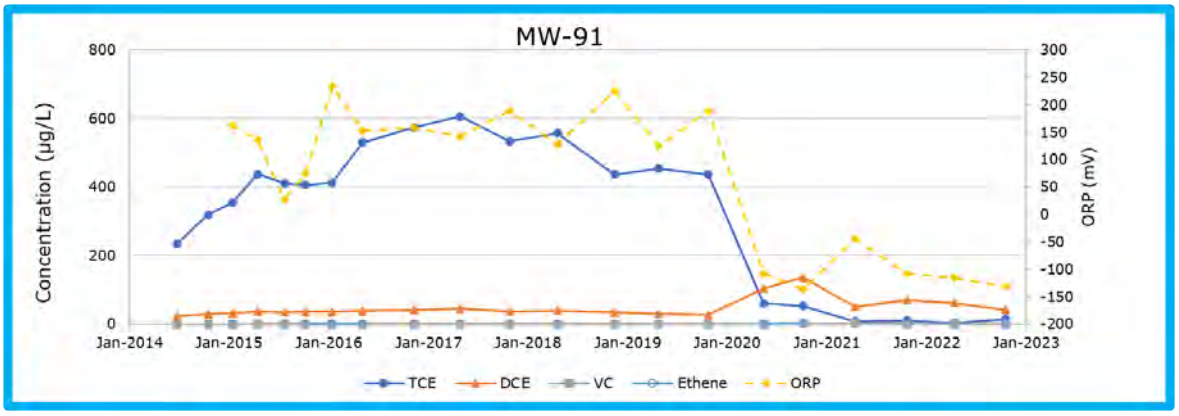


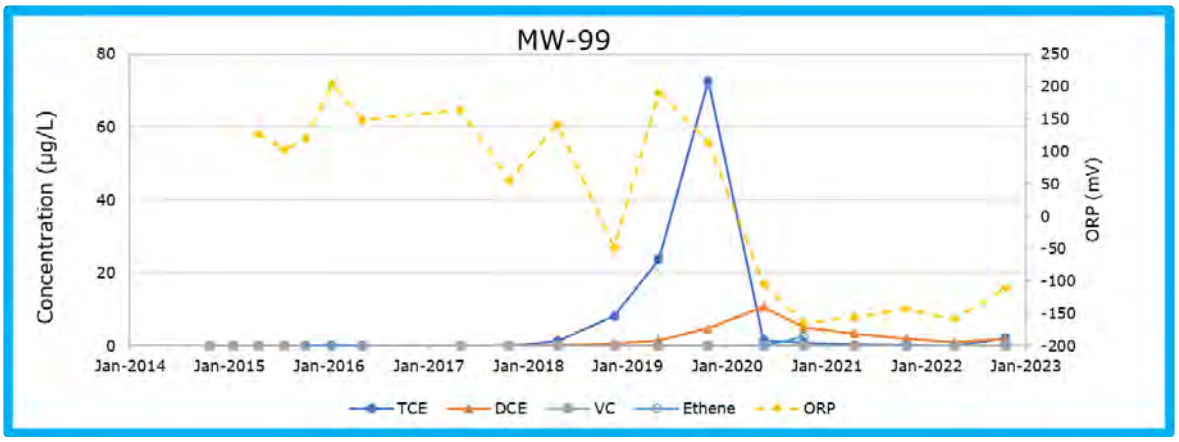


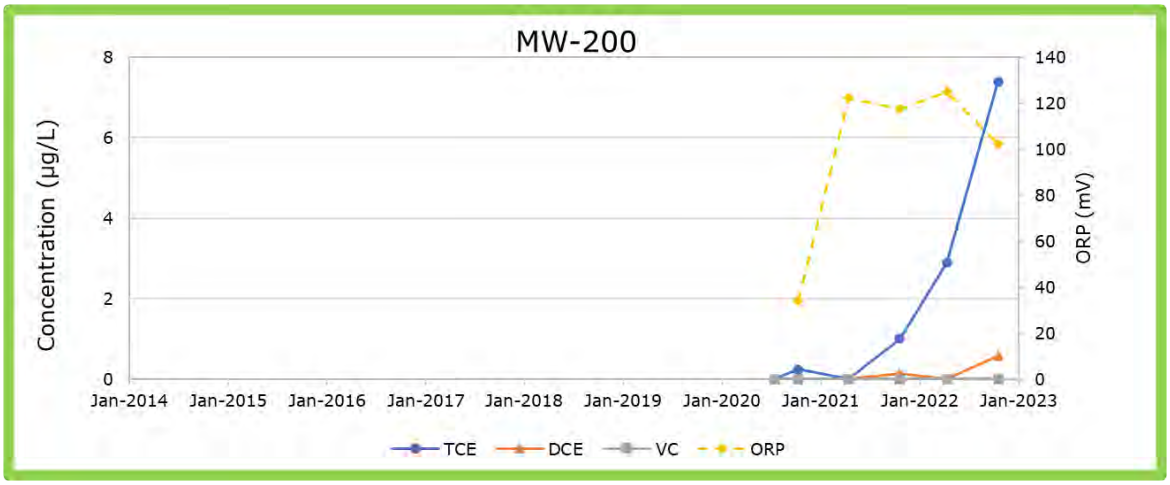
Orange – Upgradient, Blue – Plume Treatment Area, Green - Downgradient

Northeast Plume





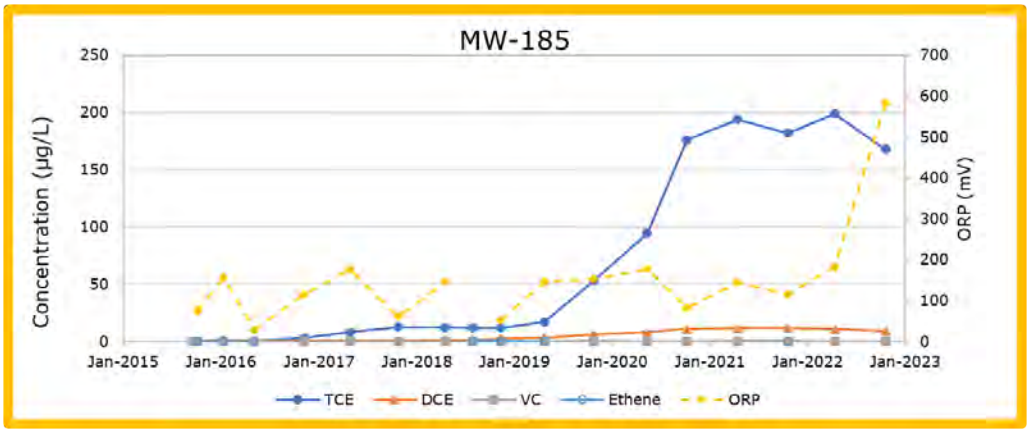


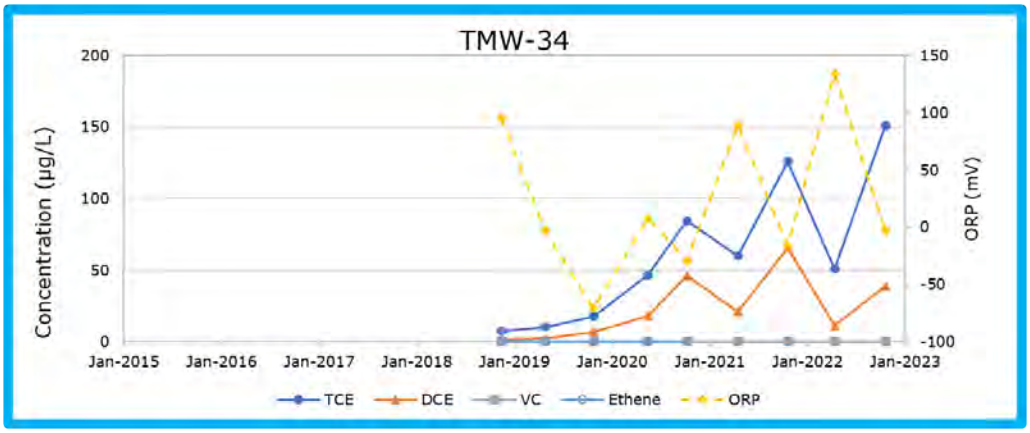


Orange – Upgradient, Blue – Plume Treatment Area, Green - Downgradient

RAMBOLL

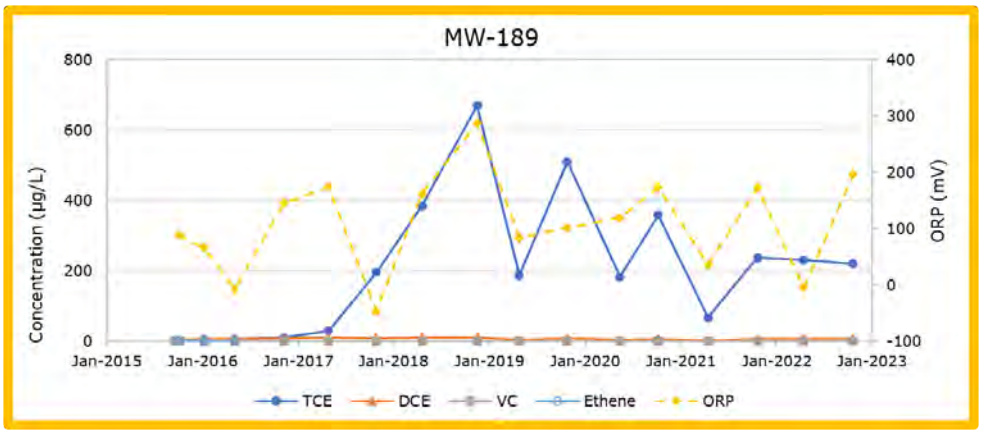
East Plume

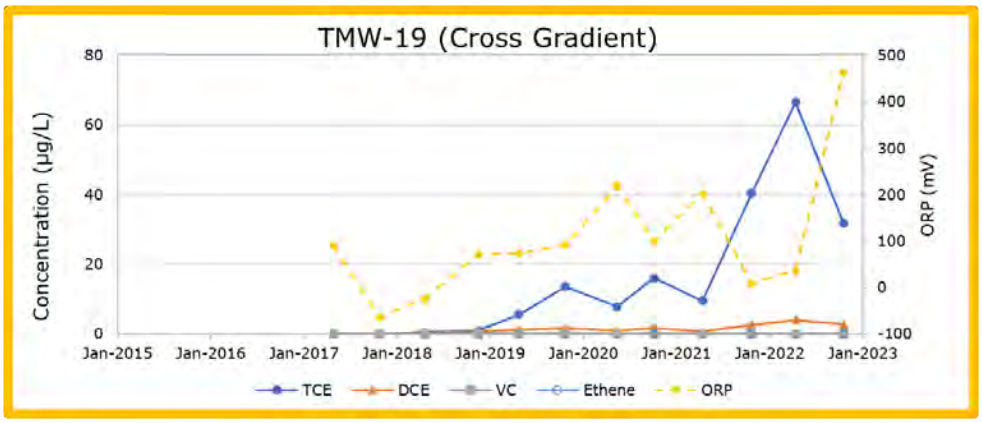


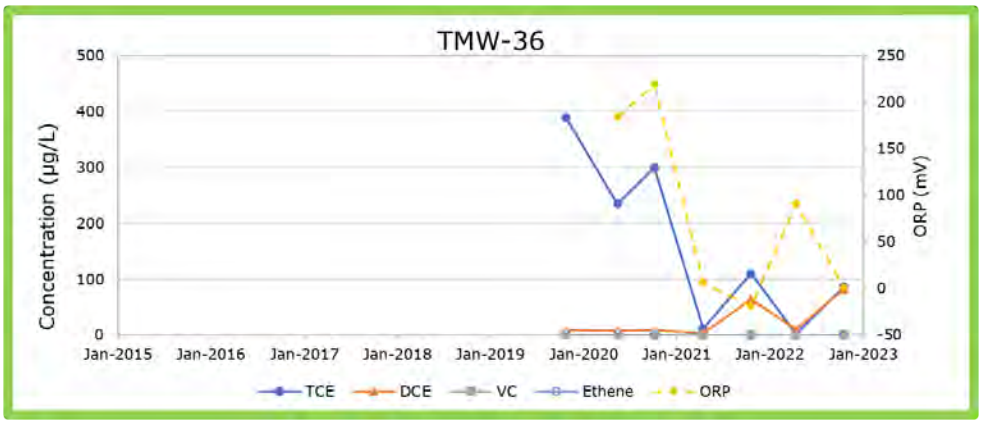


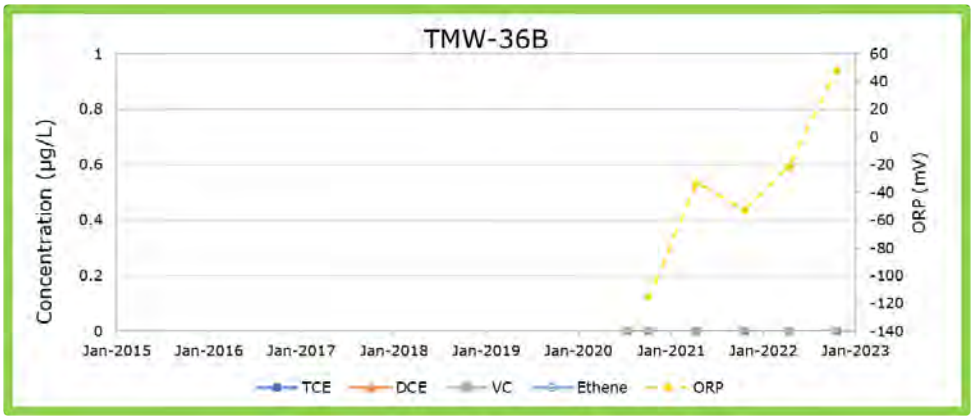
Orange – Upgradient, Blue – Plume Treatment Area

South Plume



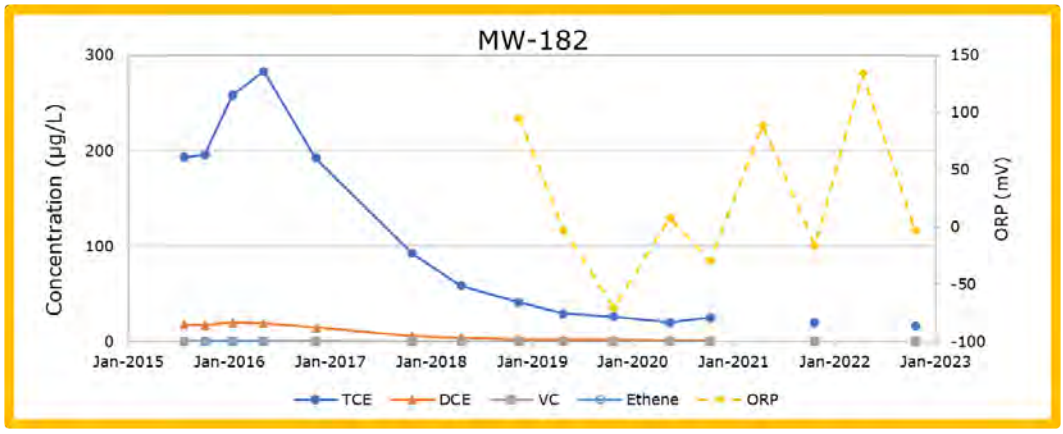


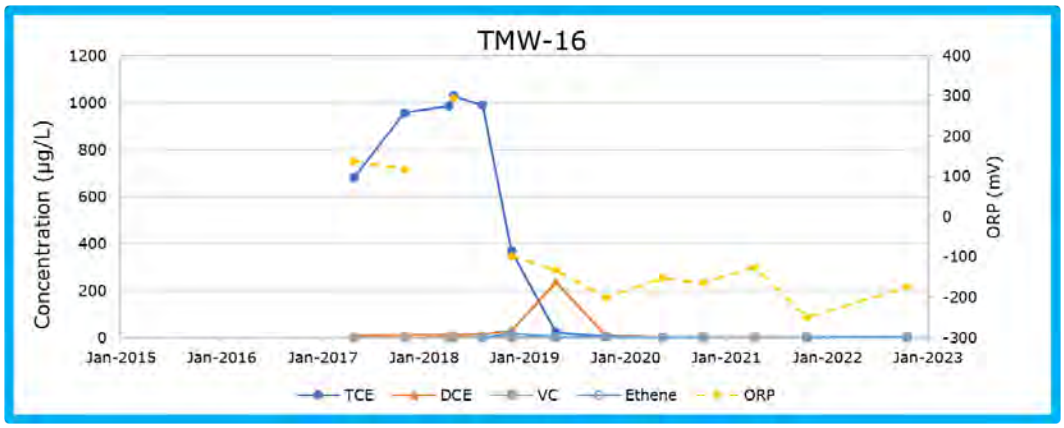


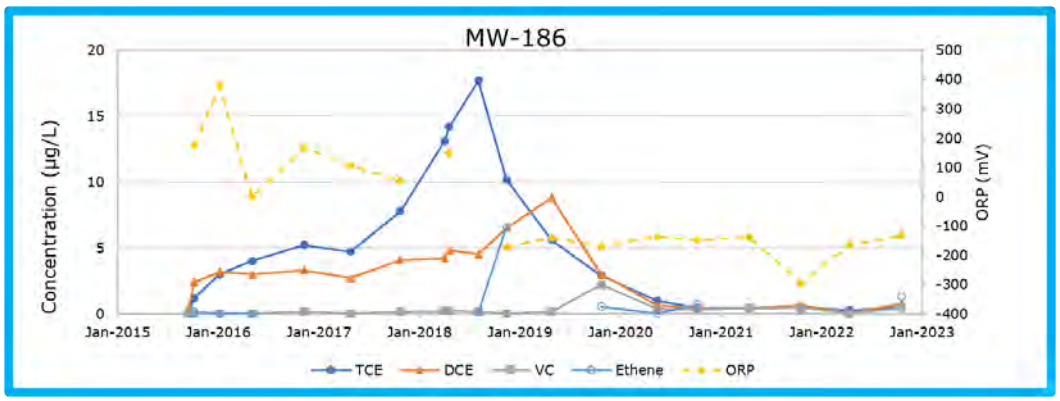


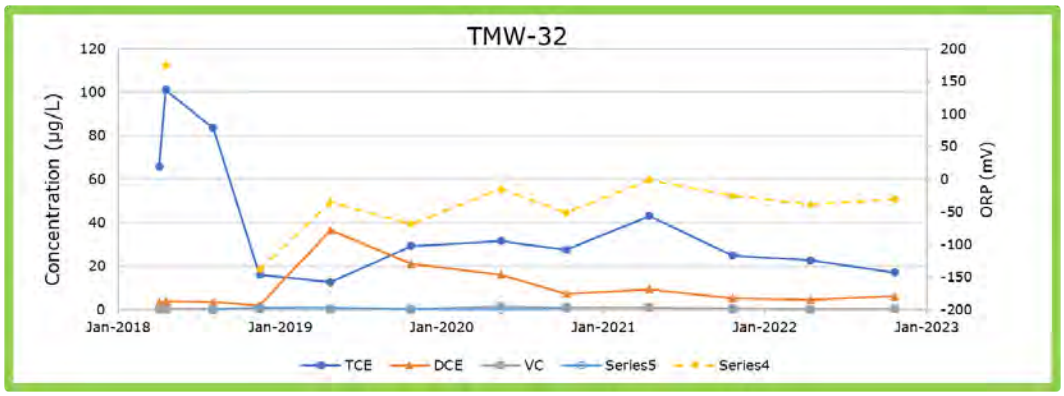
Orange – Upgradient, Green - Downgradient

Southwest Plume









Orange – Upgradient, Blue – Plume Treatment Area, Green - Downgradient

Appendix F

Air Sampling Field Notes and Weather Data for October 2022

Appendix G

Offsite Vapor Intrusion Risk Calculations and Input Parameters

Appendix G
Risk Calculations and Input Parameters

Contents:

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	Acetone	67-64-1	ID	1	N						3.1E+01	100	129	111
VOC	Benzene	71-43-2	A	1	N			7.8E-03	1	60	3.0E-02	300	1	
VOC	Bromodichloromethane	75-27-4	B2	1	N								126	90
VOC	Bromoform	75-25-2	B2	1	N			1.1E-03	1				126	90
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	1,3-Dichloropropene (total)	542-75-6	B2	1	N			4.0E-03	1		2.0E-02	30	1	
VOC	Ethyl Benzene	100-41-4	D	1	N						1.0E+00	300	1	
VOC	Toluene	108-88-3	ID	1	N						5.0E+00	10	1	
VOC	Trichloroethene	79-01-6	HC	1	Y	0.202	0.244	4.1E-03	1	159	2.0E-03	100	1	
VOC	Vinyl Chloride	75-01-4	A	1	N			4.4E-03	1	79	1.0E-01	30	1	

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 2023.

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.

117 USEPA. NCEA. 2003. Risk Assessment Issue Paper for: Derivation of Provisional Subchronic and Chronic RfCs for Chloroform [CASRN 67-66-3]. January 23.

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

129 ATSDR. 2013. Minimal Risk Levels. March.

Notes:

3 HEAST Alternate Method.

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).

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	Acetone	67-64-1	1.6E-03	1.1E-03	44		1.1E+00	44	9.8E-05	44	2.5E+01
VOC	Benzene	71-43-2	2.3E-01	1.6E-01	44		7.6E-01	44	8.5E-05	44	2.5E+01
VOC	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	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	1,3-Dichloropropene (total)	542-75-6	7.3E-01	4.8E-01	44		5.4E-01	44	8.6E-05	44	2.5E+01
VOC	Ethyl Benzene	100-41-4	3.2E-01	2.0E-01	44		6.5E-01	44	6.7E-05	44	2.5E+01
VOC	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.

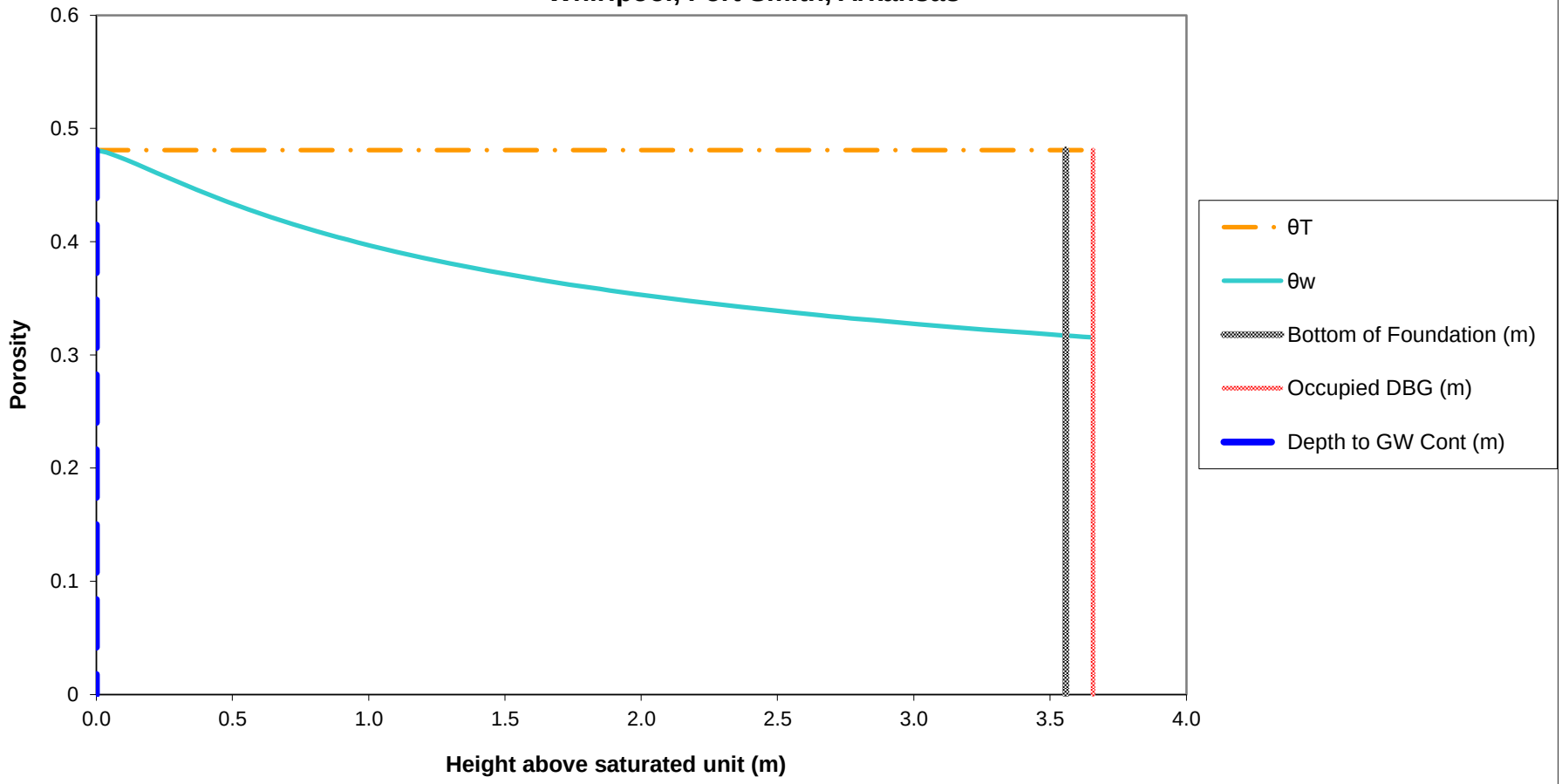
References:

40	Research Triangle Institute, Center for Environmental Analysis. 1995. Supplemental Technical Support Document for Hazardous Waste Identification Rule: Risk Assessment for Human and Ecological Receptors--Volume 1, TABLE A-1. November 1995.
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. 20014. Superfund Chemical Data Matrix (SCDM). Office of Superfund Remediation and Technology Innovation. June 20, 2014.
52	USEPA. 1997. CHEM9 Compound Properties Estimation and Data. Version 1.00. Office of Air Quality Planning and Standards. July.
68	PHYSPROP data base. Syracuse Research Corporation.
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.

Ramboll

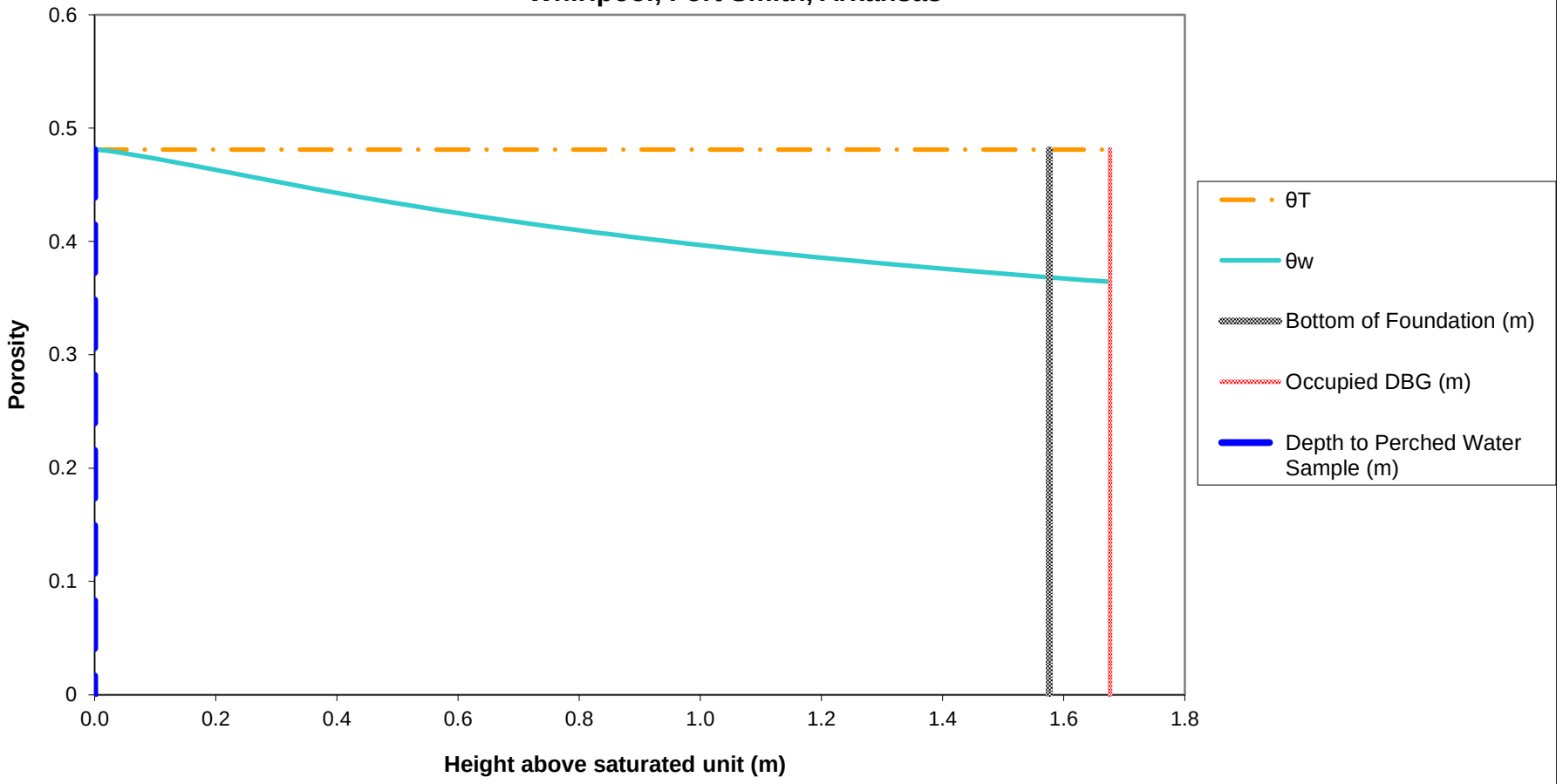
Appendix G.4: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at Monitoring Wells Whirlpool, Fort Smith, Arkansas

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	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.72E-01	1.87E-02	6.80E-02	2.73E-03	1.86E-04	2.12E-04
VOC	Benzene	71-43-2	7.60E-01	8.47E-05	1.59E-01	1.22E-01	8.15E-04	3.17E-03	2.73E-03	8.67E-06	1.38E-03
VOC	Bromodichloromethane	75-27-4	2.57E-01	9.16E-05	4.45E-02	4.13E-02	1.07E-03	4.17E-03	2.73E-03	1.14E-05	5.07E-04
VOC	Bromoform	75-25-2	1.29E-01	8.90E-05	1.34E-02	2.07E-02	1.64E-03	6.37E-03	2.73E-03	1.74E-05	2.33E-04
VOC	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	1,3-Dichloropropene (total)	542-75-6	5.41E-01	8.64E-05	4.83E-01	8.68E-02	3.69E-04	1.44E-03	2.73E-03	3.93E-06	1.90E-03
VOC	Ethyl Benzene	100-41-4	6.48E-01	6.74E-05	2.04E-01	1.04E-01	5.75E-04	2.24E-03	2.73E-03	6.12E-06	1.25E-03
VOC	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.										

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	Acetone	67-64-1	ID	N	2.70E-03	5.72E-07					3.1E+01	1.8E-08
VOC	Benzene	71-43-2	A	N	2.10E-04	2.89E-07	7.8E-03		9.3E-10		3.0E-02	9.2E-06
VOC	Bromodichloromethane	75-27-4	B2	N	2.00E-04	1.01E-07						
VOC	Bromoform	75-25-2	B2	N	2.18E-02	5.07E-06	1.1E-03		2.3E-09			
VOC	Dibromochloromethane	124-48-1	C	N	9.10E-04	2.93E-07						
VOC	1,1-Dichloroethene	75-35-4	C	N	3.60E-03	9.69E-06					2.0E-01	4.6E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.35E-02	1.65E-05					4.0E-02	4.0E-04
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	3.40E-04	6.07E-07						
VOC	1,3-Dichloropropene (total)	542-75-6	B2	N	3.20E-04	6.07E-07	4.0E-03		1.0E-09		2.0E-02	2.9E-05
VOC	Ethyl Benzene	100-41-4	D	N	2.10E-04	2.62E-07					1.0E+00	2.5E-07
VOC	Toluene	108-88-3	ID	N	8.90E-04	1.19E-06					5.0E+00	2.3E-07
VOC	Trichloroethene	79-01-6	HC	Y	6.15E-01	9.87E-04	4.1E-03	0.2439	2.3E-06		2.0E-03	4.7E-01
VOC	Vinyl Chloride	75-01-4	A	N	1.89E-02	6.23E-05	4.4E-03		3.9E-07		1.0E-01	6.0E-04
							Cumulative Risk:		3E-06		**HI:**	5E-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 2022 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-7 (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.

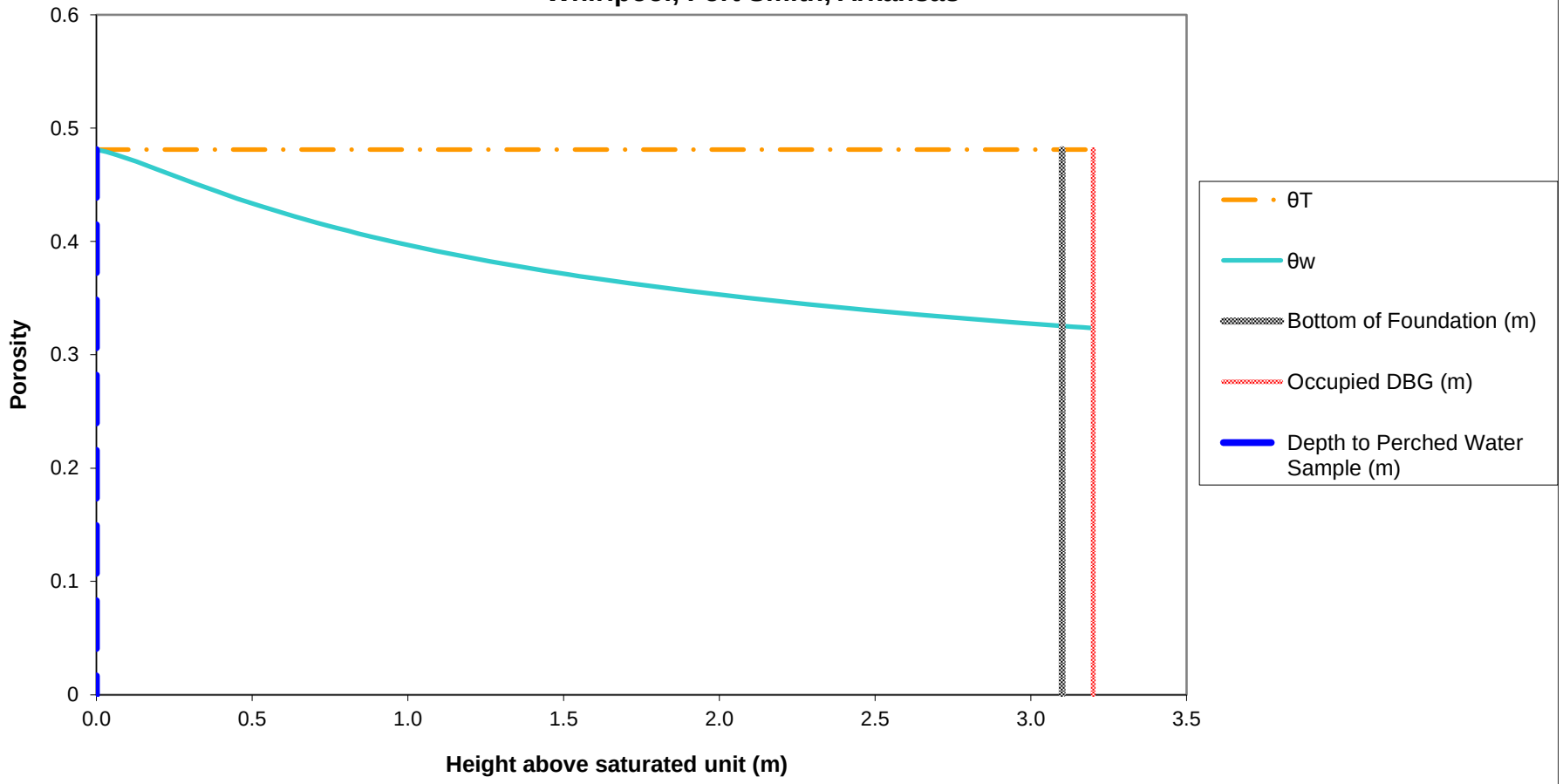
Appendix G.7: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Perched Water at VP-7 (Parcel 2) Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.61E-01	2.07E-02	1.54E-01	2.73E-03	4.21E-04	4.80E-04
VOC	Benzene	71-43-2	7.60E-01	8.47E-05	1.59E-01	1.14E-01	4.01E-04	3.52E-03	2.73E-03	9.63E-06	1.53E-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	0.061							
	Air-filled porosity	L/L-soil	θ_a	0.314							
	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	0.023							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.983							
	Permeability to vapor	cm^2	k_v	9.74E-08							
	Distance from building foundation to source	m	L_{T-gw}	1.58							
	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.										

Appendix G.8: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Perched Water at VP-7 (Parcel 2) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Acetone	67-64-1	ID	N	3.12E-02	1.50E-05					3.1E+01	4.7E-07
VOC	Benzene	71-43-2	A	N	3.20E-04	4.90E-07	7.8E-03		1.6E-09		3.0E-02	1.6E-05
							Cumulative Risk:		2E-09		**HI:**	2E-05
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 2022 water sample at VP-7 (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 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.

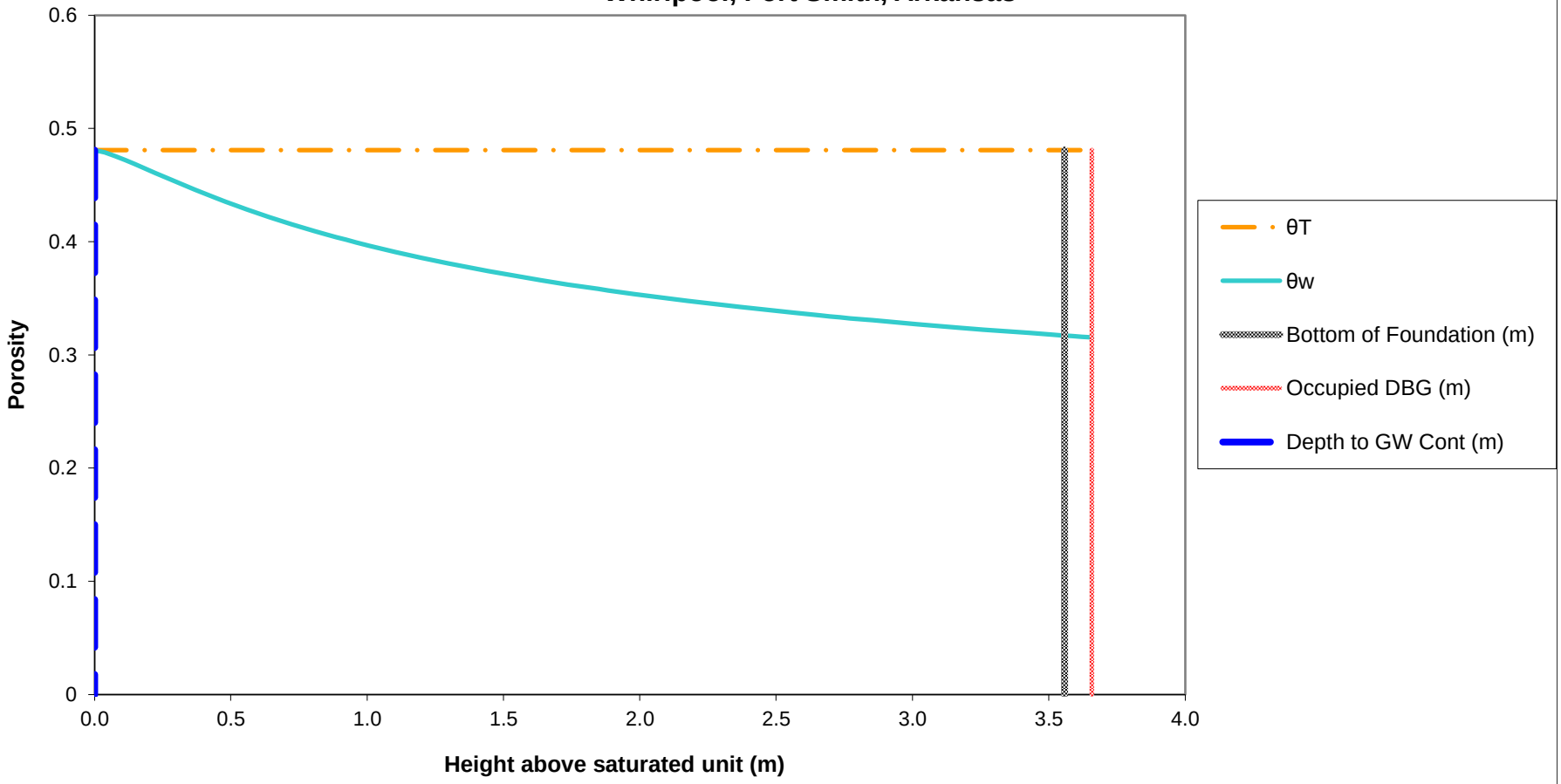
Appendix G.10: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Perched Water at VP-8 (Parcel 2) Whirlpool, Fort Smith, Arkansas

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	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.71E-01	1.87E-02	7.73E-02	2.73E-03	2.11E-04	2.41E-04
VOC	Benzene	71-43-2	7.60E-01	8.47E-05	1.59E-01	1.21E-01	7.17E-04	3.20E-03	2.73E-03	8.74E-06	1.39E-03
VOC	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.										

Appendix G.11: 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	Acetone	67-64-1	ID	N	3.70E-02	8.91E-06					3.1E+01	2.8E-07
VOC	Benzene	71-43-2	A	N	5.50E-04	7.64E-07	7.8E-03		2.4E-09		3.0E-02	2.4E-05
VOC	Chloromethane	74-87-3	D	N	6.30E-04	1.03E-06					9.0E-02	1.1E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.50E-04	1.87E-07					4.0E-02	4.5E-06
VOC	Toluene	108-88-3	ID	N	3.40E-04	4.57E-07					5.0E+00	8.8E-08
VOC	Trichloroethene	79-01-6	HC	Y	5.60E-03	9.02E-06	4.1E-03	0.2439	2.1E-08		2.0E-03	4.3E-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 2022 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.12: 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.

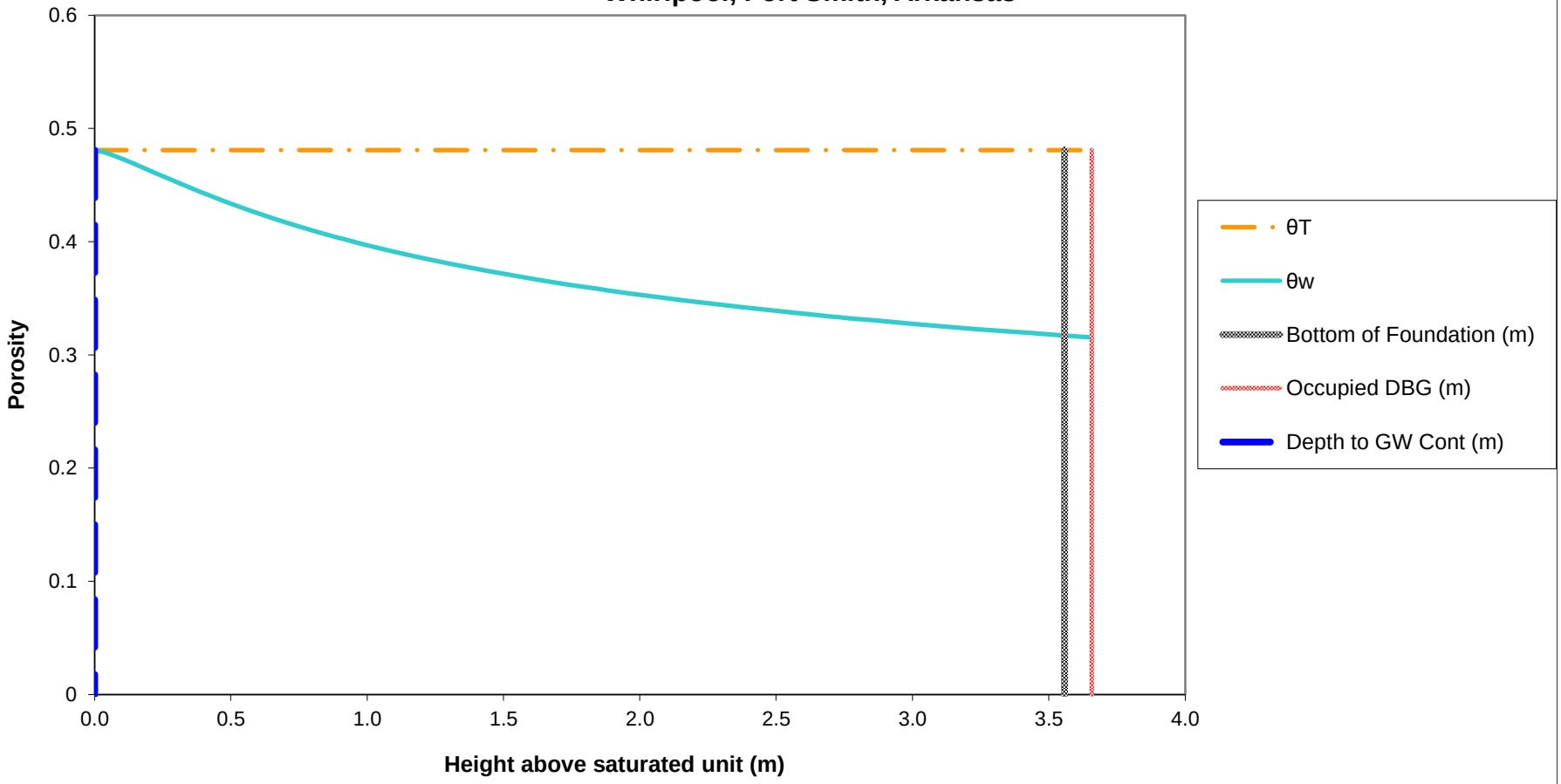
Appendix G.13: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-175 (Parcel 2) Whirlpool, Fort Smith, Arkansas

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	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	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.										

Appendix G.14: 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	cis-1,2-Dichloroethene	156-59-2	ID	N	2.20E-03	2.69E-06					4.0E-02	6.5E-05
VOC	Trichloroethene	79-01-6	HC	Y	1.39E-01	2.23E-04	4.1E-03	0.2439	5.2E-07		2.0E-03	1.1E-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 2022 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.15: 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.

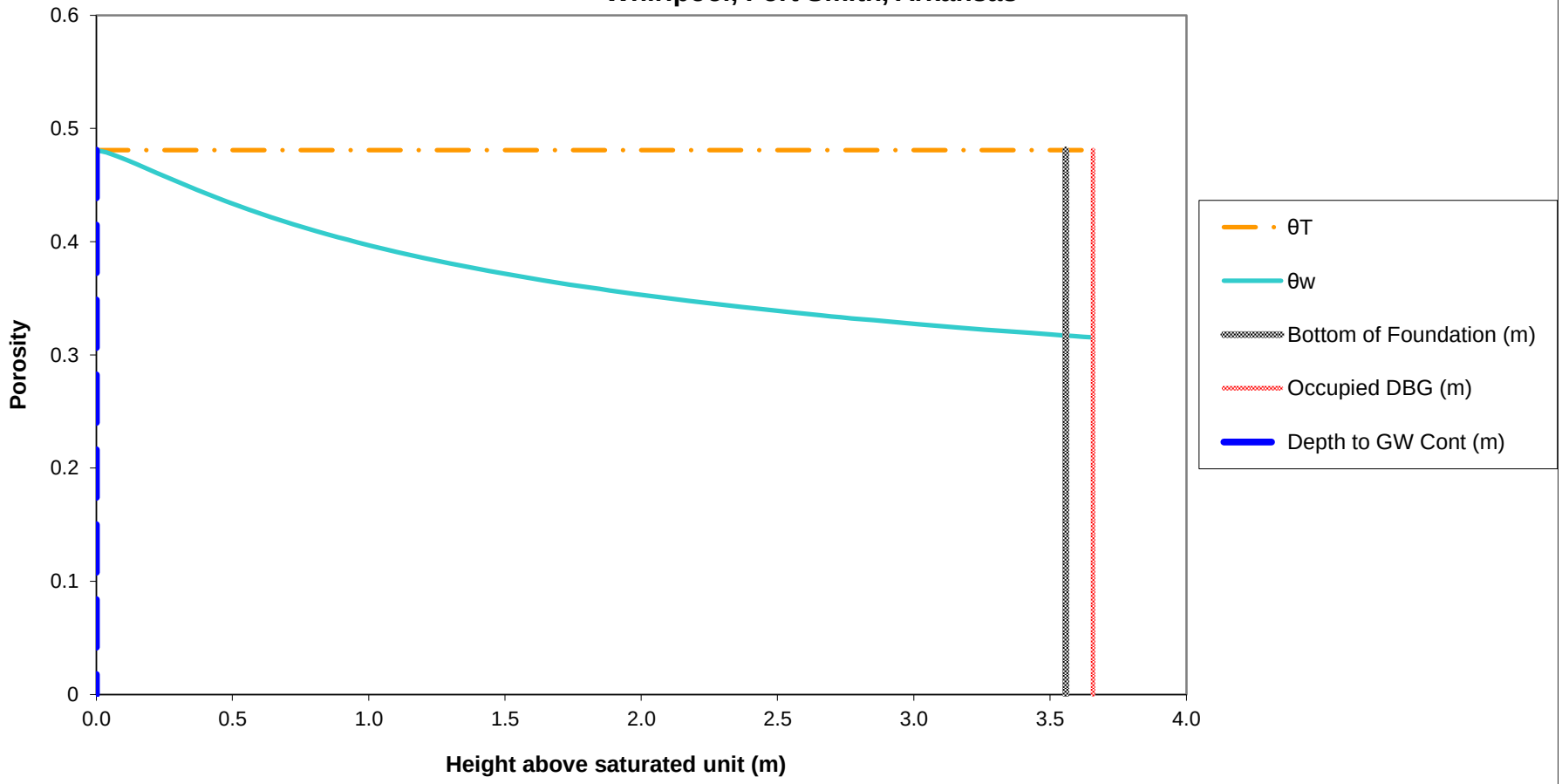
Appendix G.16: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-176 (Parcel 3) Whirlpool, Fort Smith, Arkansas

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	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.										

Appendix G.17: 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	1,1-Dichloroethene	75-35-4	C	N	2.20E-03	5.92E-06					2.0E-01	2.8E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.35E-02	1.65E-05					4.0E-02	4.0E-04
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	3.40E-04	6.07E-07						
VOC	Trichloroethene	79-01-6	HC	Y	3.29E-01	5.28E-04	4.1E-03	0.2439	1.2E-06		2.0E-03	2.5E-01
VOC	Vinyl Chloride	75-01-4	A	N	1.89E-02	6.23E-05	4.4E-03		3.9E-07		1.0E-01	6.0E-04
							Cumulative Risk:		2E-06		**HI:**	3E-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 2022 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.18: 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.19: 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	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.										

AppendixG.20: 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	cis-1,2-Dichloroethene	156-59-2	ID	N	3.80E-03	4.65E-06					4.0E-02	1.1E-04
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	1.00E-04	1.79E-07						
VOC	Trichloroethene	79-01-6	HC	Y	2.89E-02	4.64E-05	4.1E-03	0.2439	1.1E-07		2.0E-03	2.2E-02
							Cumulative Risk:		1E-07		**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 2022 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.												