Thursday, January 15, 2015

Robin Gifford
Enforcement and Inspection Branch
Hazardous Waste Division, ADEQ
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

Whirlpool Fort Smith 2014 Annual Progress Report

Dear Ms. Gifford:

Whirlpool Corporation is pleased to provide the 2014 Annual Progress Report to the Arkansas Department of Environmental Quality (ADEQ), the residents of Fort Smith, and the Directors and staff of the City of Fort Smith. This Annual Progress Report summarizes the 2014 activities related to the remediation of trichloroethylene (TCE) in the groundwater beneath and to the north of the former Whirlpool property in Fort Smith. This report, as well as all other site data and reports submitted to ADEQ this year, is available on www.whirlpoolfortsmith.com.

In summary, during the first twelve months of the two-year process described in the 2013 RADD, Whirlpool has kept its commitments to the Fort Smith community by:

1) Completing a significant number of required and supplemental remediation activities that have made a real impact on the contamination using a proven, science-driven process under the oversight and guidance of ADEQ;
2) Closely monitoring the TCE to ensure there remains no health risk to residents, track the progress of the remediation work, and determine appropriate next steps;
3) Keeping the community fully informed through our website and regular presentations to City Directors;
4) Making significant progress in the redevelopment of the Whirlpool property; and
5) Working diligently with residents and their attorneys to set forth a path towards achieving a fair resolution with affected property owners.

As shown above, Whirlpool's work in Fort Smith during 2014 was extensive. The activities included completing groundwater oxidation injections, proposing and executing supplemental hot-spot soil treatment and removal activities and enhancing ongoing monitoring efforts. Under the Adaptive Remedy Approach, new data has been constantly gathered, validated, analyzed and incorporated into our activities to increase the effectiveness of the remediation efforts.

Importantly, the data collected and submitted to ADEQ during 2014 shows that despite some expected fluctuations in the groundwater plume boundary, the plume remains under control and does not present health risks to residents or workers. Residents may continue to use and enjoy their properties and their neighborhood as they have in the past.

In 2015, Whirlpool will continue to keep its commitments by moving forward in a proven, deliberate manner to implement the plans and actions necessary to meet the requirements of the 2013 RADD.

I. Summary of 2014 Activities

1. Whirlpool completed the following remedial activities required by the RADD:
    a. Submitted work plans to ADEQ;
    b. Conducted bench scale tests of in-situ chemical oxidation (ISCO) in a laboratory;
    c. Administered three phases of ISCO injections in Area 1 (on-site/Whirlpool property), Area 2 and Area 3, designed to provide chemical treatment to degrade TCE in groundwater;
    d. Performed quarterly groundwater monitoring for treatment effectiveness and to determine progress of ongoing natural attenuation of TCE;
    e. Recorded institutional controls for the Area 1 portion of the Whirlpool property; and
    f. Continued fulfillment of the community participation requirements of the RADD.

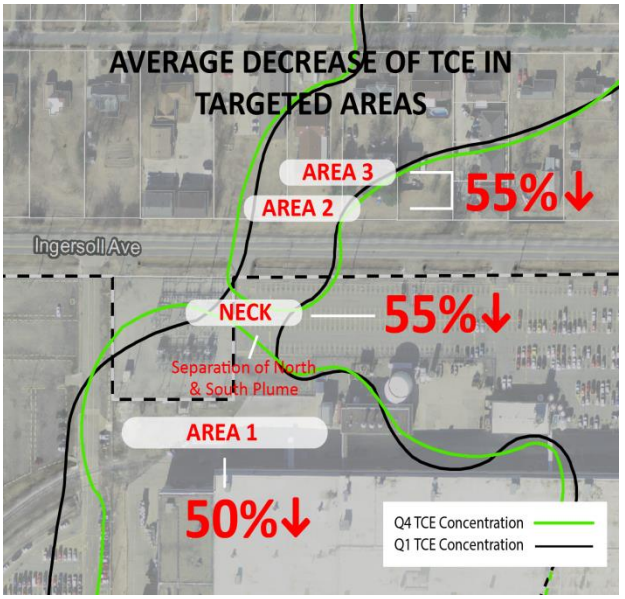
2. In addition to the requirements of the RADD, Whirlpool completed the following supplemental activities in 2014:
    a. Voluntary supplemental investigation beneath the manufacturing building;
    b. Voluntary supplemental ISCO treatments in the "neck area" of the plume;
    c. Additional delineation of Area 1;
    d. Voluntary supplemental targeted hot-spot soil removal in Area 1 through large-diameter borings and related soil removal. After soil removal, the large diameter borings were backfilled with limestone gravel and a clean soil cover to promote natural attenuation;
    e. Additional delineation activities in the northeast

corner of the facility, including the Boys and Girls Club;

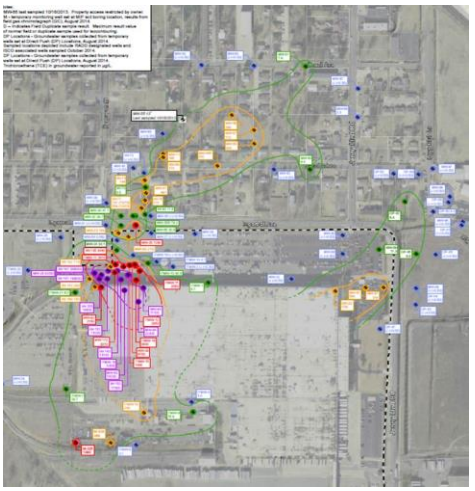
f. Surface water and sediment sampling;
g. Voluntary supplemental investigation of the entire site boundary; and
h. Sale of the warehouse distribution facility to Spartan Logistics in 2014.

II. Impacts, Results and Conclusions of 2014 Activities

1. Implementation of the Adaptive Remedy activities completed in targeted areas in 2014 resulted in the following:
    a. An approximate 55% reduction in TCE concentrations in the "neck area," located on the Whirlpool property in the parking area north of the northwest corner of the facility;
    b. An approximate 55% decrease in TCE concentrations in Areas 2 and 3 north of Ingersoll Avenue; and
    c. An approximate 50% decrease in TCE concentrations in Area 1 in (based on the 30-day ISCO monitoring event performed in early December).



2. Extensive data collected in 2014 indicated the following:
    a. No change in the prior determination that there is no health risk to area residents;
    b. Decreasing or stable TCE concentrations in 83% of the monitoring wells both on- and off-site;
    c. A separation of the plume in the neck area, signaling that TCE in Area 1 is not contributing to contamination beneath the neighborhood to the north;
    d. A small expansion of the plume boundary in the area of MW-61.
    e. There is no health risk to employees, visitors or workers at the Boys and Girls Club from the impacted groundwater near the northeast corner of the Whirlpool site, which only extends beneath a small corner of the undeveloped piece of the Boys and Girls club property that will be separated from the rest of the Club by the Ingersoll Avenue



Expansion project;

f. No health risk from vapor intrusion based on updated modeling and soil vapor measurements;
g. No evidence of TCE in the groundwater beyond the south or west boundaries of the Whirlpool property;
h. Monitored Natural Attenuation (MNA) is occurring via biological mechanisms in both on-site and off-site groundwater; and
i. Incidental historical releases of TCE from degreasing operations in and around the degreaser building off the northwest corner of the former manufacturing facility were the likely primary source of TCE found in soils in Area 1 and an associated linear drainage feature.

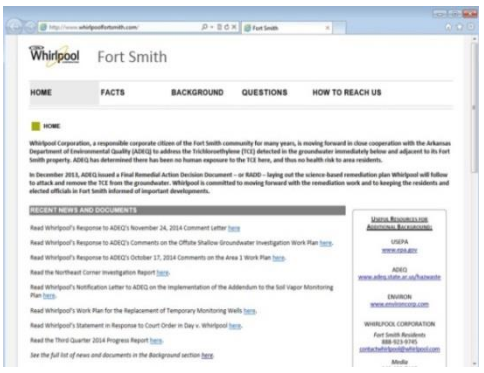
III. Property Redevelopment

In 2014, Whirlpool made significant progress toward the site's redevelopment.

The warehouse was sold to Spartan Logistics in September. Spartan is already generating new economic activity in the area and has indicated an intention to invest further in this property.

Whirlpool remains in discussions with multiple interested buyers for the remainder of the property. In light of the many attractive attributes of the property, including size, location and amenities of the 100-acre parcel, we remain confident in completing a transaction that will result in long-term and productive development of the parcel.

Additionally, land donations on Jenny Lind Road and Ingersoll Road were completed by Whirlpool to facilitate the ongoing road expansion projects that will help drive development in the neighborhood.



IV. Community Engagement

Whirlpool undertook a series of activities to keep residents of Fort Smith informed of important developments in 2014.

Whirlpool continues to regularly update the website www.whirlpoolfortsmith.com to provide the Fort Smith

community, elected officials and members of the press with information on important developments and extensive background materials, including all reports and data submitted to ADEQ related to this project.

Representatives from Whirlpool and ENVIRON participated in public meetings conducted by the City of Fort Smith on April 8, July 8, and October 14, where they provided updates on recent activities, outlined upcoming plans, and answered questions from elected officials. Members of the Whirlpool team also met individually with several community residents and maintained a 1-888-923-9745 hotline to answer questions from the community.

With the goal of reaching fair resolutions based on unique individual circumstances, Whirlpool continues to communicate directly with residents and with legal representatives of property owners who reside over the plume. Lawsuits have been filed on behalf of many residents and Whirlpool remains committed to respecting the legal process. Whirlpool remains hopeful that a fair and equitable resolution can be achieved by all parties.

V. Looking Forward: 2015

Whirlpool will continue to meet its commitments to the Fort Smith community in 2015 on all fronts.

Remediation activities will continue to move forward, driven by the Adaptive Remedy Approach that has been so successful to date. Activities in 2015 related to the 2013 RADD are anticipated to include:

1. Installation of the soil cover during the third quarter of 2015;
2. Installation of additional soil vapor monitoring points in the first quarter of 2015;
3. Completion of Quarterly Progress Reporting for the first, second, third and fourth quarters of 2015;
4. Continued monitoring of the effectiveness of ISCO and MNA for reduction of TCE concentrations in groundwater; and
5. Preparation and submittal of the Remedy Effectiveness Report to ADEQ on or before December 31, 2015.

Whirlpool is currently reviewing the proposed Revised RADD made public by ADEQ in December 2014 and intends to file public comments on the proposal. Whirlpool is committed to working constructively with ADEQ and the public to assess the extent, if any, to which further remedial actions are necessary or appropriate at the Whirlpool site. Whirlpool will continue to conduct extensive monitoring, share that data with ADEQ and the public, and incorporate that information into future planning as part of the Adaptive Remedy process.

Whirlpool will continue to move forward with efforts to reach a resolution with affected residents that is fair to all parties.

Finally, Whirlpool will continue efforts to achieve long-term redevelopment of the property to benefit the entire Fort Smith community.

VI. Conclusion

Through the hard work of ADEQ, the City of Fort Smith, and area residents, we have made remarkable progress since the 2013 RADD was signed just over one year ago, and are beginning to see the results of the ongoing work by all parties.

Whirlpool Corporation appreciates the leadership of ADEQ in providing the appropriate regulatory oversight to protect the environment and health and safety of the residents of Fort Smith, Arkansas. We also thank elected officials and staff of the City of Fort Smith who have continued to be a strong and clear voice on behalf of residents of the community.

The regulatory and political process is working when options, plans, and results are openly shared and sometimes differing perspectives are appropriately discussed. We look forward to continuing to work with everyone who has an interest in the successful resolution of this matter.

Sincerely,

Jeff Noel
Vice President, Whirlpool Corporation



2014 Remedial Action Effectiveness Report
Whirlpool Corporation
Fort Smith, Arkansas

Prepared for:
Whirlpool Corporation

Prepared by:
ENVIRON International Corporation
St. Louis, Missouri

Date:
January 2015

ENVIRON

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1 INTRODUCTION

On behalf of Whirlpool Corporation (Whirlpool), ENVIRON International Corporation (ENVIRON) has prepared this 2014 Remedial Action Effectiveness Report (Report) for the Fort Smith, Arkansas Site (Site). The Report presents a summary of the investigation and remediation activities performed in 2014. In addition, this Report provides an analysis of site characterization and remediation data for the Site generated since the 1989 discovery of chlorinated volatile organic compound (CVOC) contamination.

This report also outlines the remedial actions implemented pursuant to the December 27, 2013 Remedial Action Decision Document (RADD) and related Administrative Consent Order and the report addresses the effectiveness of these remedial actions through 2014. Pursuant to the RADD, in 2014, Whirlpool conducted three in-situ chemical oxidation (ISCO) events at multiple locations, placed institutional controls on designated portions of the Whirlpool property and conducted further monitoring and investigation of soil and groundwater conditions both onsite and offsite. In addition, Whirlpool voluntarily excavated and removed a limited volume of heavily TCE impacted soil from Area 1 onsite through the use of large diameter borings. An onsite soil cover required by the RADD in the vicinity of Area 1 is scheduled for placement later in 2015 pending removal of certain onsite injection wells and other encumbrances.

1.1 REPORT ORGANIZATION

The remaining portions of this Report are as follows:

- **Section 2: Physical Characteristics of the Site.** This section provides data regarding the topography and limits of the Site, in addition to data and information regarding the geology, hydrogeology and hydrology of the site.
- **Section 3: Site Characterization.** This section presents a description of the investigative activities, sampling events and data analyses that have been conducted for the Site through 2014.
- **Section 4: Nature and Distribution of Contamination.** This section presents historical data and recent data through 2014 to discuss sources of impact as well as the nature and extent of soil, groundwater and soil vapor impacts at the Site.
- **Section 5: Fate and Transport.** This section presents an updated discussion of the fate and transport of the contaminants documented to be present in the groundwater of the Site.
- **Section 6: Remedy Implementation.** This section presents an overview of the remedial actions that have taken place at the Site throughout 2014.
- **Section 7: Risk Assessment.** This section presents a summary of the Human Health Risk Assessment first established for the Site in 2012. This risk assessment has also been updated quarterly in conjunction with the quarterly monitoring reports in 2014.

- **Section 8: Summary and Conclusions.** This final section of the report summarizes the findings of the investigations and analyses conducted to date regarding the Site. Conclusions are presented regarding the effectiveness of the remedial action to date.

2 SITE SETTING

The Whirlpool Fort Smith facility is located at 6400 Jenny Lind Road on the south side of Fort Smith, Arkansas (Figure 2-1). The site formerly consisted of approximately 153 acres of which approximately 21 acres on the southwestern portion of the property were undeveloped vegetated areas. The developed portion of the property consists of the former manufacturing facility, a warehouse and ancillary buildings north of the former manufacturing building including the boiler room and water treatment plant (Figure 2-2). Concrete driveways and concrete and asphalt parking areas surround the structures. Whirlpool sold the warehouse and surrounding property on the southern portion of the site in late September 2014 to Spartan Logistics.

The site was first developed in 1961 by Norge Corporation as a refrigerator, icemaker and gas/air conditioning manufacturing facility. Whirlpool acquired the facility in 1966. The facility manufactured side-by-side household refrigerators, trash compactors and icemakers during Whirlpool's time of operations. Manufacturing operations ceased in 2013. Therefore, manufacturing operations occurred at the facility for more than 50 years.

Residential areas are located to the north and south of the property and commercial industrial properties are located to the east and west.

2.1 TOPOGRAPHY AND HYDROLOGY

The Whirlpool facility is situated near the crest of a low hill. The topography of the site gently slopes to the east-northeast along the northern portion of the property and to the south-southeast along the southern portion of the property. The elevation of the site as identified from the USGS 7.5 minute topographic quadrangle for Fort Smith, Arkansas ranges from approximately 470 feet above mean sea level (msl) along the northeast portion of the property to a high of approximately 480 feet msl along the southwest corner and south side of the building. The site is located outside the 100 year and 500 year floodplains.

Drainage ditches are located along Ingersoll Avenue on the north side of the site and along Jenny Lind Road on the east side of the Site. Surface water flow from precipitation at the site is generally divided. Surface water runoff and roof drain flow from the eastern half of the site generally flows toward the northeast corner of the facility (Outfall 001) where it enters the city storm sewer system under Jenny Lind Road and flows toward Mill Creek while the surface water runoff and roof drain flow from the western half of the site generally flows toward the west central portion of the property (Outfall 002) near the rail lines exiting the site at the intersection of Pierce Drive and Goodwin Street.

2.2 REGIONAL GEOLOGY

Fort Smith is located within the Arkansas River Valley physiographic region of the Interior Highlands Region of Arkansas. The Arkansas River Valley is a low-lying region surrounding the valley of the Arkansas River and its major tributaries and represents the northern extent of the

Ouachita orogenic (mountain building) system in Arkansas. Surface rocks in this region consist of a sequence of Pennsylvanian Period coal-bearing sandstones and shales that have been compressed into well-developed east-west trending open folds (anticlines and synclines) and faults primarily because of the orogenic event. The site is situated on the northwestern flank of the Massard Prairie Anticline.

2.3 SITE GEOLOGY

The unconsolidated surface materials at the site consists of stream deposited Quaternary age alluvium that ranges from approximately 25 to 35 feet in thickness. Underlying the alluvium is the Pennsylvanian Period McAlester Formation which consists primarily of gently dipping dark gray shales and siltstones with thin coal beds and is likely over 500 feet thick in the Fort Smith area (Hendricks, 1949)

A review of published geologic literature and data from investigation conducted at the site indicate the unconsolidated alluvium consists primarily of two units; a shallow fine-grained unit (Upper Fine-Grained Unit) and a coarse textured basal unit (Basal Transmissive Zone). The Upper Fine-Grained Unit consists primarily of recent age fine grained alluvial sediment. The Basal Transmissive Zone may be equivalent to the Pleistocene age Gerty Sand and consists of unconsolidated river terrace sand and gravel. Each unit is discussed in further detail in the following paragraphs.

Upper Fine-Grained Unit

The Upper Fine-Grained Unit at the site exhibits significant variations in texture from silt to sandy clay. The shallow portion of this unit (upper 4 feet) consists primarily of silty clay and silt. The central portion of this unit [from approximately 4 to 15 feet below ground surface (bgs)] generally consists of silty to sandy clay. This unit becomes characterized by thinly bedded silty clays and silts in offsite areas, primarily north of Jacobs Avenue (located approximately 300 feet north of the site property boundary) and east of MW-46R.

Within the Upper Fine-Grained Unit there are discontinuous thin zones of greater permeability that contain more silt and/or sand content. A zone of greater permeability at a depth ranging from approximately 4 feet to 7 feet bgs is prevalent, though not consistently present, north of the Whirlpool building and extends north into the residential areas. When present the zone is typically logged as moist or wet. A deeper shallow permeable zone at depths of approximately 9 to 12 feet was observed in some of the borings in the same areas, but it is not as prevalent as the shallower zone.

Typically, the lower portion of the Upper Fine-Grained Unit at depths greater than 15 feet bgs transitions to the sandy Basal Transmissive Zone discussed below.

Basal Transmissive Zone

The Basal Transmissive Zone can be generally subdivided into two primary units; the upper unit composed primarily of silty sand to sandy silt and the lower unit composed primarily of sands and gravels.

The upper unit of the Basal Transmissive Zone is composed primarily of silty sand to sandy silt grading to sandy gravel with depth. This upper "sand" unit is generally only present on site and ranges from 2 to 9 feet thick. The "sand" unit appears to pinch out just north of Ingersoll Avenue and re-appears in a narrow band that extends from RW-69 to MW-61 (Figure 2-3). Other than MW-61, the upper "sand" unit is absent in all the northern perimeter wells. A narrow band of the "sand" unit does extend to the east of the property beneath the Boys and Girls Club (Figure 2-3). The unit gradationally transitions into the lower unit of the Basal Transmissive Zone.

The lower unit of the Basal Transmissive Zone consists primarily of sand and gravel that is generally 4 to 7 feet thick onsite with variable amounts of clay and silt. This sand and gravel layer is present in the majority of the borings on site and it rests in an unconformable manner on weathered shale or on clay associated with weathered shale. Figure 2-4 depicts the thickness of the lower "gravel" unit. The thickest portions of this "gravel" unit are located onsite beneath the building and north from the northwest corner of Building extending to approximately Jacobs Avenue. This lower "gravel" unit thins rapidly to the north and northeast of the site where it is typically less than 3 feet thick. The "gravel" unit is completely absent in MW-58. There are pockets of a thicker gravel unit to the northeast, east and southwest. Approximately 8 feet of gravel is present in boundary well MW-66 located along Jenney Lind Road as well as in DP-40 on the Boys and Girls Club property and approximately 7 feet is present in property boundary boring DP-61 along the southwest property boundary.

Historical investigation reports previously prepared by another consultant (ERM) stated that the gravel-rich lower basal zone pinches out south of Brazil Avenue and west of Jenny Lind Road and that beyond this area to the north and northeast only discontinuous pockets of clay-rich gravel are present. These old ERM reports differentiate the clay-rich gravel (low permeability matrix) from the gravel zone that is present beneath and extends from the plant. However, based upon the ERM boring logs, as well as subsequently collected data, the "gravel" units both onsite and offsite are clay-rich and this matrix change appears to be gradational and inconsistent.

McAlester Formation

The upper portion of the McAlester Formation is typically silty, black to dark gray, fissile and micaceous shale. Both weathered shale and a thin veneer of friable and laminar bedded red-orange to gray-brown clay produced from the weathering of shale are frequently encountered in the transition zone above the unweathered shale bedrock. This transition zone typically grades into the black or dark gray shale of the massive McAlester Formation.

Based on the orientation of the Massard Prairie Anticline with respect to the site, the shale beneath the site would be expected to follow the regional dip which is generally to the

northwest. However, based on data from the investigations conducted at the site (not all borings went deep enough to encounter competent shale) the competent shale surface appears to slope to the east-southeast (Figure 2-5). There are isolated bedrock lows and highs present beneath the site and surrounding area. A bedrock trough, referred to as the "neck" area, trending roughly from north to south is present just east of the transformer substation and a low transitioning into a trough trending west to east is present along Ingersoll Avenue, extending toward the Boys and Girls Club. There are bedrock highs present at the northeast corner of the former manufacturing building and north along Jenny Lind Avenue between Jacobs and Brazil Avenues.

2.4 SITE HYDROGEOLOGY

The primary groundwater zone at the site is the Basal Transmissive Zone which is under semi-confined conditions. Groundwater under semi-confined conditions is partially confined by overlying soil layers of low permeability. Though rebound to a state of equilibrium is noted when the groundwater unit is pierced, recharge and discharge can still occur at very low rates through the overlying semi-confining layers.

Basal Transmissive Zone

Evaluation of potentiometric surface maps created from determination of groundwater elevations at the site indicates that there appear to be two distinct groundwater flow regimes at the site; the Northern Flow Regime and Southern Flow Regime. These Northern and Southern Flow Regimes are separated by a groundwater gradient divide that trends east to west just north of the former manufacturing building. The lateral hydraulic gradient, as an indication of the likely direction of groundwater flow, appears to be relatively consistent over time. As illustrated on Figure 2-6, the hydraulic gradient is near zero in the area that extends from the western portion of the north parking lot to just north of Jacobs Avenue. North of this point the hydraulic gradient is directed generally to the north/northeast. South of this flat area, the direction of the hydraulic gradient is to the southeast. The groundwater gauging data from the additional wells installed at the Boys and Girls Club to the east of the facility in late 2014 suggests that the groundwater divide disappears east of the facility and that groundwater flow direction in the Southern Flow Regime becomes more easterly along the eastern side of the Whirlpool property.

Historically both slug tests and pump test have been conducted on several wells for estimating hydraulic conductivity of the Basal Transmissive Zone. Independent of the testing method used, the calculated range of hydraulic conductivities has been relatively consistent. The historical range is from a maximum of 3.26E-02 centimeters per second (cm/sec) calculated for observation well MW-65 during a pump test using MW-35R as the pumping well to a minimum of 1.73E-04 cm/sec in ITMW-20 as calculated from results of a bail-down test. More recent slug tests conducted in early 2014 using a GeoProbe System® Pneumatic process produced hydraulic conductivity ranging from 8.8E-04 cm/sec to 3.4E-05 cm/sec and these results are more typical of hydraulic conductivities associated with silts, sandy silts and clayey sands.

Northern Flow Regime

The Northern Flow Regime extends from the groundwater divide across Ingersoll to the north and northeast. In the Northern Flow Regime, groundwater flows consistently toward the north-northeast without significant seasonal variations. The gradient is quite flat near the groundwater divide and extending north from the eastern portion of the north parking lot to just north of Jacobs Avenue (Figure 2-6). North of Jacobs Avenue the gradient increases to approximately 0.013 feet/foot between MW-68 and MW-61 based on 2014 quarterly groundwater data. There does not appear to be any significant seasonal variation in groundwater flow directions or gradient north of the site.

Southern Flow Regime

The Southern Flow Regime extends from the groundwater divide across the majority of the Whirlpool Facility. Groundwater flow is generally to the southeast. The hydraulic gradient is much more gradual to the south. The gradient in the Southern Flow Regime is approximately 0.002 feet/foot between wells ITMW-21 and ITMW-6 based on gauging data from 2014 quarterly sampling events.

Shallow Permeable Zone

There are discontinuous thin zones of greater permeability within the Upper Fine-Grained Unit. When present the zones of higher sand content are typically logged as moist or wet indicating the presence of perched water. The water present in these zones is perched, as the underlying soil of less permeability impedes the downward migration. It is highly likely that the water content in these zones is seasonal and due to subsurface utilities or other subsurface structures intercepting these shallow permeable zones. Due to the discontinuous nature of these zones or lenses of greater permeability, any groundwater movement would be minimal and localized.

3 SITE CHARACTERIZATION

A series of soil and groundwater investigations have been implemented over the years to characterize conditions at the site. It is believed that constituents in the soil and groundwater identified are the result of historical practices prior to 1980 associated with the use of trichloroethylene (TCE) for degreasing primarily within the former degreaser building located near the northwestern corner of the Whirlpool building.

3.1 HISTORICAL INVESTIGATIONS

Soil and groundwater studies were initiated in the late 1980's at the Site as part of an underground fuel storage tank (UST) removal project. The UST work did not find evidence of a petroleum hydrocarbon release from the UST, however, the analytical data did show the presence of TCE and other solvents in shallow groundwater not related to the UST. Several subsequent investigations have been conducted to characterize the nature and extent of TCE in soil and groundwater. The major investigations conducted over time at the facility are briefly described below (pilot remediation studies completed concurrent with site investigation activities are discussed further in Section 3.2):

- **1989.** CVOCs were discovered during the closure of USTs at the Whirlpool facility.
- **1989 to 1991:** Stratigraphic borings, hand auger sampling, installation of 21 monitoring wells (ITMW-1 through ITMW-21), slug testing at certain monitoring wells, completion of a pilot groundwater recovery test at ITMW-15 and periodic sampling of groundwater monitoring wells. The majority of these monitoring wells were located in the area of the former degreaser building near the northwest corner of the former manufacturing building.
- **1993 to 1997:** Electromagnetic offset logging (EOL) near the northwestern corner of the former manufacturing building, direct push soil borings, installation of MW-22 and MW-23, abandonment of ITMW-8 and periodic sampling of groundwater monitoring wells.
- **1999 to 2002:** Cone penetration testing (CPT), direct push soil borings, installation of 15 monitoring wells (MW-24 to MW-38) including three located immediately north of Ingersoll Avenue (MW-34, 35 and 36), in-situ chemical oxidation (ISCO) bench scale treatability study and pilot study in the immediate vicinity of MW-37, MW-38, ITMW-12 and ITMW-15 and semiannual groundwater monitoring well sampling.

  In September 2001, a field pilot test of ISCO was conducted that included the injection of approximately 394 gallons of a 4% potassium permanganate solution into seven small diameter (0.5-inch) temporary injection wells and one 2-inch diameter monitoring well in a 20 by 20 foot area around MW-11 located approximately 30 feet west of the former degreaser building near the northwestern corner of the former manufacturing building. Immediately prior to the field pilot test, two monitoring wells (MW-37 and MW-38) were installed within the 20 feet by 20 feet test area approximately 10 feet to the northwest and southwest MW-11, respectively. Monitoring well MW-38 was used an injection point (IP-8) during the pilot test.

The permanganate solution was injected at a flow rate that ranged from 0.15 to 1.5 gallons per minute (gpm) and an average pressure of 9 pounds per square inch (psi). The results of monitoring indicated that there was temporary reduction in TCE concentrations but significant rebound was observed within approximately six months which could be attributed to the migration of untreated water into the treatment zone. MW-37 and MW-38 located within the treatment zone have consistently exhibited high concentrations of TCE daughter products cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride (VC) following the pilot test.

- **2003 to 2009:** A series of investigations north of Ingersoll Avenue using direct push and membrane interface probe (MIP) technologies, installation of 21 monitoring wells (MW-39 to MW-43, MW-46, MW-50, MW-55 to MW-58, MW-60 to MW-63, MW-65 to MW-68, MW-70 and MW-71), installation of one large diameter remediation well (RW-69), installation of nine injection wells (IW-72 to IW-80), abandonment of monitoring wells MW-35 and MW-46 and installation of replacement wells MW-35R and MW-46R, ISCO pilot study north of Ingersoll Road with injection in April and July 2009 and typically semiannual groundwater monitoring well sampling.

  In 2009, as part of interim measures activities, two ISCO injection events were conducted and a pilot groundwater extraction system was operated in areas north of Ingersoll Avenue. These activities began with the installation of three monitoring wells (MW-68, MW-70 and MW-71), one 4-inch diameter extraction well (RW-69) and nine injection wells (IW-72 through IW-80). The newly installed monitoring wells and the extraction well were located north of Jacobs Avenue approximately 300 feet east of Ferguson Street. The injection wells were installed in a line approximately 300 feet in length extending from Ingersoll Avenue to the south to Jacobs Avenue to the north approximately 200 feet east of Ferguson Street.

  The initial injection completed in April 2009 consisted of the injection of 445 gallons of a sodium permanganate solution into five of the nine newly installed injection wells (IW-73, IW-74, IW-75, IW-78 and IW-79). This was followed by the second injection event in July 2009 when 720 gallons of sodium permanganate solution were injected into eight of the nine injection wells (no injection into IW-77). The permanganate solution was injected at pressures less than 5 psi. The results of monitoring indicated that the permanganate concentrations in the area of the injection wells persisted and did not migrate a significant distance from the injection points over the initial ten month monitoring period.

  Increased oxidation reduction potential (ORP) values between the injection events in 2009 were cited as evidence of a radius of influence for ISCO treatment in the range of 5 to 45 feet; that variation was consistent with lithological characterizations of the aquifer (i.e. wells in gravel-rich areas have larger radius of influence than wells in clay-rich areas). The ORP values measured in the vicinity of the treatment area in April 2009 were reported as negative in almost all wells monitored at that time; however, similar widespread negative ORP readings have not been measured prior to or

following that monitoring event. Permanganate and low TCE concentrations have persisted in certain injection wells and concentrations of TCE in nearby monitoring wells are generally lower than pre-injection levels.

- **2010 to 2012:** Pilot groundwater recovery test at RW-69 and semiannual groundwater monitoring well sampling. The pilot groundwater extraction test was conducted from November 2010 through February 2011. During this approximate four month period the extraction pump operated in RW-69 for a total of approximately 45 days at an average rate of 0.5 gpm. Based on monitoring results, the effective radius of the pumping was limited to 40 to 50 feet from the extraction well which was consistent with results of pumping tests conducted in May 2009 at RW-69. The monitoring results indicated that very limited drawdown was induced by the pumping activities and this was attributed to the relatively low transmissivity and limited saturated thickness of the aquifer in the area of the pilot test. Given the limited ability to induce a change in potentiometric gradient and logistical issues associated with operation of the extraction system, its future use in offsite residential areas was deemed impractical.

3.2 2013 – 2014 INVESTIGATIONS

As set forth below, ENVIRON conducted numerous investigation and characterization activities at the site throughout 2013 and 2014.

3.2.1 Investigation and Characterization (June 2013 through January 2014)

ENVIRON conducted investigation and characterization activities at the Site during four mobilization events (June 2013, September 2013, December 2013 and January 2014) including the following:

- In June 2013, five temporary monitoring wells (TMW-01 to TMW-05) were installed on Whirlpool property south of the former manufacturing building near the eastern, southern and western property boundaries (Figure 3-1). This investigation included the collection of soil and groundwater samples for volatile organic compounds (VOCs) analysis. The temporary wells were abandoned immediately following sampling.
- Both beneath the former manufacturing building and in the vicinity of its northwest corner, MIPs were advanced using direct push technology (DPT) to screen and log the relative concentration of VOCs with depth in soil. MIP profiling was conducted during September 2013, December 2013 and January 2014 events (Figure 3-2).
- Using DPT, soil and groundwater sampling was conducted during the December 2013 and January 2014 events to refine the understanding of the extent of COCs and confirm the results of MIP screening (Figure 3-3).
- Groundwater and saturated soil samples were collected during the January 2014 event and submitted for bench scale treatability testing to aid oxidant selection and determination of oxidant demand (Figure 3-3).

- Using DPT, a hydraulic profiling tool (HPT) was advanced during the January 2014 event. HPT logs the pressure and flow of water into the soil to estimate the formation permeability (Figure 3-3).
- A Pneumatic Slug Test (PST) was used to conduct slug test using temporary DPT well screens. These slug tests were conducted during the January 2014 event (Figure 3-3).

During the September 2013, December 2013 and January 2014 events, a combination of MIP/HPT/PST soil and groundwater sampling was completed at 145 locations in an area encompassing approximately 40 acres. Six of these locations were completed offsite north of Ingersoll Avenue. Slug testing was conducted at four onsite locations (SLUG-06, SLUG-08, SLUG-09, SLUG-10) and two offsite locations (SLUG-01 and SLUG-02) north of Ingersoll Avenue.

MIPs provide a continuous, semi-quantitative screening of soils. A description of MIPs was provided in the MIP Narrative (ENVIRON, 2014a). MIP screening consists of collecting vapors through a semi-permeable membrane mounted within a heated block on the MIP lead probe rod. As the probe is advanced, soils are heated to approximately 120ºC on contact with the heated block. As a result, VOCs diffuse along the induced concentration gradient across the membrane and are transferred via nitrogen carrier gas to the detectors at the ground surface. Two variations of MIP probes were deployed during the pre-design. The September event utilized three detectors: a photoionization detector (PID), a flame ionization detector (FID) and an electron capture device (ECD). The December 2013 and January 2014 events utilized PID, FID and ECD probes, as well as a halogen specific device (XSD). The August 2014 event (see Section 3.2.2) utilized PID, FID and ECD probes and performed low-level MIP screening. Of the four chemical detectors deployed, the ECD is the most sensitive to chlorinated compounds (e.g. TCE) and has the lowest detection limit. Accordingly, the discussion of MIP screening results for the site focuses on ECD responses as a screening indicator of TCE impacts.

An electrical conductivity (EC) detector was also used during each MIP event to provide an indication of soil particle size based on the electrical conductivity of the soils as the probe is advanced. In general, finer-grained clay and silt soils have much higher conductivities compared to sands and gravels, allowing for differentiation between the formations.

The HPT is a logging tool that measures the pressure required to inject water into the soil as the probe is advanced into the subsurface. This injection pressure log is an indicator of formation permeability. In addition to measurement of injection pressure, the HPT can also be used to measure hydrostatic pressure under a zero-flow condition and provide an estimate of hydraulic permeability of the soils. Like the MIP, the HPT provides a continuous data stream representing the total length of the borehole. The HPT also utilizes the EC detector, providing both estimates of formation permeability (HPT) and soil size (EC).

3.2.2 Investigation and Characterization (February through December 2014)

ENVIRON conducted many different investigation and characterization activities at the Site during 2014. These activities include the following:

- In February and March, 31 2 inch diameter injection wells (IW-101 through IW-131) were installed in three arrays in preparation for the pending tracer and initial ISCO site work.
- During March, baseline bromide sampling was completed at wells IW-101, IW-103, IW-105, IW-107, IW-109 and IW-111. A bromide tracer application of approximately 600 gallons was completed on March 12, 2014 and post application monitoring was performed through March 23, 2014.
- In March and April, VOC groundwater samples were collected from injection area wells for baseline and 30 day monitoring of the initial ISCO injection. IW-101 through IW-131 were sampled for baseline monitoring in March and a subset of these wells were sampled for 30 day effectiveness monitoring in April.
- During May, six monitoring wells (MW-81 through MW-86) were installed in and around the target second ISCO injection areas. During installation of the wells, soil samples were collected and submitted for VOC analysis.
- Also in May, ISCO monitoring was completed with the collection of 15 VOC groundwater samples from IW-101, 106, 108, 109, 115, 118 and 125 through 131). Seventy temporary injection points were installed to facilitate injection of chemical oxidant for the second ISCO event. Twenty of the points were installed within injection array 1 (“neck” area), 40 within injection array 2 (Areas 2 and 3) and ten within Area 1. Baseline ISCO monitoring prior to the second injection was completed at newly installed monitoring wells MW-81 through MW-86 as well as MW-23, MW-24, IW-78 and IW-79. Groundwater samples were collected for VOCs as well as field parameters.
- During June, 15 additional soil borings (DP-23 through DP-37) were completed along a former linear drainage feature identified in a 1971 historical aerial photograph. The drainage feature extends from the former degreaser building to the west-southwest toward the former rail spur on the north side of the former Whirlpool manufacturing building. The eastern portions of the former linear drainage feature are located north of Area 1 and the western portions are located within the northwestern corner of Area 1. The borings, completed to approximately 30 feet bgs, were positioned at the eastern extent of the drainage feature near MW-37 and continued along the feature at approximately 60 foot intervals moving to the west. This investigation included the collection of soil samples at various depths for VOC analysis and the borings were abandoned immediately following sampling activities.
- During June, five monitoring wells (MW-87 through MW-91) were installed near the northeast corner of the former manufacturing building. Soil samples were collected during the installation of the wells and no TCE soil contamination was identified. These wells were installed to supplement the data from interior MIPs and soil probes previously performed. Groundwater samples for VOC analysis were also collected from these wells after well development was completed.

- In July, nine VOC groundwater samples were collected from IW-77, IW-101, IW-115, MW-23 through MW-25, MW-81, MW-82 and MW-85 for ISCO monitoring.
- During August 2014, MIPs for screening soil and groundwater were completed to investigate the Whirlpool property boundary and areas north and east of the Whirlpool property, including the Boys and Girls club property located northeast of the Whirlpool property. Soil and groundwater samples were collected for laboratory analysis. During this investigation 58 MIPs (M-300 through M-357) and 24 soil probes (DP-38 through DP-62) were completed facilitating collection of 72 soil samples and 21 groundwater samples. Twenty-two additional groundwater samples were also field analyzed for VOCs. The investigation identified groundwater concentrations slightly above MCLs at several offsite locations to the northeast of the Whirlpool property, including the Boys and Girls Club property. No TCE soil contamination was identified at offsite locations during this investigation.
- Sediment and surface water samples were collected at the request of the Arkansas Department of Environmental Quality (ADEQ) in August from the permitted outfalls at the Whirlpool property. Surface water samples were collected from the manhole located near the northeast boundary (Outfall 001) and near west central site boundary (Outfall 002). Eight sediment samples (SED-01 through SED-08) consisting of three sediment samples from the ditch immediately south of the Boys and Girls Club draining towards Mill Creek and five sediment samples from the drainage features on the west side of the site were collected and analyzed for VOCs. No TCE or other chlorinated solvents were found in the surface water or sediment samples.
- During September, 14 VOC groundwater samples were collected from IW-78, IW-79, IW-101, IW-115, IW-127, MW-23, MW-24 and MW-81 through MW-86 for Phase II ISCO monitoring.
- In late September and early October, five additional monitoring wells (MW-92 through MW-95 and MW-172) were installed to support monitoring efforts for the third ISCO injection. During the same timeframe 40 additional permanent injection wells (IW-132 through IW-171) and 31 temporary injection points were installed on an approximate 25 foot grid spacing through Area 1 and the linear drainage feature.
- In October, permanent wells (MW-96 through MW-99) were installed on the Boys and Girls Club property. These wells were sampled for VOCs for inclusion in the Fourth Quarter Groundwater Monitoring Report.
- During October, 16 monitoring and injection wells in Area 1 were sampled for VOC analysis of groundwater for baseline monitoring prior to the third ISCO injection.
- During December, 21 groundwater samples were collected and analyzed for VOCs to evaluate the third ISCO injection efforts.
- In December, five investigative borings were completed for soil lithology according to USGS classification in preparation for placement of soil vapor points and shallow groundwater wells in January 2015. Four borings were located at offsite locations north of the site and one boring was located onsite.

3.3 GROUNDWATER MONITORING PROGRAM

Periodic groundwater monitoring activities at the site began in 1989. Semiannual groundwater monitoring was started in March 2000 and continued through 2013. Whirlpool implemented the voluntary semiannual groundwater sampling program to monitor groundwater conditions at the Site as part of its groundwater management program. The semiannual monitoring events have expanded over time to incorporate additional monitoring wells installed during various investigation activities.

The groundwater monitoring program frequency was revised to quarterly starting in 2014 in accordance with the RADD. The quarterly groundwater monitoring program at the Site currently includes sampling of 33 onsite monitoring wells and 23 offsite monitoring wells. During each monitoring event the water levels in all monitoring wells are gauged to provide data for evaluating groundwater flow conditions. Locations of the wells that are part of the quarterly monitoring program defined in the RADD are shown in Figure 3-4.

3.4 SOIL GAS SAMPLING/VAPOR INTRUSION EVALUATION

In accordance with the RADD, ENVIRON evaluated the potential for vapor intrusion into buildings in the neighborhood north of Ingersoll Avenue on a quarterly basis using data collected from groundwater monitoring wells and soil vapor monitoring points. These data were used to provide multiple lines of evidence to assess whether a vapor intrusion pathway from groundwater exists at residential properties. This section summarizes the installation of soil vapor monitoring points in 2012 and 2014, as well as the sample collection methods and procedures used.

3.4.1 Installation and Monitoring of Soil Vapor Monitoring Points

Whirlpool installed four soil vapor monitoring points identified in the RADD in May 2012 (SV-01S, SV-02D, SV-03S and SV-04D) and collected soil vapor data from them as an additional line of evidence to complement a modeling analysis of the potential for vapor intrusion from groundwater. These soil vapor data and the vapor intrusion modeling results were presented in the RRMP and the RADD. Soil gas sampling locations SV-01S and SV-02D were located south of Ingersoll Avenue (near MW-33) and soil gas sampling locations SV-03S and SV-04D were located in the neighborhood (adjacent to MW-70).

The screens for the 2012 soil vapor monitoring points (SV-01S, SV-02D, SV-03S and SV-04D) filled with water prior to the Fourth Quarter 2013 monitoring event. Whirlpool replaced these monitoring points with VP-2S/D and VP-1S/D during the First Quarter 2014 monitoring event, respectively, as described in the First Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report[1].

The Final Remedy Work Plan (ENVIRON 2014b) included a soil vapor monitoring point at 1410 Jacobs Avenue. During the First Quarter 2014 monitoring event, Whirlpool attempted to install

[1] Attachment B of the First Quarter 2014 Progress Report (ENVIRON May 2014).

monitoring points VP-3 and VP-4 at this address (shown on Figure 3-5). As explained in the First Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report, the attempt at VP-3 encountered very moist soil at 3 feet bgs and water entered the borehole at 4 feet bgs. At VP-4, very moist to wet soil was encountered starting at 2.5 feet bgs. Because of the wet shallow soil, no vapor monitoring point was installed at either VP-3 or VP-4.

The Final Remedial Work Plan also called for vapor monitoring points near MW-46R and MW-56 (VP-5 and VP-6, respectively). VP-5 could not be installed at the planned location because multiple underground utilities were encountered in the road right-of-way.VP-6 could not be installed because the identified property owner did not grant permission. In trying to avoid underground utilities along the road right-of-way, Whirlpool requested permission from owners of nearby properties to install VP-5 and VP-6. Whirlpool has been denied access to these properties.

Whirlpool has endeavored to work with legal counsel for the private property owners north and south of Jacobs Avenue throughout 2014 to gain access to perform additional investigation. Recently, Whirlpool has gained access to select properties for performance of soil vapor monitoring (see Section 3.2.2 for discussion of initial borings). This additional investigation and monitoring will be performed in accordance with the Addendum to the Soil Vapor Monitoring Plan dated October 2, 2014 (Addendum) (ENVIRON, 2014c). This additional investigation will be performed to obtain data as additional lines of evidence in determining if a vapor intrusion pathway from groundwater exists at respective properties.

3.4.2 Soil Gas Sampling Events

In 2014, soil vapor sampling was attempted during each of the four quarterly sampling events. A summary of the soil vapor sampling completed in 2014 is presented in Table 4-4.

The field procedures used during the soil vapor sampling events in 2014 were consistent with the methodology described in the First Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report (ENVIRON 2014d) and the modifications discussed in the Second Quarter Soil Vapor Monitoring/Vapor Intrusion Report (ENVIRON 2014e), except the sampling attempt during the Fourth Quarter was not preceded by at least five consecutive days with less than 0.1 inch of rain. Soil vapor sampling for the Fourth Quarter was attempted at the end of the two week sampling event after it had rained three of the five days prior to the attempted sampling date (no rain occurred on the sampling date).

Soil vapor samples could not be collected from certain locations during the monitoring events in 2014 because water was present in the monitoring points and this water could not be purged from the sampling train for the respective soil vapor monitoring points. No water was present in the sampling train for the deep port at location VP-1, except in July and collection of a soil vapor sample was attempted. However, despite the use of sustained vacuum at this location, collection of a soil vapor sample was not possible. Consistent with the modifications to the sampling plan proposed in the Second Quarter Soil Vapor Monitoring/Vapor Intrusion Report (ENVIRON, 2014e), water samples were collected from the soil vapor monitoring points where

possible during the Third and Fourth Quarters. Table 4-4 summarizes the matrices encountered at the soil vapor monitoring points and the types of samples that could be collected in 2014.

4 NATURE AND DISTRIBUTION OF IMPACT

This section summarizes the nature and distribution of contaminants based on both the data collected in 2013 and 2014 (described above) and the historical data collected during prior site investigations on both the former manufacturing building site and offsite. Analytical data are summarized in tables attached to this report and raw data packages have been included as Appendices to the Quarterly Progress Reports.

4.1 SOURCES OF IMPACT

Three sources of groundwater impact from TCE have been identified at the site. The primary source appears to be an area of incidental TCE release in the vicinity of the degreaser building (Area 1) and extending along a linear drainage feature (identified in a 1971 historical aerial photograph) running from the degreaser building and draining to the west southwest toward the former rail spur on the north side of the former manufacturing building. Two other areas have also been identified where TCE impacts are present in groundwater, although TCE impacts in these areas are not as substantial or extensive as the impacts in the vicinity of the degreaser building and trench. The first of these two lesser source areas is located near the northeast exterior corner of the former manufacturing building and the second is located southwest of the former manufacturing building identified based on field gas chromatograph results. Each is discussed in some detail in the following paragraphs.

Northwest Corner

The former degreaser building is a small building located near the former manufacturing building and west of the boiler house. The use of TCE as a solvent for degreasing operations in the building dates back to approximately 1967 and was discontinued in the mid 1980's. Based on verbal reports from former workers, the degreasing equipment consisted of a tank and a parts rack. The degreasing operations involved placing parts into the parts rack positioned over the tank. The TCE tank was then heated creating a TCE vapor in the area where the parts were placed. Following degreasing activities, the vapor was condensed and returned to the tank below the parts rack. The former degreaser building has not been used since the mid 1980's when degreasing activities ceased.

It is suspected that incidental spills and releases from these former degreasing operations resulted in the impact to both soil and groundwater at the northwest corner of the site.

Northeast Corner

Site investigations have not identified the operations or activities that likely resulted in the presence of TCE in groundwater at the northeast exterior corner of the former manufacturing building. No soil impact from TCE has been identified in this area. Laboratory analytical data indicates only groundwater impact and MIP data collected from the northeast corner area shows elevated responses at depths corresponding to the depth of the Basal Transmissive Zone. The highest groundwater concentration [594 microgram per liter (µg/L)] was found in MW-87 located

outside of the building. The interior and exterior MIP data, groundwater monitoring data from MW-22 and comparison of relative TCE concentrations in soil and groundwater from the northeast corner and northwest corner demonstrate a separation of this source area from the Northwest Corner source (Figure 4-5).

It appears that the source identified in the northeast corner is only present at depth and associated with a groundwater impact.

Southwest Corner

Field gas chromatograph results from the August 2014 Property Boundary Report (ENVIRON, 2014f) indicated the potential for another source of TCE impact to groundwater southwest of the former manufacturing building in the former boneyard area. MIPs advanced in this area (M-325 and M-329) exhibited larger ECD responses as compared to other MIPs advanced in the southwest corner area as a whole. The largest ECD response in this area was 1.0 µV x 10^7 at M-329 at approximately 32 feet bgs. Groundwater samples were collected from borings performed at M-325 and M-329 and these groundwater samples contained TCE at the following concentrations: M-325 at 1,390 µg/L and M-329 at 368 µg/L. The groundwater samples were collected at depths of 33 and 32 feet bgs, respectively. In both MIPs, ECD responses did not indicate potential impact in soil or groundwater at shallower depths.

The potential source identified in the southwest corner is present at depth and associated with a groundwater impact. No evidence of an impact to soil has been identified to date in this area.

4.2 VADOSE ZONE SOILS

The impact to the Vadose Zone (the Upper Fine-Grained soil Unit defined in Section 2.3) appears to be limited to the northwest corner outside the former manufacturing building (also defined as Area 1 in the RADD) and isolated areas within the former manufacturing building footprint.

The primary source of TCE identified in the Vadose Zone appears to be related to the former linear drainage feature that began near the former degreaser building. The eastern portions of the former linear drainage feature are located north of Area 1 identified in the RADD and the western portions are located within the northwestern corner of Area 1 while the western terminus of the former linear drainage feature is located west of Area 1. The MIP screening data and results of subsequent soil sampling conducted during the Area 1 Investigation and installation of injection wells suggest the contaminated soils are present in a linear manner associated with the former drainage feature and the vertical profile of impact extends throughout the Vadose Zone soil profile and into the underlying saturated Basal Transmissive Zone (Figures 4-1 and 4-2). Soil boring logs from the area indicate that Vadose Zone soils encountered from approximately 5 to 15 feet at wells ITMW-11, MW-37 and MW-25 and soil borings ERM-7 and ERM-8 located along the alignment of the former linear drainage feature exhibited indications of VOC contamination including odors and elevated PID readings.

Additional Area 1 soil investigation field activities were completed during the week of June 23, 2014. During this investigation, 15 soil borings were completed to further characterize Vadose Zone and saturated soil conditions in the Basal Transmissive Zone (Appendix E, Area 1 Soil Investigation Summary Report, Whirlpool Fort Smith Second Quarter 2014 (Area 1 Report) (ENVIRON, 2014g). The borings were located along the former linear drainage feature described above.

Analytical results for soil samples collected from DPT borings advanced in the area confirm the presence of elevated concentrations of TCE in the clay of the Upper Fine-Grained Unit. The highest TCE concentrations were identified in DP-07 located approximately 100 feet west of the former degreaser building. TCE was present at 270 milligrams per kilograms (mg/kg) at 5.5 to 6 feet bgs and 200 mg/kg at 12.5 to 13 feet bgs in DP-07. All TCE data from the soil samples collected from the DPT borings advanced by ENVIRON in 2013/2014, offsite soil borings advanced by ENVIRON in December 2014 as well as ERM soil data from DPTs advanced in 1999 are summarized on Table 4-1. East to west and north to south cross-sections across this area that show the distribution of contaminants in the soil are provided in Figures 4-3 and 4-4.

Soil analytical results for TCE at Area 1 and along the linear drainage feature are mapped on Figures 4-7 through 4-9. TCE concentrations and lithologic profiles are illustrated in three cross-sections that are roughly parallel to the former linear drainage feature with cross-section D-D' to the north, cross-section E-E' along the centerline and cross-section F-F' to the south. Similar to the MIP ECD results, the TCE concentrations in Vadose Zone soils are highest near the centerline of the former linear drainage feature (each of the borings along the centerline cross-section has at least two samples with TCE concentrations greater than 10 mg/kg) and decrease to the north and south with the lowest concentrations along the southern cross-section. TCE concentrations in both the Vadose Zone soils and saturated soil in the Basal Transmissive Zone were lower in borings located near the western end of the former linear drainage feature and west of Area 1. TCE concentrations in soil exhibit slightly increasing trends with depth in borings to the north and south of the former linear drainage feature. TCE concentrations generally decrease with depth in the borings along the centerline of the former linear drainage feature except at MW-86 and DP-08 where TCE concentrations are higher in saturated soil in the Basal Transmissive Zone. The TCE concentration in a saturated soil sample at MW-86 was 137 mg/kg at a depth of 26.25 feet and the concentration in a saturated soil sample at DP-08 was 3,300 mg/kg at a depth of 18.75 feet.

Five additional monitoring wells (MW-92 through MW-95 and MW-172) were installed in September/October 2014 to supplement existing Area 1 ISCO monitoring wells. One soil sample was collected from every five foot depth interval (i.e. 0-5 feet, 5-10 feet, 10-15 feet, etc.) during well installation. Vadose Zone soil samples exceeded the RADD RAL of 0.129 mg/kg at MW-92 (0.364 mg/kg) and MW-172 (0.288 mg/kg) at 14 feet bgs. All other samples exceeding the RAL were collected from saturated zone soil (generally at depths between 20 and 30 feet bgs). It should be noted that Malcolm Pirnie also collected soil samples from three borings located in the area of the former degreaser and linear drainage feature in 1996 and the analytical results for TCE were less than 1 mg/kg.

Isolated Areas within Building Footprint

Based on MIP data taken from areas underneath the former manufacturing building, two isolated areas of elevated TCE (based on the ECD response – Figures 4-2, 4-5, 4-6) were identified in the Vadose Zone soil. In two of the three areas an offset DPT was advanced to collect soil samples for laboratory analysis. The results are briefly discussed below:

- M-69 is located beneath the floor of the former manufacturing building in the northwest portion (1975 addition) of the plant where steel storage activities were previously conducted. An offset DPT (DP-14) was advanced and a sample was collected from the depths with the greatest ECD responses (15.5 to 16 feet). The analytical result for TCE was 0.63 mg/kg.
- M-48 is located beneath the floor of the former manufacturing building in the southwest portion (1984 addition) of the plant. Former activities in this area are not known and no DPT boring was advanced in this area. However, based upon the ECD response it is likely that the analytical result would be similar to those obtained at DP-12 (0.84 mg/kg at 11.5 to 12 feet) and DP-14.

In August 2014, three additional DP borings DP-54, DP-55 and DP-56 were completed within the former manufacturing building footprint to investigate shallow ECD responses detected at M-86, M-87 and M-100, respectively [Property Boundary Report, Attachment D, Volume 2, Third Quarter 2014 Progress Report (ENVIRON, 2014f)]. At sample location DP-55 TCE exceeded the RAL of 0.129 mg/kg in samples collected at 4 feet bgs (0.6 mg/kg), 8 feet bgs (0.973 mg/kg) and 13 feet bgs (0.388 mg/kg). TCE concentrations in soil samples collected at 27 and 31 feet bgs in DP-55 were less than the RAL as were all TCE concentrations in soil samples from DP-54 and DP-56.

Southwest Corner

Eight MIPs were completed at locations M-325, M-329, M-330, M-341, M-348 through 351 and M-356 (as shown on Figure 1 of the Property Boundary Report, ENVIRON, 2014f) at the southwest corner of the former manufacturing building property. Most MIP screening results indicated no or very little response on the ECD. To the extent that ECD responses were noted in the upper 1 to 2 feet at many MIP locations, these responses were an artifact of the screening instrumentation. At sample location M-348/DP-62 the ECD response was 7.5 µV x 10^5 at 1 foot bgs and the soil sample analytical result was non-detect. The result above provides laboratory confirmation of the absence of VOC impact in shallow soil samples where ECD responses occurred.

Northeast Corner and Property Boundary Investigations

During the Northeast Corner and Boys and Girl Club investigation (ENVIRON, 2014h), no TCE was detected in any of the 44 soil samples collected. Twenty MIPs were performed at the northeast corner of the former manufacturing building property and on the City of Fort Smith and Boys and Girls Club properties. These 20 MIPs include: M-300, M-301, M-304, M-312 through

M-319, M-326A through M-328, M-331 through M-333 and M-353 through M-355. The soil probes performed for the northeast corner and City of Fort Smith and Boys and Girls Club properties include DP-40 through DP-53. Based upon the results of this investigation and the results described in the Northeast Corner Investigation Report (ENVIRON, 2014h) no TCE or other VOCs were detected in soil.

4.3 GROUNDWATER

The Basal Transmissive Zone is the primary groundwater unit at the site. Potentiometric surface mapping indicates two distinct groundwater flow regimes at the site; the northern flow regime and southern flow regime. These northern and southern flow regimes are separated by a groundwater gradient divide that trends east to west just north of the facility building. The hydraulic gradient is near zero in the area that extends from the western portion of the north parking lot to just north of Jacobs Avenue. North of this point the hydraulic gradient is directed generally to the north/northeast. South of this flat area, the direction of the hydraulic gradient is to the south, southeast. Groundwater data from new wells installed east of the facility in late 2014 suggests the groundwater divide disappears east of the facility and that groundwater flow direction in the southern flow regime becomes more easterly along the eastern side of the Whirlpool property.

Three potential sources for TCE in groundwater have been identified at the site:

- The source area identified as Area 1 and the linear drainage feature near the northwest corner of the former manufacturing building. This source area has resulted in the presence of TCE in groundwater south of Area 1. In addition, this area likely historically contributed to groundwater contamination to the north (migration of impact to the north is presumed to have occurred historically since no current data indicates that impacts in Area 1 contribute to the north plume);
- A source of groundwater contamination identified at the northeast, exterior corner of the Whirlpool building; and
- A potential source of groundwater contamination southwest of the Whirlpool building identified based on field gas chromatograph results.

Analytical data from the monitoring well network indicate the majority of the TCE in affected groundwater originated in the vicinity of the Area 1/linear drainage feature source area. Shallow soil impacts are present near the former vapor degreaser and contaminated soils are present in association with the former drainage feature. The vertical profile of soil impact extends through the Vadose Zone soil profile and into the underlying saturated Basal Transmissive Zone.

During the 2014 Fourth Quarter groundwater monitoring event, the maximum onsite groundwater TCE concentration of 42,500 µg/L was detected in MW-25, located at the western extent of the impacted area adjacent the drainage feature(higher concentrations of TCE were detected in groundwater during baseline sampling performed for injection wells in Area 1 prior to the third ISCO injection event). The concentrations of the daughter products (cis-1,2-DCE and 1,1-DCE) are also highest in the wells in this area. The highest concentration of VC was also

identified at MW-25. A TCE isoconcentration map depicting fourth quarter results is provided in Figure 4-10, an updated isoconcentration map including data collected in December 2014 is provided in Figure 4-11 and the historical analytical data is presented in Table 5-1.

The extent of affected groundwater to the south is limited to the Whirlpool property. Analytical data from boundary investigation soil borings and existing wells to the south indicate that impacted groundwater with TCE concentrations above MCLs extends less than 600 feet south of the south wall of the former manufacturing building.

The TCE plume in groundwater extends approximately 1,000 feet north of the site property boundary. Migration of contaminants in groundwater north of the site appears to be effected by a number of geologic and hydrogeologic factors including: (a) the flat potentiometric surface immediately north of the site, (b) the absence of an upper "sand" unit and (c) the thinning of the lower "gravel" unit of the Basal Transmissive Zone. The upper "sand" unit is absent in the majority of wells and soil borings north of Jacobs Avenue; therefore, the lower "gravel" portion of the Basal Transmissive Zone appears to be the controlling factor with regard to distribution of the plume north of the site.

At the northeast corner of the former manufacturing building, the potentiometric surface gradient is to the east/northeast. The shallow soils consist primarily of clay. The Basal Transmissive Zone is not present at all locations investigated at the northeast corner. However, a few pockets or seams of clayey gravel are present and have been identified as the Basal Transmissive Zone. TCE has been detected in groundwater within these areas identified as the Basal Transmissive Zone. The most elevated TCE level in this area is MW-87 at 594 µg/L. With the exception of MW-89, no TCE was detected in groundwater at locations where the Basal Transmissive Zone was absent.

In order to assess the relative distribution of TCE within the north groundwater plume, an estimate of the quantity of TCE was calculated based on the following assumptions:

- Aerial extent of the plume is 500,000 square feet (ft^2).
- Average saturated thickness of the north portion of the aquifer of 3.7 feet.
- Porosity of 0.40.
- Estimated average minimum concentrations and mass estimates for respective sections of the plume were calculated based on TCE concentrations of 5, 100 and 1,000 µg/L. Maximum average mass estimates were calculated based on 100, 1,000 and 1,500 µg/L.
- Specific gravity for TCE of 1.46.

Given these assumptions, the quantity of TCE in groundwater in the north plume ranges from less than one gallon up to approximately two gallons of TCE.

An estimate of the quantity of TCE in the south plume was calculated based on the following assumptions:

- Aerial extent of the plume is 900,000 ft^2.
- Average saturated thickness of the north portion of the aquifer of 8.3 feet.
- Porosity of 0.40.
- Estimated average minimum concentrations and mass estimates for respective sections of the plume were calculated based on TCE concentrations of 5, 100 and 1,000 µg/L. Maximum average mass estimates were calculated based on 100, 1,000 and 1,500 µg/L.
- Specific gravity for TCE of 1.46.

Given these assumptions, the quantity of TCE in groundwater in the south plume ranges from approximately 2 to 8 gallons of TCE.

An estimate of the quantity of TCE in the northeast corner plume was calculated based on the following assumptions:

- Aerial extent of the plume is 257,000 ft^2.
- Average saturated thickness of the north portion of the aquifer of 4.4 feet.
- Porosity of 0.40.
- Estimated average minimum concentrations and mass estimates for respective sections of the plume were calculated based on TCE concentrations of 5, 100 and 1,000 µg/L. Maximum average mass estimates were calculated based on 100, 1,000 and 1,500 µg/L.
- Specific gravity for TCE of 1.46.

Given these assumptions, the quantity of TCE in groundwater in the northeast plume ranges from less than one tenth of gallon to less than 1 gallon of TCE. The results of the calculations are detailed in Tables 4-2 and 4-3.

4.4 SOIL VAPOR

As discussed in the 2014 Quarterly Groundwater Monitoring Reports, concentrations of TCE and other VOCs in groundwater are generally either stable or declining, particularly in areas that have been subjected to ISCO treatment. Moreover, VOC concentrations in groundwater from MW-71 and MW-33 in the vicinity of the soil vapor monitoring points (VP-1 and VP-2) have not changed significantly since 2012, when the soil vapor modeling was first conducted. Similarly, as discussed in the First and Second Quarter 2014 Soil Vapor Monitoring and Vapor Intrusion Reports (ENVIRON, 2014d and e), soil vapor concentrations measured in 2014 were comparable to those from the May 2012 event. The data for groundwater, soil vapor and water from the vapor monitoring points for each quarter were presented and evaluated in the corresponding Quarterly Progress Reports.

The potential for significant vapor intrusion from groundwater into residences in the neighborhood was evaluated following the approach in Section 6.5.2 of the ADEQ-approved RRMP and the risk estimates were compared to ADEQ's risk management limits of 10^{-5} and 1 for cumulative cancer risk and non-cancer HI, respectively. As summarized in Table 4-6, the cancer risk and non-cancer HI are below ADEQ's limits based on the maximum detected concentrations among groundwater monitoring wells that were sampled in the neighborhood during 2014.

Conservative risk estimates based on the detected concentrations in soil vapor, collected during the First and Second Quarters in 2014, were used to confirm the results of the groundwater vapor intrusion calculations following the methodology and the analytical approach discussed in Section 6.8.2 of the RRMP. As summarized in Table 4-5, the risk estimates for detected concentrations in soil vapor at VP-1 are lower than those for groundwater from MW-71. The risk estimates for detected concentrations in soil vapor at VP-2 are also lower than those for groundwater from MW-33. All risk estimates are below ADEQ's risk management limits, confirming that there does not appear to be an unacceptable health risk from soil vapor intrusion.

Because soil vapor samples could not be collected during the Third and Fourth Quarters 2014, water samples were collected from the soil vapor monitoring ports. These water samples were used to provide another line of evidence regarding the potential for vapor intrusion risks, using the same approach as was used for calculating soil vapor intrusion from groundwater (described in Section 6.5.2 of the ADEQ-approved RRMP). As summarized in Table 4-6, the cumulative cancer risk and HI estimates for detected concentrations in shallow water from the vapor monitoring ports are no more than 1/20th of those based on groundwater data from the corresponding monitoring wells. All risk estimates are below ADEQ's risk management limits.

Consistent with the results discussed in Section 6.8.2 of the RRMP, measured groundwater concentrations are not expected to result in the potential for significant vapor intrusion. Further, the risk estimates for both the measured soil vapor concentrations and the water in the soil vapor monitoring ports indicate that the modeling approach used to calculate vapor intrusion risks from groundwater is overly conservative and that the actual vapor intrusion risk is lower than that predicted by the model.

5 FATE AND TRANSPORT

Incidental releases of TCE from former TCE degreasing operations near the northwest corner of the former manufacturing building have resulted in soil contamination in the vicinity of Area 1 and the drainage trench and groundwater contamination to the south of this primary source area. In addition, because historical groundwater flow regimes may have been different than current flow regimes, this source area likely contributed to groundwater impact to the north beyond the property boundary.

A separate source of TCE in groundwater was identified near the northeast exterior corner of the former manufacturing building. Although the historical cause of contamination in this area has not been determined, TCE impacts have been delineated and the impacts appear to be limited, making further investigation unnecessary.

A third source of TCE impacts to groundwater was identified based on field gas chromatograph results south of the southwest corner of the Whirlpool building. Based on MIP data and confirmatory field soil samples, soils in this area do not appear to be impacted. Given the limited nature of the groundwater impact in this area and the extensive MIP and other data already collected, further investigation is not warranted.

5.1 HYDROGEOLOGIC AND HYDRAULIC CHARACTERISTICS

Generally, migration of TCE contamination in groundwater occurs primarily within the more highly permeable Basal Transmissive Zone and is controlled by the groundwater gradient and lithology.

Hydrogeologic and hydraulic factors affecting the migration of TCE in groundwater to the south from Area 1 and the linear drainage feature include:

- The extent of the sand and gravel units of the Basal Transmissive Zone.
    - To the south the sand unit is limited and not continuous; however, the gravel unit is quite thick south of the source area beneath the former manufacturing building.
- The southeasterly slope of the bedrock surface at the source area and what appears to be a large bedrock trough beneath the former manufacturing building.

Hydrogeologic and hydraulic factors affecting the migration of TCE in groundwater from the source at the northeast corner include:

- The extent of the sand and gravel units of the Basal Transmissive Zone.
    - To the east and northeast of the source area the units are limited and not continuous (not present at all locations investigated at the northeast corner).
- The presence of TCE in groundwater appears to be controlled more by the presence or absence of the Basal Transmissive Zone than the bedrock surface.

Specific hydrogeologic and hydraulic factors that impede the migration of TCE in groundwater north of the site include:

- The flat groundwater gradient within the source area and to the north of the source area.
    - Groundwater elevations based upon water level measurements during 2014 indicated that wells located north of the former manufacturing building in the source area had approximately the same elevations as those wells located 150 feet north of Jacobs Avenue. This lack of gradient provides little or no driver for TCE migration to the north.
    - The groundwater gradient divide evident north of the former manufacturing building separating the northern and southern flow regimes.
- The absence of upper "sand" unit and the thinning of the lower "gravel" unit of the Basal Transmissive Zone of in the majority of wells drilled north of Jacobs Avenue. This thinning combined with the absence of the upper sand unit limits the ability for groundwater movement and thus TCE migration.

5.2 PLUME STABILITY

In order to analyze the stability of the groundwater plume(s) at the site, several analytical tools or "lines of evidence" were used to evaluate overall plume stability including:

- **Statistical Methods.** A Mann-Kendall nonparametric test (Gilbert, 1987; USEPA, 2000) to calculate the temporal trend in individual well analyte concentrations over time. The statistical test evaluated individual wells and the results are discussed in three groupings: northern plume wells, southern plume wells and source area wells (subset of southern plume wells).
- **Isoconcentration Maps.** A qualitative method to evaluate temporal trends by comparing periodic representations of both the extent of the TCE plume and TCE concentrations within the plume over the duration of monitoring.
- **Time vs. Concentration Plots.** A qualitative method to evaluate temporal trends in constituent concentration for both individual wells and for mean representative concentrations in the overall plume. The plots also include exponential regression lines to aid the analysis of temporal trends.

A historical summary of TCE and its degradation products cis-1,2-DCE and VC concentrations in groundwater is provided in Table 5-1. These values are used for the analysis of trends described in the remainder of this Section. For purposes of the following discussion, the wells at the site have been categorized as those located in the northern plume (generally MW-24 and wells to the north characterized by groundwater gradient towards the north-northeast), those located in the southern plume (generally south of MW-24 characterized by groundwater gradient towards the south-southeast) and source area wells. Source area wells are a subset of the southern plume wells, located immediately north of the northwestern corner of the Whirlpool

building characterized by TCE concentrations greater than 1,000 µg/L. The following is the list of wells in each category:

- **Northern Plume Wells (39 wells)**. MW-23, MW-24, MW-27, MW-28, MW-31, MW-32, MW-33, MW-34, MW-35R, MW-36, MW-39, MW-40, MW-41, MW-46R, MW-50, MW-55, MW-56, MW-57, MW-58, MW-60, MW-61, MW-62, MW-63, MW-65, MW-66, MW-67, MW-68, RW-69, MW-70, MW-71, IW-72, IW-73, IW-74, IW-75, IW-76, IW-77, IW-78, IW-79 and IW-80.
- **Southern Plume Wells (27 wells)**. ITMW-1, ITMW-2, ITMW-3, ITMW-4, ITMW-5, ITMW-6, ITMW-7, ITMW-9, ITMW-10, ITMW-11, ITMW-12, ITMW-13, ITMW-14, ITMW-15, ITMW-16, ITMW-17, ITMW-18, ITMW-19, ITMW-20, ITMW-21, MW-22, MW-25, MW-26, MW-29, MW-30, MW-37 and MW 38.
- **Source Area Wells (9 wells all of which are part of the Southern Plume)**. ITMW-11, ITMW-12, ITMW-15, ITMW-17, ITMW-18, ITMW-19, MW-25, MW-37 and MW-38.

Statistical Analysis of Temporal Trends

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

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

The trend analyses performed for groundwater concentrations from 2009 (when installation of the last of the current wells used for monitoring was complete) through the Fourth Quarter 2014 are summarized in Table 5-2 (two wells, MW-42B and MW-43 were properly abandoned in October 2014 and were sampled fewer than four times during this period and no statistical evaluation was performed for these wells). The following discussion summarizes the findings of the trend analyses:

- **Northern Plume Wells (39 wells):** The Mann-Kendall trend analysis utilizes data from all wells associated with the monitoring for the northern plume (Table 8). As described in more detail below, 79% of these wells exhibit either little or no TCE or a decreasing or stable TCE concentration trend.

The trend analysis for the 39 wells associated with monitoring the northern plume indicates the following:

- Thirteen wells exhibit a stable trend for TCE concentrations.
- Nine wells exhibit a decreasing trend for TCE concentrations.
- Six wells exhibit no trend regarding TCE concentrations. TCE concentrations in four of these wells (MW-31, MW-36, MW-39 and MW-68) have been non-detect or less than 1 microgram per liter (µg/L) since October 2012.
- Five wells exhibit TCE concentrations below detection limits or below PQLs.
- Five wells exhibit an increasing trend for TCE concentrations.

TCE concentrations in nine of the 39 northern plume wells (23%) have been non-detect or less than 1 µg/L since October 2012 and 22 of the 39 wells (56%) have exhibited decreasing or stable trends. Therefore, 31 of the 39 northern plume wells (79%) exhibit either little or no TCE or a decreasing or stable TCE concentration trend.

In addition, the average TCE concentration for all wells in the northern plume decreased from 384 µg/L in April 2009 to 251 µg/L in October 2014. (See Table 5-1). The average concentration for all wells in the northern plume has varied from 384 µg/L in April 2009 to 144 µg/L in March 2011 but is generally trending downward as shown on Figure 5-1.

TCE concentration trends are increasing in five of 39 (13%) northern plume wells (MW-55, MW-56, MW-57, MW-61 and IW-77). Further, of those five northern plume wells four wells (MW-56, MW-57, MW-61 and IW-77) had concentrations during the 2014 Fourth Quarter that were within historical ranges of detected values further leading the conclusions regarding stability.

- **Southern Plume Wells (27 wells):** 24 of 27 (89%) southern plume wells exhibit either little or no TCE or a decreasing or stable TCE concentration trend. The trend analysis for the 27 wells associated with monitoring the southern plume indicates the following:
  - Six wells exhibit a stable trend for TCE concentrations.
  - Ten wells exhibit a decreasing trend for TCE concentrations.
  - Three wells exhibit no trend regarding TCE concentrations. TCE concentrations in these wells (ITMW-16, ITMW-20 and MW-26) have been non-detect or less than 1 µg/L since October 2012.
  - Five wells exhibit TCE concentrations below PQLs.
  - Three wells (ITMW-10 – south of the former manufacturing building, ITMW-12 - in Area 1 and MW-38 – immediately north of Area 1) exhibit an increasing trend for TCE concentrations.
- **Source Area Wells (nine wells):** The nine source area wells showed predominantly decreasing or stable concentration trends for TCE (five wells decreasing and two wells stable) and cis-1, 2-dichloroethene (six wells decreasing and three wells stable). Only two of the source area wells (ITMW-12 and MW-38) demonstrated an increasing

concentration trend for TCE and one source area well (ITMW-17) demonstrated an increasing concentration trend for VC.

Isoconcentration Maps

Figure 4-7 shows isoconcentration lines for the 2014 Fourth Quarter groundwater monitoring event. Figure 4-8 shows isoconcentration lines including the 3-day post ISCO sampling event completed in early December.

The 2014 Second Quarter groundwater monitoring event was the first time that the TCE concentration at MW-61 exceeded 5 µg/L, requiring that the isoconcentration line extend to include MW-61. This trend continued through the Fourth Quarter event, with a TCE concentration of 7.9 µg/L reported at MW-61 (decreased slightly from 8.1 µg/L during Third Quarter 2014). Therefore MW-61 continues to be included within the 5 µg/L plume boundary.

The reduction in TCE concentrations following ISCO injections has resulted in the following:

- The apparent separation of the northwest plume from the southern plume to the south of Ingersoll Avenue as shown on Figure 4-7;
- Further separation of the northwest plume with concentrations greater than 100 µg/L;
- Further reduction in TCE concentrations in the source area have reduced the size of the source area plume as shown on Figure 4-8; and
- The southern plume does not appear to be moving offsite.

Concentration vs. Time Plots

The average (arithmetic mean) of the detected TCE, cis-1,2-DCE and VC concentrations were calculated for each of the 14 comprehensive groundwater monitoring events conducted at the Site beginning in 2009 and are summarized in Table 5-3. Figures 5-1 through 5-4 show the average concentrations versus time for all wells, north plume wells, south plume wells and source area wells, respectively. Decreases in average concentrations for TCE, cis-1,2-DCE and VC are noted for all wells, north plume wells, south plume wells and source area wells.

TCE and cis-1,2-DCE concentration versus time charts are also provided for pairs of wells located in the south plume, source area and north plume (Figures 5-5 through 5-8). As shown on Figure 5-5, although TCE concentrations have been increasing in ITMW-10 (primarily during the four most recent sampling events), concentrations of cis-1,2-DCE in ITMW-10 and in nearby ITMW-9 have been decreasing. The concentration of TCE at ITMW-9 shows a stable trend.

Figure 5-6 shows concentration trends for wells ITMW-19 and MW-25 located in the source area; concentrations are generally decreasing or stable. Although the overall decreasing trend is consistent, it is apparent that at MW-25 concentrations of TCE, cis-1,2-DCE and VC change significantly between spring and fall sampling events with higher concentrations occurring in the fall and lower concentrations occurring in the spring. This observation was corroborated by the concentrations of cis-1,2-DCE and TCE at MW-25 during the Fourth Quarter sampling event

and is consistent with historical results at this well. Quarterly sampling conducted in 2014 further confirms this trend with lower TCE concentrations in the first half of 2014 and higher concentrations in the last half of 2014.

Figure 5-7 shows that although concentrations of TCE and cis-1,2-DCE exhibit an increasing trend at IW-77 in the north plume, these concentrations are decreasing at the next down-gradient monitoring well IW-76. TCE and cis-1,2-DCE concentrations in IW-77 also change between spring and fall sampling events with higher concentrations occurring in the fall and lower concentrations occurring in the spring However, these seasonal concentration changes in IW-77 appear to be interrupted by the ISCO events in Area 3 causing TCE and cis-1,2-DCE concentrations to trend downward during sampling events in the third and fourth quarters (Table 5-1) (VC concentrations are below detection limits at IW-77).

An increasing trend in TCE concentrations is depicted for MW-61 on Figure 5-8. .

5.3 NATURAL ATTENUATION

Consistent with USEPA guidance three lines of evidence should be evaluated to assess the natural attenuation of chlorinated solvents.[2] The three lines of evidence include:

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

This section presents an evaluation of the natural attenuation data that were collected from the Site commencing with the 2014 First Quarter event and continuing through the Fourth Quarter.

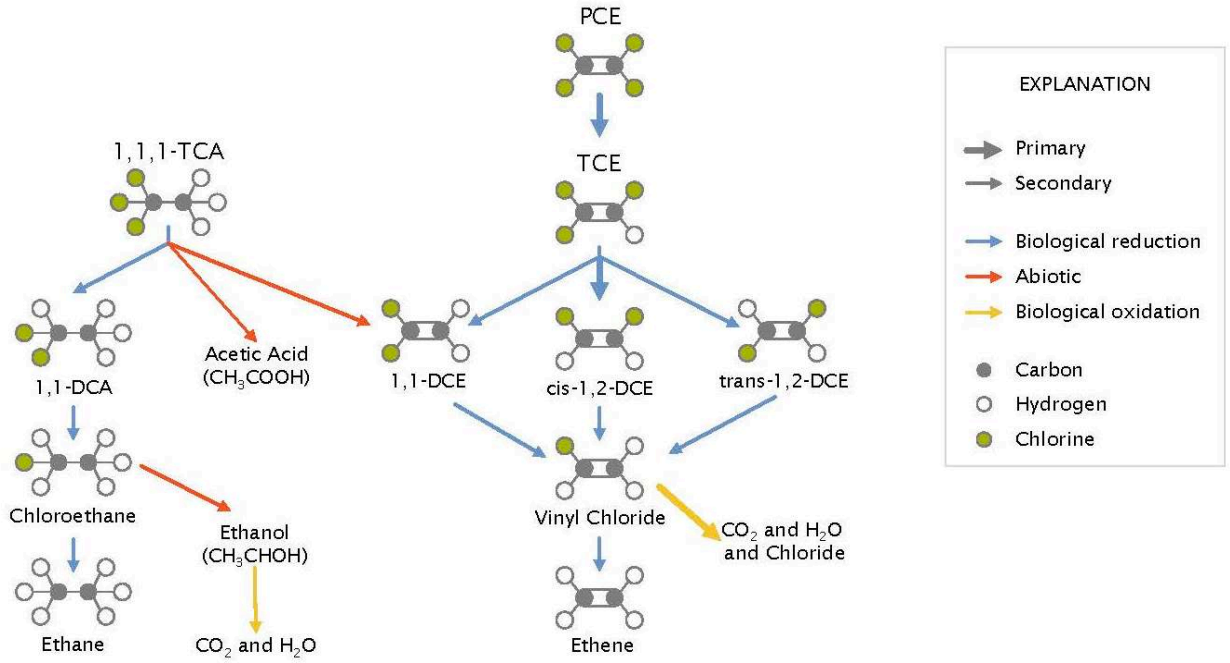
Chemical Lines of Evidence

The occurrence and progress of natural attention in reducing COC concentrations is established by evaluating the presence and effectiveness of the transformation pathways for chlorinated ethenes. Chlorinated ethenes are degraded by both biological and abiotic (non-biological) mechanisms. Figure 5-9 below shows the biological (anaerobic) and abiotic transformation pathways for chlorinated ethenes. This figure does not include other chemically induced aerobic (e.g. ISCO) and anaerobic (e.g. zero valent iron) pathways that can promote degradation of chlorinated compounds.

[2] Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater (US EPA 1998) and An Approach for Evaluating the Progress of Natural Attenuation in Groundwater (US EPA 2011)

Figure 5-9. Abiotic and Biotic Pathways for Chlorinated Ethenes and Ethane

Source: Vogel et al., 1987.



Historical COC Groundwater Data

Table 5-4 provides a summary of laboratory analytical results for the 2014 First Quarter through Fourth Quarter groundwater monitoring events. Analytical results for VOCs in groundwater during 2014 demonstrate that natural attenuation of TCE is occurring via biological mechanisms in both onsite and offsite groundwater. Groundwater samples from onsite monitoring wells ITMW-11, ITMW-12, ITMW-18, MW-25 and MW-38 displayed elevated (>100 µg/L) concentrations of cis-1,2-DCE, a biodegradation daughter product of TCE for at least three of the four quarters in 2014. These results indicate that reductive dechlorination is occurring on a consistent basis in various onsite wells with elevated TCE concentrations. Vinyl chloride (VC), a biodegradation product of cis-1,2-DCE, has been observed sporadically in groundwater samples from onsite monitoring wells. During 2014, VC was detected at concentrations greater than 10 µg/L in monitoring wells ITMW-12, MW-25 and MW-38 during at least two quarters indicating that microbes capable of reductive dechlorination are present in the aquifer. Concentrations of cis-1,2-DCE have been increasing in some of the onsite wells, such as MW-25 and ITMW-12, demonstrating that bioattenuation of TCE is occurring in site groundwater. In addition, low levels of ethene, which is the non-harmful final reductive dechlorination byproduct, were observed in the following monitoring wells during 2014: ITMW-2, ITMW-4, ITMW-6, ITMW-7, ITMW-9, ITMW-15, ITMW-20, MW-35R, MW-38, MW-57, MW-58 and RW-69, which provides further support that complete reductive dechlorination is occurring in some locations.

Geochemical Lines of Evidence

- In conjunction with chemical and microbial analyses, monitoring of geochemical conditions can provide an indirect measure of the predominant microbial processes occurring in the groundwater. The presence of cis-1,2-DCE in groundwater at this site clearly indicates that conditions are favorable for reductive dechlorination. Other key factors that affect the success of natural attenuation include hydrogeology, temperature, electron acceptors [dissolved oxygen (DO), nitrate, iron, manganese and sulfate], aquifer minerals, nutrients (nitrogen and phosphorus), bioavailability of COCs and pH.
- Table 5-5 presents the groundwater field parameters for 2014. The key items on this table are discussed below.
- Groundwater appeared to be under bulk aerobic conditions during the First quarter 2014, with more than 90% of the wells showing DO concentrations greater than 1 milligram per liter (mg/L). However, as additional quarterly sample results were obtained, there was a shift from most of the wells being under aerobic conditions to more than 74% of the wells exhibiting microaerophilic to anaerobic conditions during the Third and Fourth quarter sampling events. The anaerobic and microaerophilic conditions observed in the last two quarterly sampling events are more conducive to supporting reductive dechlorination of the chlorinated ethenes. Although more than 20 percent of the wells displayed aerobic conditions, there appear to be anaerobic microniches within the area around some of these wells, as indicated by the elevated levels of the reductive dechlorination byproduct cis-1,2-DCE, which was observed in many site wells.
- During 2014, the ORP of the groundwater samples ranged from a low of -194.2 millivolts (mV) in MW-58 to a high of 735 mV in IW-76. In general the ORP levels were less than 500 mV in most of the site monitoring wells, which indicates that the groundwater is under manganese reducing to sulfate reducing conditions. Reductive dechlorination has been observed under manganese to sulfate reducing conditions (Wiedemeier et al., 1999). Groundwater exhibiting high ORP levels are typically impacted by oxidant from ISCO injection areas.
- The pH of the groundwater ranged from a low of 4.5 to a high of 12.6. In general, the pH of the groundwater across the majority of the plume is greater than 5.5 and less than 8. The two wells with the elevated pH greater than 9 (MW-65 and MW-35R) are likely being impacted by the ISCO activities, which affect the pH levels of groundwater. Most microbial enzymatic reactions prefer a relatively neutral pH range from 6 to 8, which is conducive to a wide group of microorganisms, including those microbes that are able to biodegrade TCE and the daughter products. The pH results indicate that the pH of the groundwater may need to be adjusted to promote biostimulation and/or bioaugmentation of the CVOCs if these alternative remedial approaches are considered for groundwater.
- The alkalinity of the groundwater is relatively low with many of the groundwater samples showing alkalinity concentrations less than 100 mg/L. However, during 2014 there were thirteen wells that showed alkalinity equal to or greater than 100 mg/L including ITMW-6, ITMW-15, ITMW-20, IW-72 IW-80, MW-38, MW 50, MW-60, MW-61, MW-65, MW-66, MW-67 and MW-35R. The relatively low alkalinity concentrations in some parts of the

plume indicate that the groundwater does not have significant natural buffering capacity in these areas. This is significant because the alkalinity indicates the buffering capacity of the groundwater which can impact the pH. Enhanced bioremediation may require pH adjustments in some areas of the plume.

- The major competing electron acceptors nitrate, manganese, iron and sulfate were evaluated in site groundwater samples (Table 5-4). Nitrate levels were generally present at less than 1 mg/L in most of the monitoring wells, only a few wells showed nitrate levels above 1.5 mg/L and only two wells, MW-68 and ITMW-9, showed elevated levels of nitrate(>14 mg/L). Manganese concentrations were generally less than 1 mg/L in the majority of site monitoring wells. Ferric iron was present in most of the groundwater samples at less than 4 mg/L, which was consistent with the low levels of ferrous iron observed in groundwater (<3.4 mg/L). MW-61 showed elevated levels of total iron throughout the 2014 quarterly sampling events. Sulfate concentrations were generally less than 50 mg/L with the exception of monitoring wells MW-29 and ITMW-6. The 2014 groundwater sampling results indicate that competing electron acceptors (nitrate, manganese, iron and sulfate) do not appear to be present at concentrations that would significantly inhibit reductive dechlorination of TCE. These data are further supported by the presence of the reductive dechlorination byproduct, cis-1,2-DCE. The dissolved hydrogen concentrations ranged from 0.63 nanomolar (nM) in MW-27 to 4500 nM in MW-35R. The majority of wells displayed dissolved hydrogen concentrations that were greater than 0.8 nM and less than 5 nM, which is in the transition range from iron reducing to sulfate reducing conditions (Wiedemeier et al., 1999). These data are consistent with the sulfate and iron levels observed in the groundwater. Dissolved hydrogen serves as the electron donor and is key to the reductive dechlorination process. The dissolved hydrogen data are consistent with the ORP data, which supports the observation of biodegradation products in site groundwater.
- Total organic carbon (TOC) levels ranged from less than 1 mg/L to a high of 32.7 mg/L in MW-58. The majority of the wells displayed TOC levels less than 1 mg/L, which may indicate that carbon is present in limiting concentrations at various locations in the plume.
- Methane, ethane and ethene were detected at low concentrations or were non-detect in groundwater samples throughout the site (Table 5-4). This result is likely due to low levels of TOC and elevated levels of DO observed in various monitoring wells throughout the site.
- Major nutrients, ammonia and phosphate, were evaluated in the groundwater and the results in Table 5-4 indicate that the groundwater contains non-detectable or low levels of ammonia (<50 µg/L). Phosphate was detected at concentrations ranging from non-detect (< 30 µg/L) to a high of 5,200 µg/L, which indicates that phosphate is present in non-limiting concentrations to the indigenous microbial community.

Microbial Lines of Evidence

Quantitative polymerase chain reaction (qPCR) is a molecular biological tool that is used to quantify targeted members of the microbial community deemed critical for site remediation. While a number of bacterial cultures capable of utilizing tetrachloroethylene (PCE) and TCE as growth supporting electron acceptors have been isolated (Gerritse et al., 1999; and Loffler et al., 1996), *Dehalococcoides* spp. are the only bacterial group that has been isolated to date which is capable of complete reductive dechlorination of PCE to ethene (Maymó et al., 1999). The presence of *Dehalococcoides* spp. has been associated with complete reductive dechlorination of PCE to ethene at sites across North America and Europe (Hendrickson et al., 2002). Thus, qPCR quantification of *Dehalococcoides* can be used to evaluate the likelihood of complete reductive dechlorination of PCE and TCE under MNA conditions.

Table 5-4 shows the microbial results for the genus *Dehalococcoides* (DHC) and the functional genes, tceA reductase (tceA), BAV1 VC reductase (BVC) and VC reductase (VCR). The presence of TCE reductase indicates the ability to reduce TCE to DCE and VC. The presence of the VC reductases (qVC and qBVC) indicates the potential for reductive dechlorination of VC to ethene. DHC were consistently detected at elevated concentrations in MW-38, which is relatively close to the source area. In addition to DHC, the BVC gene was detected at elevated levels (>36,000 cells/ml) in MW-38, which indicates the potential for complete reductive dechlorination in this area. Besides MW-38 displaying elevated levels of DHC and BVC, monitoring well IW-73 showed elevated levels of DHC (21,700 cells/ml) and BVC gene (4,610 cells/ml). The following wells displayed DHC concentrations greater than 100 cells/ml: MW-22, MW-28, MW-41, MW-56 and MW-60. More than 70 percent of the wells showed the presence of DHC at detectable levels, whereas, approximately 18 percent of the wells detected the BVC or VCR gene during 2014.

Summary of Natural Attenuation Results

The natural attenuation water quality results for monitoring well MW-38, which are shown in Table 5-6, clearly demonstrate how bioattenuation is actively occurring in this well. The elevated levels of chlorinated ethene daughter products cis-1,2-DCE and VC were observed all four quarters in 2014. Likewise, elevated levels of the benign end product, ethene, were also observed during the Third and Fourth quarters of 2014. These data are consistent with the low levels of DO and ORP observed in this well and most importantly with the elevated levels of DHC and BVC. Even though the TOC of the groundwater in this well was less than 3 mg/L, reductive dechlorination was able to occur under these conditions, which would indicate that enhanced anaerobic biodegradation of chlorinated VOCs may require low levels of carbon to enhance this process. Likewise, the chlorinated VOC results for MW-25, ITMW-11, ITMW-12 and ITMW-18 demonstrate that reductive dechlorination is occurring at these locations. However, since these wells did not display elevated levels of DHC or the genes responsible for VC degradation, it is not surprising that we did not observe elevated levels of ethene in the groundwater. In summary, the combined MNA results provide concrete support that biodegradation processes are contributing to the degradation of chlorinated VOCs in site groundwater, from these wells. It should be noted that the referenced wells (MW-25, ITMW-11,

ITMW-12 and ITMW-18) present the strongest data to demonstrate that natural attenuation by microbial processes is occurring in site groundwater; and, data from other wells at other onsite and offsite locations has not yet provided this strong evidence.

6 REMEDY IMPLEMENTATION

The following section describes the selected remedies for the site as defined within Section 10 of the RADD and summarizes the progress towards achieving the selected remedies through 2014 as well as certain additional voluntary remediation measures not required by the RADD or Consent Administrative Order (CAO) which were completed in the neck area and within and north of Area 1. Except for the installation of an impermeable cover in the vicinity of Area 1, both the onsite and offsite remediation activities required by the RADD have been implemented. The impermeable cover is currently scheduled to be placed during the third quarter of 2015 (see Section 6.2). In addition, further groundwater and soil vapor monitoring required by the RADD will continue in 2015. Whirlpool will also continue to submit quarterly monitoring progress reports in 2015 and will prepare a Remedy Effectiveness Report due on December 31, 2015.

6.1 INSTITUTIONAL CONTROLS

Consistent with Item 10c of the RADD, Whirlpool recorded the deed restriction for a portion of the site containing Area 1 and part of the manufacturing building on April 7, 2014. The major components of the deed restriction for all portions of the property are provided below:

- Groundwater on the property shall not be used for residential, agricultural, recreational, industrial, or commercial purposes.
- The property may only be used for industrial or commercial purposes, provided that in no event shall apartments, schools, hospitals, child daycare, adult daycare, or restaurants with playgrounds be permitted uses on the property.
- Any monitoring or injection wells must remain in place and protected during any period required by the ADEQ. Any well damaged will be replaced at owner's expense.
- ADEQ and its contractors are allowed access to the property for purposes defined under Arkansas law.

Additional deed restrictions are provided below for two areas onsite.

"Restricted Area A": Southern border of Area A runs parallel to and 90 feet south of the north wall of the former manufacturing building:

- No excavation of soil, concrete or asphalt shall be permitted in the restricted area without the prior written approval of ADEQ.
- The owner shall regularly inspect, repair and maintain concrete or asphalt cover in the restricted area such that the cover continues to provide an impermeable barrier to water migrating into the subsurface soils in the restricted area.

"Restricted Area B": Encompasses the entire footprint of the former manufacturing building:

- Upon submission and ADEQ approval of a work plan, the building may be demolished and all elements of the structure removed, including foundations, footings and flooring.

- Upon removal of the building, owner shall identify areas of impacted soil and then appropriately remediate the impacted soil through either excavation, placement of cover over the impacted soil, or other such remediation measures as deemed appropriate by ADEQ.

6.2 IMPERMEABLE COVER

Item 10A of the RADD requires the onsite impacted soil surface area to be covered with asphalt and an impermeable coating. This cover will be installed in the vicinity of Area 1 and the linear drainage feature upon completion of other remedial activities within this area including the continued monitoring of wells in the area. The current schedule for placement of this cover is the third quarter of 2015.

6.3 MONITORED NATURAL ATTENUATION

Item 10B of the RADD requires sampling and evaluation of MNA for the onsite and offsite plume. This sampling and evaluation has occurred for four quarters in 2014 and will continue during quarterly monitoring in 2015. Results and conclusions from the MNA effort are discussed in Section 5.3.

6.4 IN-SITU CHEMICAL OXIDATION

Item 10B of the RADD requires that three areas be treated with an in-situ chemical treatment. Details of the chemical treatment implementation are described below.

During 2014, Whirlpool conducted a bench scale treatability study of in-situ chemical oxidation (ISCO). This bench scale study was complemented by a tracer test of several different injection wells to assess the efficacy of ISCO injections and the dispersion of ISCO in groundwater in order to assess the effective placement and distribution of wells in injection areas.

Upon completion of the bench scale treatability test and the tracer test, Whirlpool conducted three separate ISCO injection events. The initial injection event was completed in March 2014, the second injection event was completed in late May and early June 2014 and the third injection event was completed in late October and early November 2014. The injection events included injection of oxidants in areas identified in the RADD as well as voluntary, supplemental injection of oxidant in areas outside of those identified in the RADD.

ADEQ determined that the described injection activities would be “authorized by rule” as described in 40 CFR 144.84. In-Situ Oxidative Technologies, Inc. (ISOTEC) of Lawrenceville, New Jersey, provided materials, equipment and personnel needed to introduce the reagents into the subsurface at the selected locations and assisted in monitoring the progress of the injection events.

The oxidants injected included base activated sodium persulfate (BASP), Modified Fenton’s reagent (hydrogen peroxide and chelated iron) (MFR) and MFR activated sodium persulfate (MASP). The BASP, MFR and MASP process generates sulfate radicals, hydroxyl radicals and

superoxide radicals that promote enhanced desorption and degradation of the constituents of concern (COCs), primarily TCE and its degradation products. The end products of the reaction are carbon dioxide, sulfate, oxygen and water. A total of 42,200 gallons of oxidant was injected in 2014 as summarized by area as follows:

- In the supplemental neck area (Injection Array 1), 9,000 gallons of BASP was injected in 20 temporary injection points and 12 injection wells;
- In Areas 2 and 3 (Injection Array 2), 14,600 gallons of BASP was injected in 40 temporary injection points and 11 injection wells; and
- In and north of Area 1 (Injection Array 3), 3,000 gallons of MASP was injected in 10 temporary injection points, 3,200 gallons of MFR was injected in 16 temporary injection points and 12,400 gallons of MASP was injected in 19 temporary injection points and 41 injection wells.

Following injections, the total sum of TCE concentrations in groundwater in wells decreased by:

- Approximately 55% in the supplemental neck area (Injection Array 1) (Table 6-3A);
- Approximately 55% in Areas 2 and 3 (Injection Array 2) (Table 6-3B); and
- Approximately 50% in Area 1 (Injection Array 3) (Table 6-3C).

Although overall TCE concentrations decreased in each treatment area as expected following the injection events, TCE concentrations at certain wells (MW-85 and MW-86) increased following the third oxidant injection. The increases at these wells are attributed to continued desorption of TCE from soil following injection of MASP and MFR. Monitoring of the effectiveness of oxidant injections will continue in 2015. Additional details for each injection event are provided in the following sections.

Initial ISCO Injection Event

The initial injection event, during the week of March 23, 2014, included the injection of:

- 800 gallons of BASP into IW-130 located in injection well Array 1 (supplemental neck area);
- 600 gallons of BASP into IW-131 located in injection well Array 2 (Area 2 and south of Area 3); and
- 200 gallons of BASP into IW-129 located in injection well Array 3 (Area 1).

Monitoring of water levels, field water quality parameters and persulfate concentrations during and following the initial injection indicate that the influence of the oxidant was measured in wells located up to 18 feet from the injection point; although greater influence was observed in wells located from 5 to 10 feet from the injection point.

Second ISCO Injection Event

The second injection event, during the weeks of May 27 and June 4, 2014, included the injection of:

- 8,200 gallons of BASP solution into 11 existing permanent injection wells and 20 additional temporary direct push injection points in the supplemental neck/ injection array 1 area;
- 14,000 gallons of BASP into ten existing permanent injection wells and 40 additional temporary direct push injection points in the Area 2 and Area 3/ injection array 2 area; and
- 3,000 gallons of MASP solution into ten temporary direct push injection points located in Area 1 in the vicinity of MW-25.

TCE concentrations in each of the injection areas decreased compared to baseline conditions prior to injection.

Monitoring of water levels, field water quality parameters, persulfate concentrations and VOC concentrations during and following the second injection event indicate the following key observations:

- Water levels, field water quality parameters and persulfate concentrations indicate that the influence of the oxidant was measured in wells located in the injection areas and up to 35 feet from the injection areas (MW-24).
- Measurable levels of persulfate persisted in portions of the injection areas and in wells down-gradient of the injection areas for more than 90 days following the second injection event (more than 170 days following the initial injection event in Area 1/Injection Array 3).
- The sum of the TCE concentrations in the majority of wells located in the supplemental neck area (Injection Array 1) (MW-23, MW-24, MW-83, MW-84 and IW-101) decreased from approximately 1,300 micrograms per liter (µg/L) prior to the second injection event in May to approximately 800 µg/L by October, roughly five months following injection (~40% decrease).
- The sum of the TCE concentrations in wells located in Area 2 and Area 3 (Injection Array 2) (MW-34, MW-35R, MW-36, MW-65, MW-81, MW-82, IW-77, IW-78, IW-79, IW-80, IW-115) decreased from approximately 3,900 µg/L prior to the second injection event in May to 1,700 µg/L by October, roughly five months following injection (~55% decrease).
- The sum of the TCE concentrations in the MW-25 injection area (MW-25, MW-85 and MW-86) decreased from approximately 550,000 µg/L prior to the second injection event in May to 200,000 µg/L in December, roughly six months following the injection (~65% decrease) (Table 6-3D).

- TCE concentrations at MW-25 and MW-85 initially increased following the injection and these increases may be the result of desorption of TCE following MASP injection and/ or seasonal fluctuations observed at MW-25.

Third ISCO Injection Event

The third injection event, during the weeks of October 26 and November 2, 2014, included the injection of oxidants in and around Area 1 as follows:

- 3,200 gallons of MFR solution were injected into 16 temporary injection points located in and near the northwest portion of Area 1; and
- 12,200 gallons of BASP solution were injected into 41 permanent injection wells and 19 temporary injection points located in and around Area 1.

Monitoring of water levels, field water quality parameters, persulfate concentrations and VOC concentrations during and 30 days following the third injection event indicate the following key preliminary observations (only 30 days of monitoring has been performed because the injection event was completed in early November):

- Water levels, field water quality parameters and persulfate concentrations indicate that the influence of the oxidant was measured in wells located in the injection areas and up to 15 feet from the injection areas (MW-38 and ITMW-17).
- During injection activities, the highest level of peroxide was detected in MW-25. This well was approximately 10 feet from temporary injection point 1. Lower levels of peroxide were detected in MW-85, MW-86, MW-172, ITMW-17 and injection wells IW-132, IW-142, IW-150, IW-155 and IW-159.
- Measurable levels of persulfate increased 30 days after injection by a factor of ten times at wells MW-38, MW-85, ITMW-12 and ITMW-18. The increase of persulfate in these wells indicates the persulfate is reaching a larger area of influence with time.
- After 30 days, monitoring wells where the concentration of persulfate was 1,200 mg/L or greater include MW-86, MW-85, MW-172, ITMW-12, ITMW-15, ITMW-18 and ITMW-19.
- The total sum of the TCE concentrations in wells in Area 1 (IW-127, IW-141, IW-147, IW-152, IW-153, IW-157, MW-25, MW-38, MW-85, MW-86, MW-92, MW-93, MW-94, MW-95, MW-172, ITMW-11, ITMW-12, ITMW-15, ITMW-17, ITMW-18 and ITMW-19) decreased from approximately 944,000 µg/L prior to the third injection event in September and October to approximately 432,000 µg/L in December, roughly 30 days following injection (~54% decrease). Notable decreases in TCE concentrations were observed at: MW-25 where the TCE concentration was reduced from 59,800 µg/L to 2,620 µg/L (96% reduction); and, ITMW-19 where the TCE concentration was reduced from 12,800 µg/L to 33.5 µg/L (99.7% reduction).
- TCE concentrations at MW-85 and MW-86 increased following injection and these increases are attributed to continuing desorption of TCE following MFR (TCE concentration at MW-86 is still 68% less than when it was first sampled in May 2014).

6.5 LARGE DIAMETER BORINGS

A series of 19 large diameter boring (LDBs) were completed along the linear drainage feature to remove TCE contaminated Vadose Zone and Basal Transmissive Zone soils in and around Area 1. The work performed within the linear drainage feature was conducted as a voluntary measure, not required by the RADD or CAO. Prior to initiating drilling activities, a private utility locator was contracted to identify underground utilities and other potential obstructions in the work area. Based on the results of the utility location, the proposed LDB locations were adjusted in the field to minimize the potential for encountering underground utilities and to maintain the proposed 15 foot spacing to the extent practicable. Figure 6-1 provides the surveyed locations of the completed borings.

Due to the relatively large number of identified utilities and potential obstructions in the work area, excavation of soil at each boring location was planned to expose and clear subsurface utilities to a depth of 6 feet bgs. When utilities and/or obstructions were encountered during excavation, the onsite Whirlpool representative was contacted to determine if the utilities/obstruction could be removed prior to proceeding with excavation or should be left intact. Each utility clearance excavation resulted in the removal of approximately eight cubic yards (CY) of soil, or a total of approximately 152 CY for the 19 utility clearance excavations.

The four feet diameter LDBs were drilled by Pier Drillers, Inc. (PDI) of Oklahoma City, Oklahoma. The drilling process consisted of rotating the auger downward at approximately three foot depth intervals (i.e. the length of the auger), retracting the auger to surface and spinning the auger to place the soil cuttings on the ground surface. The drilling continued in each boring until evidence of the top of the shale was encountered, at depths ranging from 27 to 30.3 feet bgs. The drilling process at each boring removed approximately 10.6 CY of soil for a total of approximately 201 CY of soil removed from the 19 large diameter borings (i.e. total volume of soil removed from the borings after completing the utility clearance excavations described above).

The LDBs were backfilled with crushed limestone gravel and lean cement (i.e. sand with Portland cement). Gravel was placed in each boring to the approximate static groundwater level following drilling which generally ranged from approximately 13.5 to 15 feet bgs. In addition to potentially increasing the naturally low groundwater pH to promote biological natural attenuation, a secondary purpose of the gravel backfill was to fill the bottom portion of the completed borings to the approximate groundwater potentiometric level (roughly 15 feet bgs) so that contaminated groundwater would not be displaced to the surface while backfilling the LDB with lean cement. The remaining annular space of each boring was filled with lean cement to within approximately one to two feet from the surface. For borings located in areas paved with concrete, gravel was placed from the top of the cured lean cement to the bottom of the concrete surface and compacted prior to the placement of concrete to match the existing surface.

A photoionization detector (PID) was used to monitor for the presence of VOCs during excavation and drilling for health and safety purposes. PID measurements were used to estimate the relative VOC concentrations at the soil surface at each boring. No odor or PID

detections were documented in the upper three feet of soil at each excavation. In general, the areas that were observed to have the highest PID readings included borings LDB-6 through LDB-8 (including LDB-19) and borings LDB-12 through LDB-14. The spatial distribution of PID readings measured during excavation and drilling appear to be consistent with previously completed subsurface soil and groundwater sampling results.

Excavation spoils and drill cuttings were placed into lined roll-off boxes for storage prior to offsite disposal. Waste characterization samples were collected from the roll-offs. A total of 31 roll-off boxes were used to contain the excavation spoil and drill cuttings. Twenty-five of the 31 roll-offs containing nonhazardous spoil were transported offsite in November and December, 2014 to the City of Fort Smith Municipal Waste Landfill in Fort Smith, Arkansas for disposal. A total of six of the 31 roll-off boxes containing characteristically hazardous spoil were transported offsite in December 2014 to the Clean Harbors' Lone Mountain, LLC RCRA disposal facility in Waynoka, Oklahoma for disposal. The characteristically hazardous roll-off boxes contained soils from portions of LDB-1, LBD-4, LDB-5, LDB-7, LDB-12, LDB-13, LDB-14, LDB-18 and LDB-19). A summary of the roll off box information is included as Table 6-4 and a summary of soil volumes excavated during large diameter boring work is included as Table 6-5.

7 HUMAN HEALTH RISK ASSESSMENT

The following sections provide a summary of the site human health risks based on analysis of site characterization and remediation data for the Site generated since 1989 and conclusions derived from that analysis.

A Human Health Risk Assessment was presented to ADEQ in November 2012 (revised in April 2013 (ENVIRON 2013) and it has been reviewed and updated as appropriate during each quarterly progress report in 2014. This human health risk assessment evaluated the potential health significance of data for soil, groundwater and soil gas that were collected at and around the site to support remedy selection per the letter of agreement (LOA) with the ADEQ dated July 19, 2002. The risk assessment used this data to quantify risks from reasonable maximum exposures (RME) to soil, groundwater and soil gas under current and reasonably expected future land and groundwater use both at the site and offsite.

The risk assessment evaluated the significance of potential exposure for the following receptors and potential pathways identified for current and potential future land use and groundwater use as follows:

- **Onsite Routine Workers**
  - Soil: Incidental ingestion, dermal contact and inhalation of vapors and particulates during outdoor activities; inhalation of vapors in indoor air; and
  - Groundwater: Inhalation of vapors in outdoor air; inhalation of vapors in indoor air.
- **Onsite Maintenance Workers**
  - Soil: Incidental ingestion, dermal contact and inhalation of vapors and particulates during smaller-scale surface and subsurface maintenance activities; and
  - Groundwater: Incidental ingestion, dermal contact and inhalation of vapors during smaller-scale subsurface maintenance activities that encounter groundwater.
- **Onsite Construction Workers**
  - Soil: Incidental ingestion, dermal contact and inhalation of vapors and particulates during larger-scale/short-term (i.e. one year) construction activities; and
  - Groundwater: Incidental ingestion, dermal contact and inhalation of vapors during larger scale/short-term (i.e. 1 year) subsurface construction activities that encounter groundwater.

- **Offsite Residents**
  - Soil: Inhalation of wind-blown vapors and particulates from onsite soil; and
  - Groundwater: Inhalation of vapors in outdoor air; inhalation of vapors in indoor air; and ingestion or contact if water use wells are installed in the area of impacted groundwater.
- **Offsite Routine Workers**
  - Soil: Inhalation of vapors and particulates from onsite soil during offsite outdoor activities; and
  - Groundwater: Inhalation of vapors in outdoor air; inhalation of vapors in indoor air; and ingestion or contact if water use wells are installed in the area of impacted groundwater.
- **Offsite Maintenance Workers**
  - Groundwater: Incidental ingestion, dermal contact and inhalation of vapors during smaller-scale/shorter duration subsurface maintenance activities that encounter groundwater.

The significance of potential exposure to chemicals in soil, groundwater and soil gas was evaluated for each of these exposures. The risk estimates used maximum detected concentrations for all chemicals. Given the site conceptual model discussed in the preceding sections of this report, the conclusions of human health risk assessment presented in 2012 have not changed with the collection of additional data in 2013 and 2014.

For current land and groundwater uses, all exposures to onsite soils do not exceed the acceptable cancer risk level of $1x10^{-4}$ and the non-cancer hazard risk level of 1. Under current onsite land and groundwater uses, the risk estimates using maximum detected concentrations for all chemicals in onsite groundwater meet USEPA's cancer risk level of $1x10^{-4}$ but exceed USEPA's non-cancer HI level of 1 for maintenance worker and construction worker due to dermal contact and routine worker for vapor intrusion.

For current land and groundwater uses, all exposures to offsite groundwater do not exceed the acceptable cancer risk level of $1x10^{-4}$ and the non-cancer hazard risk level of 1. In the hypothetical scenario in which drinking water wells are installed in the area of impacted offsite groundwater, potentially significant exposures could result from use of the groundwater.

8 SUMMARY AND CONCLUSIONS

The following sections provide a summary of the site conditions based on analysis of site characterization and remediation data for the Site generated since 1989 and conclusions derived from that analysis.

8.1 NATURE AND DISTRIBUTION OF CONTAMINATION

Soils

TCE detected in the Vadose Zone soils (Upper Fine-Grained Unit of the soil column) on the Whirlpool property appear to be related to historical incidental releases along a former linear drainage feature (identified in a 1971 historical aerial photograph) that begins near the former degreaser building and runs to the west southwest toward the former rail spur on the north side of the former manufacturing building. The northwest corner of Area 1 as identified in the RADD includes portions of the former linear drainage feature. Elevated TCE concentrations in soils appear to be highest along the centerline of the former linear drainage feature.

Other isolated areas of TCE impact in the Vadose Zone soils were identified during 2014 investigations within select areas of the former manufacturing building footprint.

No soil impact has been identified at the northeast corner of the Site and no Vadose Zone soil impacts were identified via analytical data at the southwestern building corner.

MIP screening and laboratory results have generally indicated impacts in saturated soil in the Basal Transmissive Zone at the linear drainage feature and at areas beyond the linear drainage feature which are predominantly located in Area 1 and beneath the former manufacturing building due to migration of TCE in groundwater.

Groundwater

The majority of the impacted groundwater originates from the Area1/linear drainage feature source area near the northwest corner of the former manufacturing building. MW-25, located in this area, has historically had the highest observed TCE concentrations, exhibits a distinct seasonal variation in VOC concentrations, has evidence of contaminated Vadose Zone soils and is located near several active (fire protection water line, stormwater drains and electrical service for the building) and abandoned subsurface utilities. To a lesser degree other TCE impacts in groundwater have been identified at the northeast corner of the former manufacturing building as well as the southwestern corner of the former manufacturing building (identified based upon field gas chromatograph results).

TCE-contaminated groundwater at the northwest corner of the site and specifically at Area 1 moves in a southerly direction largely within the Basal Transmissive Zone. A plume of TCE impacted groundwater extends less than 600 feet south of the south wall of the former manufacturing building and does not reach beyond the Whirlpool property. The amount of TCE contained in this southern plume is estimated to be 3 to 8 gallons.

Contaminant migration in groundwater to the north extends approximately 1,000 feet north of the Whirlpool property boundary. The amount of TCE in the northern plume is estimated to be less than 1 to 2 gallons.

At the northeast corner of the former manufacturing building, groundwater flows to the east/northeast. With the exception of one location, no TCE was detected in groundwater at locations where the Basal Transmissive Zone was absent northeast of the building. TCE has been detected at levels slightly above the MCL in the northwest corner of the Boys and Girls Club property, south of the future Ingersoll Avenue road expansion project and on city of Fort Smith property as shown in Figure 4-7 (DP-42 at 6.4 µg/L and DP-45 at 6.8 µg/L).

8.2 FATE AND TRANSPORT

A number of geologic and hyrdogeologic factors inhibit contaminant migration to the north of the Whirlpool property. These factors include the flat potentiometric surface in and to the north of the source area, the absence of an upper “sand” unit in the residential areas to the north of Ingersoll Avenue and the thinning or absence of the lower “gravel” unit of the Basal Transmissive Zone in the residential areas to the north of Jacobs Avenue.

Both the northern and southern plumes exhibit characteristics of a mature stable plume. The most recent depiction of plume boundaries using 2014 fourth quarter results falls within the historical limits of the plumes except for the area around MW-61 and the area near the northeast corner of the manufacturing building, which was not identified until 2014. As of the fourth quarter of 2014, 79% of the wells in the northern plume and 89% of the wells in the southern plume exhibit little or no TCE or decreasing or stable TCE trends. Evidence suggests that reductive dechlorination is occurring in portions of the plume. Numerous wells in the northern plume including: MW-41, MW-46R, MW-56, MW-57, MW-58, MW-71, RW-69, IW-73, IW-74, IW-76 and IW-77 displayed the presence of cis-1,2-DCE in groundwater samples, which clearly demonstrates that reductive dechlorination is occurring in the northern plume. In addition, several of these wells including: MW-46R, MW-58, MW-71, RW-69, IW-73, IW-74 and IW-77 have shown detectable levels of vinyl chloride, which provides further evidence of reductive dechlorination in the northern plume. Likewise, reductive dechlorination was also observed in the southern plume as indicated by the presence of cis-1,2-DCE in the following wells: MW-25, MW-33, MW-37, MW-38, ITMW-6, ITMW-7, ITMW-9, ITMW-10, ITMW-11, ITMW-12, ITMW-13, ITMW-14, ITMW-15, ITMW-17, ITMW-18 and ITMW-19. Vinyl chloride was also detected in the following wells on several occasions: MW-25 MW-37, MW-38, ITMW-9, ITMW-10, ITMW-11, ITMW-12, ITMW-15, ITMW-17 and ITMW-19, which provides further support that reductive dechlorination is occurring in the southern plume.

Monitoring and evaluation of potential vapor intrusion show that concentrations in groundwater and soil vapor are consistent with historical results. Vapor intrusion risk estimates first modeled prior to the RADD were updated based on recent groundwater data collected during 2013 and 2014. These modeled risk estimates for vapor intrusion from offsite groundwater continue to be below ADEQ’s risk management limits of 10^{-5} and 1 for cumulative cancer risk and non-cancer HI, respectively. In addition, actual soil vapor concentration data collected in 2013 and 2014

indicate that the groundwater vapor intrusion modeling approach overestimates potential exposure risks and that actual exposure risks are less than those predicted by the model.

8.3 REMEDY IMPLEMENTATION

In 2014, Whirlpool conducted several remedial actions required by the RADD. These activities included multiple different ISCO injections in Areas 1, 2 and 3 to spur chemical reduction of TCE in groundwater in these areas; the imposition of a deed restriction on that portion of the Whirlpool property containing Area 1; and the quarterly monitoring of TCE groundwater concentrations and other parameters related to TCE attenuation throughout the plume. Placement of an onsite soil cover in the vicinity of Area 1 is scheduled for 2015.

Whirlpool also conducted additional voluntary remediation activities, beyond those required by the RADD. These additional activities included targeting ISCO injections within the neck area and the removal of soil through the installation of nineteen large diameter borings along the former linear drainage feature.

Following ISCO injections, the total TCE concentrations decreased by approximately 40% in the supplemental neck area (Injection Array 1), by approximately 55% in Areas 2 and 3 (Injection Array 2) and by approximately 55% in Area 1 (Injection Array 3). These reductions are significant considering the volume of TCE in groundwater in the northern plume is estimated to range from less than 1 gallon up to 2 gallons (Table 4-2).

The reduction in TCE concentrations following ISCO injections in the supplemental neck area (Injection Array 1) has resulted in the apparent separation of the northwest plume from the southern plume to the south of Ingersoll Avenue in the area of MW-26, MW-84, ITMW-16 and MW-27 as shown on Figure 4-7. In addition, the reduction in TCE concentrations following ISCO injections in wells located adjacent and to the north of Ingersoll Avenue (MW-34, MW-65, MW-35R, IW-80 and MW-36) has further separated areas of the northwest plume with concentrations greater than 100 µg/L. Further reduction in TCE concentrations in the source area are evident based on results from the 30 day post ISCO injection monitoring event that occurred in early December 2014. This has resulted in the separation of the source area plume in the area of ITMW-15, ITMW-19, IW-152 and MW-172 as shown on Figure 4-8.

It is expected that the reduction in TCE concentrations in these areas and the separation of the southern and northern plumes will continue for a period of time given the geologic and hydrogeologic factors that act to inhibit migration of contamination to the north (flat potentiometric surface in and to the north of the source area, the absence of upper “sand” unit in the residential areas to the north of Ingersoll Avenue and the thinning or absence of the lower “gravel” unit of the Basal Transmissive Zone in the residential areas to the north of Jacobs Avenue).

Water levels, field water quality parameters and persulfate concentrations indicate that the influence of the oxidant was measured in wells located in the injection areas and up to 15 feet (MW-38 and ITMW-17) to 35 feet (MW-24) from the injection areas. Measurable levels of

persulfate have persisted in portions of the injection areas and in wells down-gradient of the injection areas for more than 90 days following the second ISCO injection event, more than 170 days following the initial ISCO injection event in Area 1/Injection Array 3 and at least 30 days following the third ISCO injection event. The success of the 2014 ISCO injection efforts are anticipated to be further evident after receipt and assessment of the future quarterly groundwater monitoring data (i.e. groundwater monitoring event performed in January 2015).

8.4 CONCLUSIONS

- On the Whirlpool property itself, the primary source of TCE in the Vadose Zone soils and saturated Basal Transmissive Zone soils appears to be the former linear drainage feature that extended from the former degreaser building towards the northwest corner of the former manufacturing building in the vicinity of Area 1.
- The highest TCE concentrations in soil on the Whirlpool property are generally located near the center of the former linear drainage feature extending roughly from DP-29 to the east towards DP-08 to the west.
- Within the Basal Transmissive Zone on the Whirlpool property, the highest measured TCE concentration in soil occurred at DP-08 and is confined to a relatively limited area of the linear drainage feature.
- Contaminant migration from the Whirlpool property in groundwater is strongly influenced by the surface topography of competent shale bedrock and the thinning or absence of upper “sand” unit and lower “gravel” unit of the Basal Transmissive Zone.
- Groundwater elevation data demonstrates the presence of a groundwater divide just south of Ingersoll Avenue. To the north of this divide, groundwater generally flows (with a gentle gradient) to the north/northeast. To the south of this divide (i.e. on the Whirlpool property) groundwater gradients are generally flat or slightly to the south/southeast. As long as this divide continues to exist, contaminated soil and groundwater in the vicinity of Area 1 on the Whirlpool property are not a continuing source of TCE to the northern plume.
- The reduction in TCE concentrations following ISCO injections in the supplemental neck area have resulted in the apparent separation of the southern and northwestern plume to the south of Ingersoll Avenue.
- Groundwater impact can now be categorized as three plumes with distinct characteristics as follows:
    - The southern plume is characterized by a relatively flat south, southeast potentiometric gradient; maximum TCE concentrations in groundwater greater than 1,000 µg/L; and an aerial extent of approximately 900,000 ft^2 predominately located under the footprint of the former manufacturing building. Area 1 and the linear drainage feature are included in the southern plume. The southern plume does not extend beyond the limits of the Whirlpool property.

  - The northern plume is characterized by a north, northeast potentiometric gradient that is flat to the south and steepens to north, northeast; TCE concentrations in groundwater generally between 5 and 1,000 µg/L; and an aerial extent of approximately 500,000 ft^2 located north of the Whirlpool.
  - The plume at the northeast corner is characterized by an east, northeast potentiometric gradient; TCE concentrations in groundwater generally between 5 and 600 µg/L; and a limited aerial extent. The northeast corner groundwater plume extends beyond the Whirlpool property to property owned by the Boys & Girls Club, but offsite groundwater TCE concentrations are only slightly elevated above MCLs.

- With respect to the southern plume, based on groundwater data collected over more than 20 years, it appears that TCE concentration trends are stable to decreasing for wells in Area 1 on the Whirlpool property. This data, which is shown in Figure 4-7 and Figure 4-8, supports our existing understanding of Area 1 and does not demonstrate a fundamental change in groundwater conditions that would necessitate a change in remedial approach.
- Subsequent to the third ISCO injection, the sum of the TCE concentrations in groundwater in Area 1 decreased from approximately 944,000 µg/L to approximately 432,000 µg/L approximately 30 days following injection for an approximate 50% decrease.
- Subsequent to the second ISCO injection, the sum of the TCE concentrations in the supplemental neck area decreased from approximately 1,300 µg/L to approximately 800 µg/L roughly five months following injection for an approximate 55% decrease.
- Subsequent to the second ISCO injection, the sum of the TCE concentrations in the Area 2 and Area 3 decreased from approximately 3,900 µg/L to approximately 1,700 µg/L roughly five months following injection for an approximate 55% decrease.
- TCE concentrations in monitoring wells in the northern and southern plumes exhibit characteristics of stability based upon statistical concentration trends and stable to slightly decreasing average concentrations.
- Current groundwater concentrations are not expected to result in the potential for significant vapor intrusion even using the most conservative scenario. For the RADD, vapor intrusion risk estimates were modeled based on groundwater data; these modeled risk estimates were updated in 2014 based on the groundwater data collected during 2014 in the neighborhood. The updated modeled risk estimates continue to be below ADEQ's risk threshold limits. In addition, risk estimates calculated from actual measured concentrations of TCE in soil vapor and water from the soil vapor monitoring points indicate that the actual soil vapor intrusion risk is likely lower than that predicted by the modeled risk estimates.
- Analytical results for VOCs in groundwater during 2014 demonstrate that natural attenuation of TCE is occurring via biological mechanisms in both onsite and offsite

groundwater, as demonstrated by the presence of the reductive dechlorination byproduct cis-1,2-DCE in the majority of the onsite and offsite groundwater.

- Bioattenuation of TCE may be enhanced by adjusting pH to levels more conducive to bioactivity (6 to 8 SU). Groundwater pH adjustment in Area 1 was complemented via the addition of crushed limestone gravel in the large diameter borings.
- Combined MNA results provide concrete support that biodegradation processes are contributing to the conversion of chlorinated VOCs in site groundwater. The chlorinated ethene data (cis-1,2-DCE and VC) along with the geochemical parameters (ORP, DO, TOC and nutrients) and microbial (Dehalococcoides) results demonstrate that environmental conditions are conducive for microbial induced anaerobic reductive dechlorination of the chlorinated ethenes.

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TABLES

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	ERM-1	ERM-1	ERM-2	ERM-3	ERM-4	ERM-5	ERM-5	ERM-5	ERM-6	ERM-7	ERM-8	ERM-8	ERM-9	ERM-9	DP-23	DP-23	DP-23
ENVIRON Sample ID																DP-23 (10.0 FT) - 062014	DP-23 (15.0 FT) - 062014	DP-23 (20.5 FT) - 062014
Lab Sample ID																60172280005	60172280006	60172280008
Collection Depth (ft bgs)		4	12	14	12	14	2.5-3	9	18	11	8	2	14	2	8	10	15	20.5
Sample Method																		
Sample Date		1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	06/24/2014	06/24/2014	06/24/2014
Comments																		
Volatile Organic Compounds																		
Acetone	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0196)	U (0.0182)	U (0.0182)
Benzene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
Bromodichloromethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
Bromoform	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
Bromomethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
2-Butanone	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0098)	U (0.0091)	U (0.0091)
Carbon Disulfide	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
Carbon Tetrachloride	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
Chlorobenzene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
Chloroethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
Chloroform	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0202 (0.0049)	0.0029 J (0.0046)	U (0.0045)
Chloromethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
Dibromochloromethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
1,1-Dichloroethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
1,2-Dichloroethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
1,1-Dichloroethene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0077 (0.0049)	U (0.0046)	U (0.0045)
cis-1,2-Dichloroethene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.58 J (2.15)	0.0414 (0.0046)	0.0154 (0.0045)
trans-1,2-Dichloroethene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0048 J (0.0049)	U (0.0046)	U (0.0045)
1,2-Dichloropropane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
1,3-Dichloropropene (total)	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
cis-1,3-Dichloropropene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
trans-1,3-Dichloropropene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
Ethyl Benzene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
2-Hexanone	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0196)	U (0.0182)	U (0.0182)
4-Methyl-2-pentanone	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0098)	U (0.0091)	U (0.0091)
Methylene Chloride	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.14 (2.15)	0.0201 (0.0046)	U (0.0045)
Styrene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
1,1,2,2-Tetrachloroethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
Tetrachloroethene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0269 (0.0049)	0.0043 J (0.0046)	U (0.0045)
Toluene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0086 (0.0049)	U (0.0046)	U (0.0045)
1,1,1-Trichloroethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)
1,1,2-Trichloroethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0053 (0.0049)	U (0.0046)	U (0.0045)
Trichloroethene	NE	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.032	0.012	0.186	0.009	<0.005	93.3 (2.15)	17.9 (0.447)	0.191 (0.0045)
Vinyl Chloride	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (2.15)	0.0408 (0.0046)	U (0.0045)
Xylenes (total)	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	U (0.0049)	U (0.0046)	U (0.0045)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location		DP-23	DP-24	DP-24	DP-24	DP-24	DP-24	DP-25	DP-25	DP-25	DP-25	DP-25
ENVIRON Sample ID	Remedial Action	DP-23 (4.5 FT) - 062014	DP-24 (12.0 FT) - 062014	DP-24 (18.0 FT) - 062014	DP-24 (20.5 FT) - 062014	DP-24 (27.0 FT) - 062014	DP-24 (9.5 FT) - 062014	DP-25 (14.0 FT) - 062014	DP-25 (17.0 FT) - 062014	DP-25 (25.5 FT) - 062014	DP-25 (4.5 FT) - 062014	DP-25 (6.0 FT) - 062014
Lab Sample ID	Levels per ADEQ	60172280004	60172418009	60172418010	60172418011	60172418012	60172418008	60172594003	60172594004	60172594005	60172594001	60172594002
Collection Depth (ft bgs)	RADD Issued	4.5	12	18	20.5	27	9.5	14	17	25.5	4.5	6
Sample Method	December 2013											
Sample Date		06/24/2014	06/25/2014	06/25/2014	06/25/2014	06/25/2014	06/25/2014	06/27/2014	06/27/2014	06/27/2014	06/27/2014	06/27/2014
Comments												
Volatile Organic Compounds												
Acetone	NE	0.0518 (0.019)	0.0096 (0.0181)	U (0.0178)	U (0.0172)	0.0093 (0.0173)	0.0099 (0.017)	U (0.0178)	U (0.017)	U (0.0158)	U (0.0194)	U (0.0179)
Benzene	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
Bromodichloromethane	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
Bromoform	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
Bromomethane	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
2-Butanone	NE	0.0114 (0.0095)	U (0.0091)	U (0.0089)	U (0.0086)	U (0.0087)	U (0.0085)	U (0.0089)	U (0.0085)	U (0.0079)	U (0.0097)	U (0.009)
Carbon Disulfide	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
Carbon Tetrachloride	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
Chlorobenzene	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
Chloroethane	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
Chloroform	NE	0.0078 (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
Chloromethane	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
Dibromochloromethane	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
1,1-Dichloroethane	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
1,2-Dichloroethane	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
1,1-Dichloroethene	NE	0.0115 (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	0.0177 (0.0044)	0.0044 (0.0042)	U (0.0039)	0.0099 (0.0048)	0.0103 (0.0045)
cis-1,2-Dichloroethene	NE	9.68 (1.14)	0.0074 (0.0045)	0.012 (0.0045)	0.0093 (0.0043)	0.0056 (0.0043)	0.0132 (0.0042)	0.608 (0.457)	0.0677 (0.0042)	U (0.0039)	1.32 (0.457)	1.56 (0.444)
trans-1,2-Dichloroethene	NE	0.0496 (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	0.0063 (0.0048)	0.0073 (0.0045)
1,2-Dichloropropane	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
1,3-Dichloropropene (total)	NE	U (0.0048)	(0.0045)	U (0.0045)	U (0.0043)	(0.0043)	(0.0042)	(0.0044)	U (0.0042)	(0.0039)	(0.0048)	U (0.0045)
cis-1,3-Dichloropropene	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
trans-1,3-Dichloropropene	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
Ethyl Benzene	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
2-Hexanone	NE	U (0.019)	U (0.0181)	U (0.0178)	U (0.0172)	U (0.0173)	U (0.017)	U (0.0178)	U (0.017)	U (0.0158)	U (0.0194)	U (0.0179)
4-Methyl-2-pentanone	NE	0.0175 (0.0095)	U (0.0091)	U (0.0089)	U (0.0086)	U (0.0087)	U (0.0085)	U (0.0089)	U (0.0085)	U (0.0079)	U (0.0097)	U (0.009)
Methylene Chloride	NE	2.98 (1.14)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
Styrene	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
1,1,2,2-Tetrachloroethane	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
Tetrachloroethene	NE	0.0516 (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	0.0103 (0.0044)	0.0023 J (0.0042)	U (0.0039)	0.0092 (0.0048)	0.0133 (0.0045)
Toluene	NE	0.0172 (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	0.006 (0.0045)
1,1,1-Trichloroethane	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
1,1,2-Trichloroethane	NE	0.0034 J (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)
Trichloroethene	NE	44.8 (1.14)	0.625 (0.223)	1.07 (0.226)	0.664 (0.232)	0.549 (0.209)	0.772 (0.231)	22.3 (0.457)	6.37 (0.429)	2.55 (0.204)	15.8 (0.457)	28.9 (2.22)
Vinyl Chloride	NE	4.43 (1.14)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	0.0659 (0.0044)	0.0062 (0.0042)	U (0.0039)	0.217 (0.0048)	0.0755 (0.0045)
Xylenes (total)	NE	U (0.0048)	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0042)	U (0.0044)	U (0.0042)	U (0.0039)	U (0.0048)	U (0.0045)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location		DP-26	DP-26	DP-26	DP-26	DP-26	DP-27	DP-27	DP-27	DP-27	DP-28	DP-28
ENVIRON Sample ID	Remedial Action	DP-26 (11.0 FT) - 062014	DP-26 (16.0 FT) - 062014	DP-26 (24.0 FT) - 062014	DP-26 (28.0 FT) - 062014	DP-26 (24.0 FT) - 062014 - DUP	DP-27 (12.5 FT) - 062014	DP-27 (23.5 FT) - 062014	DP-27 (26.5 FT) - 062014	DP-27 (26.5 FT) - 062014 - DUP	DP-28 (12.0 FT) - 062014	DP-28 (17.0 FT) - 062014
Lab Sample ID	Levels per ADEQ	60172509037	60172509038	60172509039	60172509041	60172509040	60172509030	60172509032	60172509033	60172509034	60172280011	60172280012
Collection Depth (ft bgs)	RADD Issued	11	16	24	28	24	12.5	23.5	26.5	26.5	12	17
Sample Method	December 2013											
Sample Date		06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/24/2014	06/24/2014
Comments						Field Duplicate				Field Duplicate		
Volatile Organic Compounds												
Acetone	NE	0.0157 (0.0206)	U (0.0175)	0.0105 (0.0166)	U (0.0208)	0.0111 (0.0173)	0.0096 (0.018)	U (0.018)	U (0.0177)	U (0.0187)	U (0.018)	U (0.0197)
Benzene	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
Bromodichloromethane	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
Bromoform	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
Bromomethane	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
2-Butanone	NE	U (0.0103)	U (0.0087)	U (0.0083)	U (0.0104)	U (0.0086)	U (0.009)	U (0.009)	U (0.0088)	U (0.0093)	U (0.009)	U (0.0099)
Carbon Disulfide	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
Carbon Tetrachloride	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
Chlorobenzene	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
Chloroethane	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
Chloroform	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
Chloromethane	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
Dibromochloromethane	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
1,1-Dichloroethane	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
1,2-Dichloroethane	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
1,1-Dichloroethene	NE	U (0.0051)	U (0.0044)	U (0.0041)	0.0026 J (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
cis-1,2-Dichloroethene	NE	U (0.0051)	U (0.0044)	0.0136 (0.0041)	0.0038 J (0.0052)	0.0163 (0.0043)	U (0.0047)	U (0.0045)	U (0.0044)	U (0.0047)	0.04 (0.0045)	0.0432 (0.0049)
trans-1,2-Dichloroethene	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
1,2-Dichloropropane	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
1,3-Dichloropropene (total)	NE	(0.0051)	U (0.0044)	(0.0041)	U (0.0052)	(0.0043)	(0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
cis-1,3-Dichloropropene	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
trans-1,3-Dichloropropene	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
Ethyl Benzene	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
2-Hexanone	NE	U (0.0206)	U (0.0175)	U (0.0166)	U (0.0208)	U (0.0173)	U (0.018)	U (0.018)	U (0.0177)	U (0.0187)	U (0.018)	U (0.0197)
4-Methyl-2-pentanone	NE	U (0.0103)	U (0.0087)	U (0.0083)	U (0.0104)	U (0.0086)	U (0.009)	U (0.009)	U (0.0088)	U (0.0093)	U (0.009)	U (0.0099)
Methylene Chloride	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	0.0277 (0.0045)	U (0.0049)
Styrene	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
1,1,2,2-Tetrachloroethane	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
Tetrachloroethene	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
Toluene	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
1,1,1-Trichloroethane	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
1,1,2-Trichloroethane	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
Trichloroethene	NE	0.0319 (0.0051)	0.0445 (0.0044)	0.567 (0.228)	3.39 (0.617)	0.798 (0.193)	U (0.0047)	0.0043 J (0.0045)	U (0.0044)	U (0.0047)	3.59 (0.52)	1.59 (0.609)
Vinyl Chloride	NE	U (0.0051)	U (0.0044)	0.0033 (0.0041)	U (0.0052)	0.0044 (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)
Xylenes (total)	NE	U (0.0051)	U (0.0044)	U (0.0041)	U (0.0052)	U (0.0043)	U (0.0045)	U (0.0045)	U (0.0044)	U (0.0047)	U (0.0045)	U (0.0049)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location		DP-28	DP-28	DP-28	DP-29	DP-29	DP-29	DP-29	DP-30	DP-30	DP-30	DP-30
ENVIRON Sample ID	Remedial Action	DP-28 (20.5 FT) - 062014	DP-28 (4.5 FT) - 062014	DP-28 (7.5 FT) - 062014	DP-29 (14.5 FT) - 062014	DP-29 (20.5 FT) - 062014	DP-29 (3.0 FT) - 062014	DP-29 (9.0 FT) - 062014	DP-30 (13.5 FT) - 062014	DP-30 (22.0 FT) - 062014	DP-30 (4.5 FT) - 062014	DP-30 (8.0 FT) - 062014
Lab Sample ID	Levels per ADEQ	60172280013	60172280009	60172280010	60172418015	60172418018	60172418013	60172418014	60172418021	60172418023	60172418019	60172418020
Collection Depth (ft bgs)	RADD Issued	20.5	4.5	7.5	14.5	20.5	3	9	13.5	22	4.5	8
Sample Method	December 2013											
Sample Date		06/24/2014	06/24/2014	06/24/2014	06/25/2014	06/25/2014	06/25/2014	06/25/2014	06/25/2014	06/25/2014	06/25/2014	06/25/2014
Comments												
Volatile Organic Compounds												
Acetone	NE	U (0.0172)	U (0.0176)	U (0.0186)	0.0095 (0.0181)	U (0.0188)	0.0506 (0.0178)	U (0.0189)	U (0.0177)	U (0.0173)	0.0097 (0.0175)	0.0155 (0.0179)
Benzene	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
Bromodichloromethane	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	0.0026 J (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
Bromoform	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
Bromomethane	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
2-Butanone	NE	U (0.0086)	U (0.0088)	U (0.0093)	U (0.0091)	U (0.0094)	U (0.0089)	U (0.0095)	U (0.0088)	U (0.0086)	U (0.0087)	U (0.009)
Carbon Disulfide	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	0.0028 J (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
Carbon Tetrachloride	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	0.0052 (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
Chlorobenzene	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
Chloroethane	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
Chloroform	NE	U (0.0043)	0.0042 J (0.0044)	0.0068 (0.0046)	0.0062 (0.0045)	U (0.0047)	0.0258 (0.0045)	0.0329 (0.0047)	0.0067 (0.0044)	U (0.0043)	U (0.0044)	0.0039 (0.0045)
Chloromethane	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
Dibromochloromethane	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
1,1-Dichloroethane	NE	U (0.0043)	0.0088 (0.0044)	0.007 (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
1,2-Dichloroethane	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
1,1-Dichloroethene	NE	U (0.0043)	0.0219 (0.0044)	0.0249 (0.0046)	0.0341 (0.0045)	0.0097 (0.0047)	0.11 (0.0045)	0.0948 (0.0047)	0.0945 (0.0044)	0.0024 J (0.0043)	0.0046 (0.0044)	0.064 (0.0045)
cis-1,2-Dichloroethene	NE	0.0049 (0.004)	4.15 (0.448)	3.48 (0.433)	0.0284 (0.0045)	0.0231 (0.0047)	18.5 (2.28)	0.169 (0.0047)	2.01 J (2.2)	0.015 (0.0043)	0.531 (0.483)	2.23 (0.456)
trans-1,2-Dichloroethene	NE	U (0.0043)	0.0145 (0.0044)	0.0098 (0.0046)	U (0.0045)	U (0.0047)	0.24 (0.0045)	U (0.0047)	0.017 (0.0044)	U (0.0043)	U (0.0044)	0.0139 (0.0045)
1,2-Dichloropropane	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
1,3-Dichloropropene (total)	NE	U (0.0043)	U (0.0044)	U (0.0046)	(0.0045)	U (0.0047)	(0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	(0.0044)	(0.0045)
cis-1,3-Dichloropropene	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
trans-1,3-Dichloropropene	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
Ethyl Benzene	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
2-Hexanone	NE	U (0.0172)	U (0.0176)	U (0.0186)	U (0.0181)	U (0.0188)	U (0.0178)	U (0.0189)	U (0.0177)	U (0.0173)	U (0.0175)	U (0.0179)
4-Methyl-2-pentanone	NE	U (0.0086)	U (0.0088)	U (0.0093)	U (0.0091)	U (0.0094)	U (0.0089)	U (0.0095)	U (0.0088)	U (0.0086)	U (0.0087)	U (0.009)
Methylene Chloride	NE	U (0.0043)	1.03 (0.448)	1.55 (0.433)	0.0575 (0.0045)	0.0046 (0.0047)	U (2.28)	1.21 (2.18)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
Styrene	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
1,1,2,2-Tetrachloroethane	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
Tetrachloroethene	NE	U (0.0043)	0.0077 (0.0044)	0.0123 (0.0046)	0.0033 (0.0045)	U (0.0047)	0.11 (0.0045)	0.008 (0.0047)	0.0152 (0.0044)	U (0.0043)	0.0059 (0.0044)	0.0167 (0.0045)
Toluene	NE	U (0.0043)	0.0675 (0.0044)	0.0703 (0.0046)	U (0.0045)	U (0.0047)	0.026 (0.0045)	0.0044 J (0.0047)	0.0048 (0.0044)	U (0.0043)	U (0.0044)	0.0037 (0.0045)
1,1,1-Trichloroethane	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	U (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
1,1,2-Trichloroethane	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	0.0155 (0.0045)	0.0107 (0.0047)	0.0024 J (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)
Trichloroethene	NE	0.0853 (0.004)	11.9 (0.448)	18.1 (0.433)	20.7 (0.41)	1.74 (0.505)	135 (2.28)	87.4 (2.18)	55.2 (2.2)	1.62 (0.451)	4.03 (0.483)	21.4 (0.456)
Vinyl Chloride	NE	U (0.0043)	0.463 (0.448)	0.382 J (0.433)	0.0062 (0.0045)	U (0.0047)	U (2.28)	0.0601 (0.0047)	U (2.2)	0.0025 J (0.0043)	0.113 (0.0044)	0.404 (0.456)
Xylenes (total)	NE	U (0.0043)	U (0.0044)	U (0.0046)	U (0.0045)	U (0.0047)	0.0069 (0.0045)	U (0.0047)	U (0.0044)	U (0.0043)	U (0.0044)	U (0.0045)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location		DP-30	DP-31	DP-31	DP-31	DP-31	DP-31	DP-31	DP-32	DP-32	DP-32	DP-32
ENVIRON Sample ID	Remedial Action	DP-30 (22.0 FT) - 062014-DUP	DP-31 (12.0 FT) - 062014	DP-31 (22.0 FT) - 062014	DP-31 (27.0 FT) - 062014	DP-31 (3.0 FT) - 062014	DP-31 (9.5 FT) - 062014	DP-31 (22.0 FT) - 062014 - DUP	DP-32 (12.0 FT) - 062014	DP-32 (22.5 FT) - 062014	DP-32 (27.0 FT) - 062014	DP-32 (4.5 FT) - 062014
Lab Sample ID	Levels per ADEQ	60172418024	60172509003	60172509005	60172509007	60172509001	60172509002	60172509006	60172509023	60172509025	60172509026	60172509021
Collection Depth (ft bgs)	RADD Issued	22	12	22	27	3	9.5	22	12	22.5	27	4.5
Sample Method	December 2013											
Sample Date		06/25/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014
Comments		Field Duplicate						Field Duplicate				
Volatile Organic Compounds												
Acetone	NE	U (0.0176)	0.0148 J (0.0175)	U (0.0149)	0.0108 (0.017)	0.0163 (0.0196)	0.014 (0.0176)	U (0.0148)	0.02 (0.0199)	U (0.0188)	U (0.0164)	0.0163 (0.0182)
Benzene	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
Bromodichloromethane	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
Bromoform	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
Bromomethane	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
2-Butanone	NE	U (0.0088)	U (0.0087)	U (0.0074)	U (0.0085)	U (0.0098)	U (0.0088)	U (0.0074)	0.0057 J (0.0099)	U (0.0094)	U (0.0082)	U (0.0091)
Carbon Disulfide	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
Carbon Tetrachloride	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
Chlorobenzene	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
Chloroethane	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
Chloroform	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
Chloromethane	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
Dibromochloromethane	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
1,1-Dichloroethane	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	0.0028 J (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
1,2-Dichloroethane	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
1,1-Dichloroethene	NE	U (0.0044)	0.0175 (0.0044)	0.0147 (0.0037)	0.0025 (0.0043)	U (0.0049)	0.0143 (0.0044)	0.0134 (0.0037)	0.033 (0.005)	0.0118 (0.0047)	U (0.0041)	0.0137 (0.0045)
cis-1,2-Dichloroethene	NE	0.0104 (0.0044)	1.68 (0.855)	0.0453 (0.0037)	0.0047 (0.0043)	0.181 (0.0049)	1.33 (0.437)	0.0444 (0.0037)	5.01 (0.466)	0.628 (0.459)	0.0045 (0.0045)	2.62 (0.475)
trans-1,2-Dichloroethene	NE	U (0.0044)	0.0091 (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	0.0079 (0.0044)	U (0.0037)	0.0229 (0.005)	0.0029 (0.0047)	U (0.0041)	0.0044 (0.0045)
1,2-Dichloropropane	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
1,3-Dichloropropene (total)	NE	U (0.0044)	U (0.0044)	U (0.0037)	(0.0043)	(0.0049)	(0.0044)	U (0.0037)	U (0.005)	(0.0047)	U (0.0041)	(0.0045)
cis-1,3-Dichloropropene	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
trans-1,3-Dichloropropene	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
Ethyl Benzene	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
2-Hexanone	NE	U (0.0176)	U (0.0175)	U (0.0149)	U (0.017)	U (0.0196)	U (0.0176)	U (0.0148)	U (0.0199)	U (0.0188)	U (0.0164)	U (0.0182)
4-Methyl-2-pentanone	NE	U (0.0088)	U (0.0087)	U (0.0074)	U (0.0085)	U (0.0098)	U (0.0088)	U (0.0074)	U (0.0099)	U (0.0094)	U (0.0082)	U (0.0091)
Methylene Chloride	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
Styrene	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
1,1,2,2-Tetrachloroethane	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
Tetrachloroethene	NE	U (0.0044)	0.0291 (0.0044)	0.0024 J (0.0037)	U (0.0043)	U (0.0049)	0.0199 (0.0044)	0.0029 J (0.0037)	0.0062 (0.005)	U (0.0047)	U (0.0041)	0.031 (0.0045)
Toluene	NE	U (0.0044)	0.0033 J (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	0.0026 (0.0044)	U (0.0037)	0.0033 J (0.005)	U (0.0047)	U (0.0041)	0.0044 (0.0045)
1,1,1-Trichloroethane	NE	U (0.0044)	U (0.0044)	0.0171 (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	0.0176 (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
1,1,2-Trichloroethane	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)
Trichloroethene	NE	1.66 (0.245)	22 (0.855)	7.59 (0.449)	3.02 (0.446)	0.698 (0.268)	20.6 (0.437)	7.05 (0.399)	28.3 (2.33)	7.4 (0.459)	0.0948 (0.0045)	6.66 (0.475)
Vinyl Chloride	NE	U (0.0044)	0.0586 (0.0044)	0.0123 (0.0037)	U (0.0043)	0.127 (0.0049)	0.0293 (0.0044)	0.0132 (0.0037)	1.2 (0.466)	0.126 (0.0047)	U (0.0041)	0.291 (0.475)
Xylenes (total)	NE	U (0.0044)	U (0.0044)	U (0.0037)	U (0.0043)	U (0.0049)	U (0.0044)	U (0.0037)	U (0.005)	U (0.0047)	U (0.0041)	U (0.0045)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location		DP-32	DP-32	DP-33	DP-33	DP-33	DP-33	DP-33	DP-34	DP-34	DP-34	DP-34
ENVIRON Sample ID	Remedial Action	DP-32 (9.5 FT) - 062014	DP-32 (27.0 FT) - 062014 - DUP	DP-33 (11.5 FT) - 062014	DP-33 (2.0 FT) - 062014	DP-33 (21.5 FT) - 062014	DP-33 (5.5 FT) - 062014	DP-33 (21.5 FT) - 062014-DUP	DP-34 (10.0 FT) - 062014	DP-34 (14.5 FT) - 062014	DP-34 (17.0 FT) - 062014	DP-34 (21.0 FT) - 062014
Lab Sample ID	Levels per ADEQ	60172509022	60172509027	60172418003	60172418001	60172418005	60172418002	60172418006	60172594007	60172594008	60172594009	60172594010
Collection Depth (ft bgs)	RADD Issued	9.5	27	11.5	2	21.5	5.5	21.5	10	14.5	17	21
Sample Method	December 2013											
Sample Date		06/26/2014	06/26/2014	06/25/2014	06/25/2014	06/25/2014	06/25/2014	06/25/2014	06/27/2014	06/27/2014	06/27/2014	06/27/2014
Comments			Field Duplicate					Field Duplicate				
Volatile Organic Compounds												
Acetone	NE	0.0316 (0.0175)	U (0.0187)	U (0.0162)	0.028 (0.0184)	U (0.0176)	U (0.0186)	U (0.0183)	U (0.0178)	U (0.0174)	U (0.0179)	U (0.0187)
Benzene	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Bromodichloromethane	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Bromoform	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Bromomethane	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
2-Butanone	NE	U (0.0088)	U (0.0093)	U (0.0081)	U (0.0092)	U (0.0088)	U (0.0093)	U (0.0092)	U (0.0089)	U (0.0087)	U (0.0089)	U (0.0093)
Carbon Disulfide	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Carbon Tetrachloride	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Chlorobenzene	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Chloroethane	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Chloroform	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Chloromethane	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Dibromochloromethane	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
1,1-Dichloroethane	NE	0.0034 (0.0044)	U (0.0047)	U (0.004)	0.0032 (0.0046)	U (0.0044)	0.0051 (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
1,2-Dichloroethane	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
1,1-Dichloroethene	NE	0.0441 (0.0044)	U (0.0047)	U (0.004)	0.0062 (0.0046)	U (0.0044)	0.0123 (0.0047)	U (0.0046)	U (0.0044)	0.016 (0.0044)	0.0237 (0.0045)	0.0032 J (0.0047)
cis-1,2-Dichloroethene	NE	6.16 (2.25)	0.0064 (0.0047)	0.038 (0.004)	0.853 (0.244)	0.0045 (0.0041)	1.41 (0.434)	0.0043 J (0.0044)	U (0.0046)	0.0131 (0.0044)	0.0331 (0.0045)	0.0116 (0.0047)
trans-1,2-Dichloroethene	NE	0.0144 (0.0044)	U (0.0047)	U (0.004)	0.0033 (0.0046)	U (0.0044)	0.0178 (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
1,2-Dichloropropane	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
1,3-Dichloropropene (total)	NE	(0.0044)	U (0.0047)	(0.004)	(0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	(0.0044)	(0.0044)	U (0.0045)	U (0.0047)
cis-1,3-Dichloropropene	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
trans-1,3-Dichloropropene	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Ethyl Benzene	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
2-Hexanone	NE	U (0.0175)	U (0.0187)	U (0.0162)	U (0.0184)	U (0.0176)	U (0.0186)	U (0.0183)	U (0.0178)	U (0.0174)	U (0.0179)	U (0.0187)
4-Methyl-2-pentanone	NE	U (0.0088)	U (0.0093)	U (0.0081)	U (0.0092)	U (0.0088)	U (0.0093)	U (0.0092)	U (0.0089)	U (0.0087)	U (0.0089)	U (0.0093)
Methylene Chloride	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Styrene	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
1,1,2,2-Tetrachloroethane	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Tetrachloroethene	NE	0.0101 (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Toluene	NE	0.0046 (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
1,1,1-Trichloroethane	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
1,1,2-Trichloroethane	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Trichloroethene	NE	36 (2.25)	0.108 (0.0047)	0.205 (0.004)	1.08 (0.244)	0.0867 (0.0041)	3.14 (0.434)	0.0959 (0.0044)	0.0354 (0.0046)	1.52 (0.228)	3.48 (0.458)	0.872 (0.234)
Vinyl Chloride	NE	U (2.25)	U (0.0047)	U (0.004)	0.0042 (0.0046)	U (0.0044)	0.0044 J (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)
Xylenes (total)	NE	U (0.0044)	U (0.0047)	U (0.004)	U (0.0046)	U (0.0044)	U (0.0047)	U (0.0046)	U (0.0044)	U (0.0044)	U (0.0045)	U (0.0047)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location		DP-34	DP-34	DP-35	DP-35	DP-35	DP-35	DP-36	DP-36	DP-36	DP-36	DP-36
ENVIRON Sample ID	Remedial Action	DP-34 (25.0 FT) - 062014	DP-34 (21.0 FT) - 062014 - DUP	DP-35 (13.0 FT) - 062014	DP-35 (17.0 FT) - 062014	DP-35 (21.5 FT) - 062014	DP-35 (8.0 FT) - 062014	DP-36 (14.0 FT) - 062014	DP-36 (19.5 FT) - 062014	DP-36 (21.5 FT) - 062014	DP-36 (25.5 FT) - 062014	DP-36 (6.5 FT) - 062014
Lab Sample ID	Levels per ADEQ	60172594012	60172594011	60172418027	60172418028	60172418029	60172418026	60172509010	60172509011	60172509012	60172509014	60172509009
Collection Depth (ft bgs)	RADD Issued	25	21	13	17	21.5	8	14	19.5	21.5	25.5	6.5
Sample Method	December 2013											
Sample Date		06/27/2014	06/27/2014	06/25/2014	06/25/2014	06/25/2014	06/25/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014
Comments			Field Duplicate									
Volatile Organic Compounds												
Acetone	NE	U (0.018)	U (0.018)	0.0095 (0.017)	U (0.0173)	U (0.0148)	0.0121 (0.0177)	U (0.0166)	U (0.0172)	U (0.0185)	0.0095 (0.0177)	U (0.0185)
Benzene	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
Bromodichloromethane	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
Bromoform	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
Bromomethane	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
2-Butanone	NE	U (0.009)	U (0.009)	U (0.0085)	U (0.0087)	0.004 J (0.0074)	U (0.0089)	U (0.0083)	U (0.0086)	U (0.0092)	U (0.0088)	U (0.0092)
Carbon Disulfide	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
Carbon Tetrachloride	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
Chlorobenzene	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
Chloroethane	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
Chloroform	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
Chloromethane	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
Dibromochloromethane	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
1,1-Dichloroethane	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
1,2-Dichloroethane	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
1,1-Dichloroethene	NE	U (0.0045)	0.0077 (0.0045)	U (0.0043)	0.0032 J (0.0043)	0.0049 (0.0037)	U (0.0044)	U (0.0042)	0.012 (0.0043)	0.0031 J (0.0046)	U (0.0044)	U (0.0046)
cis-1,2-Dichloroethene	NE	0.006 (0.0045)	0.0185 (0.0045)	U (0.0045)	0.0206 (0.0043)	0.014 (0.0037)	U (0.0048)	0.0058 (0.0042)	0.18 (0.0043)	0.0315 (0.0046)	0.0026 (0.0044)	0.0029 (0.0046)
trans-1,2-Dichloroethene	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	0.0041 J (0.0043)	0.0049 (0.0046)	U (0.0044)	U (0.0046)
1,2-Dichloropropane	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
1,3-Dichloropropene (total)	NE	(0.0045)	U (0.0045)	(0.0043)	U (0.0043)	U (0.0037)	(0.0044)	(0.0042)	U (0.0043)	U (0.0046)	(0.0044)	(0.0046)
cis-1,3-Dichloropropene	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
trans-1,3-Dichloropropene	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
Ethyl Benzene	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
2-Hexanone	NE	U (0.018)	U (0.018)	U (0.017)	U (0.0173)	U (0.0148)	U (0.0177)	U (0.0166)	U (0.0172)	U (0.0185)	U (0.0177)	U (0.0185)
4-Methyl-2-pentanone	NE	U (0.009)	U (0.009)	U (0.0085)	U (0.0087)	U (0.0074)	U (0.0089)	U (0.0083)	U (0.0086)	U (0.0092)	U (0.0088)	U (0.0092)
Methylene Chloride	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
Styrene	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
1,1,2,2-Tetrachloroethane	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
Tetrachloroethene	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	0.0036 J (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
Toluene	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
1,1,1-Trichloroethane	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	0.011 (0.0043)	0.0027 J (0.0046)	U (0.0044)	U (0.0046)
1,1,2-Trichloroethane	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)
Trichloroethene	NE	2.08 (0.316)	1.04 (0.459)	0.121 (0.0045)	2.03 (0.437)	2.14 (0.401)	0.038 (0.0048)	0.98 (0.207)	8.79 (0.402)	4.7 (0.486)	1.18 (0.237)	U (0.0044)
Vinyl Chloride	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	0.0024 J (0.0037)	U (0.0044)	U (0.0042)	0.0514 (0.0043)	0.0058 (0.0046)	U (0.0044)	U (0.0046)
Xylenes (total)	NE	U (0.0045)	U (0.0045)	U (0.0043)	U (0.0043)	U (0.0037)	U (0.0044)	U (0.0042)	U (0.0043)	U (0.0046)	U (0.0044)	U (0.0046)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location		DP-36	DP-37	DP-37	DP-37	DP-37	DP-37	MW-87	MW-87	MW-88	MW-89	MW-90
ENVIRON Sample ID	Remedial Action	DP-36 (21.5 FT) - 062014 - DUP	DP-37 (14.0 FT) - 062014	DP-37 (19.5 FT) - 062014	DP-37 (24.5 FT) - 062014	DP-37 (7.5 FT) - 062014	DP-37 (24.5 FT) - 062014 - DUP	MW-87 (15.0 FT) - 062014	MW-87 (4.5 FT) - 062014	MW-88 (12.0 FT) - 062014	MW-89 (17.5 FT) - 062014	MW-90 (14.5 FT) - 062014
Lab Sample ID	Levels per ADEQ	60172509013	60172509017	60172509018	60172509019	60172509016	60172509020	60172280002	60172280001	60172176003	60172176004	60172176001
Collection Depth (ft bgs)	RADD Issued	21.5	14	19.5	24.5	7.5	24.5	15	4.5	12	17.5	14.5
Sample Method	December 2013											
Sample Date		06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/26/2014	06/24/2014	06/24/2014	06/23/2014	06/23/2014	06/23/2014
Comments		Field Duplicate					Field Duplicate					
Volatile Organic Compounds												
Acetone	NE	U (0.0166)	0.0143 (0.0171)	U (0.0172)	U (0.0249)	U (0.0171)	U (0.0165)	U (0.0169)	0.0259 (0.0177)	U (0.0176)	U (0.0176)	U (0.0203)
Benzene	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Bromodichloromethane	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Bromoform	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Bromomethane	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
2-Butanone	NE	U (0.0083)	U (0.0086)	U (0.0086)	U (0.0125)	U (0.0086)	U (0.0083)	U (0.0084)	U (0.0088)	U (0.0088)	U (0.0088)	U (0.0102)
Carbon Disulfide	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Carbon Tetrachloride	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Chlorobenzene	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Chloroethane	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Chloroform	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Chloromethane	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Dibromochloromethane	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
1,1-Dichloroethane	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
1,2-Dichloroethane	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
1,1-Dichloroethene	NE	0.0047 (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
cis-1,2-Dichloroethene	NE	0.0305 (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	0.0039 (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
trans-1,2-Dichloroethene	NE	0.004 J (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
1,2-Dichloropropane	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
1,3-Dichloropropene (total)	NE	U (0.0041)	(0.0043)	U (0.0043)	U (0.0062)	(0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
cis-1,3-Dichloropropene	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
trans-1,3-Dichloropropene	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Ethyl Benzene	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
2-Hexanone	NE	U (0.0166)	U (0.0171)	U (0.0172)	U (0.0249)	U (0.0171)	U (0.0165)	U (0.0169)	U (0.0177)	U (0.0176)	U (0.0176)	U (0.0203)
4-Methyl-2-pentanone	NE	U (0.0083)	U (0.0086)	U (0.0086)	U (0.0125)	U (0.0086)	U (0.0083)	U (0.0084)	U (0.0088)	U (0.0088)	U (0.0088)	U (0.0102)
Methylene Chloride	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Styrene	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
1,1,2,2-Tetrachloroethane	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Tetrachloroethene	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Toluene	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
1,1,1-Trichloroethane	NE	0.0026 J (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
1,1,2-Trichloroethane	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Trichloroethene	NE	4.14 (0.425)	U (0.0043)	0.0472 (0.0045)	0.0099 (0.0043)	U (0.0043)	0.0288 (0.0047)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Vinyl Chloride	NE	0.0064 (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)
Xylenes (total)	NE	U (0.0041)	U (0.0043)	U (0.0043)	U (0.0062)	U (0.0043)	U (0.0041)	U (0.0042)	U (0.0044)	U (0.0044)	U (0.0044)	U (0.0051)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	MW-90	MW-91	MW-92	MW-92	MW-92	MW-92	MW-92	MW-93	MW-93	MW-93	MW-93
ENVIRON Sample ID		MW-90 (20.5 FT) - 062014	MW-91 (12.5 FT) - 062014	MW-92-SL-4FT-20140929	MW-92-SL-7FT-20140929	MW-92-SL-14FT-20140929	MW-92-SL-20FT-20140929	MW-92-SL-24FT-20140929	MW-93-SL-5FT-20141002	MW-93-SL-7FT-20141002	MW-93-SL-10FT-20141002	MW-93-SL-19FT-20141002
Lab Sample ID		60172176002	60172280003	60179053001	60179053002	60179053003	60179053004	60179053005	60179430001	60179430002	60179430003	60179430004
Collection Depth (ft bgs)		20.5	12.5	4	7	14	20	24	5	7	10	19
Sample Method												
Sample Date		06/23/2014	06/24/2014	09/29/2014	09/29/2014	09/29/2014	09/29/2014	09/29/2014	10/02/2014	10/02/2014	10/02/2014	10/02/2014
Comments												
Volatile Organic Compounds												
Acetone	NE	U (0.0201)	0.0188 (0.0186)	U (0.02)	U (0.0181)	U (0.0189)	U (0.0186)	U (0.0161)	0.0136 J (0.0186)	U (0.019)	U (0.0201)	0.0118 J (0.0188)
Benzene	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Bromodichloromethane	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Bromoform	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Bromomethane	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
2-Butanone	NE	U (0.01)	U (0.0093)	U (0.01)	U (0.009)	U (0.0095)	U (0.0093)	U (0.0081)	U (0.0093)	U (0.0095)	U (0.0101)	U (0.0094)
Carbon Disulfide	NE	U (0.005)	U (0.0047)	0.0074 (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Carbon Tetrachloride	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Chlorobenzene	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Chloroethane	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Chloroform	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Chloromethane	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Dibromochloromethane	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
1,1-Dichloroethane	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
1,2-Dichloroethane	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
1,1-Dichloroethene	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
cis-1,2-Dichloroethene	NE	U (0.005)	U (0.0047)	U (0.005)	0.0023 J (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	0.0046 J (0.0047)	0.0048 J (0.005)	U (0.0047)
trans-1,2-Dichloroethene	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
1,2-Dichloropropane	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
1,3-Dichloropropene (total)	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
cis-1,3-Dichloropropene	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
trans-1,3-Dichloropropene	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Ethyl Benzene	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
2-Hexanone	NE	U (0.0201)	U (0.0186)	U (0.02)	U (0.0181)	U (0.0189)	U (0.0186)	U (0.0161)	U (0.0186)	U (0.019)	U (0.0201)	U (0.0188)
4-Methyl-2-pentanone	NE	U (0.01)	U (0.0093)	U (0.01)	U (0.009)	U (0.0095)	U (0.0093)	U (0.0081)	U (0.0093)	U (0.0095)	U (0.0101)	U (0.0094)
Methylene Chloride	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	0.0024 J (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Styrene	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
1,1,2,2-Tetrachloroethane	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Tetrachloroethene	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Toluene	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
1,1,1-Trichloroethane	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
1,1,2-Trichloroethane	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Trichloroethene	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	0.364 (0.248)	U (0.0046)	0.0334 (0.004)	U (0.0046)	U (0.0047)	U (0.005)	0.0204 (0.0047)
Vinyl Chloride	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)
Xylenes (total)	NE	U (0.005)	U (0.0047)	U (0.005)	U (0.0045)	U (0.0047)	U (0.0046)	U (0.004)	U (0.0046)	U (0.0047)	U (0.005)	U (0.0047)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	MW-93	MW-93	MW-93	MW-94	MW-94	MW-94	MW-94	MW-94	MW-94	MW-94	MW-95
ENVIRON Sample ID		MW-93-SL-23FT-20141002	MW-93-SL-26FT-20141002	MW-93-SL-34.5FT-20141002	MW-94-SL-5FT-20141002	MW-94-SL-10FT-20141002	MW-94-SL-15FT-20141002	MW-94-SL-19FT-20141002	MW-94-SL-24FT-20141002	MW-94-SL-30FT-20141002	MW-94-SL-33FT-20141002	MW-95-SL-5FT-20141003
Lab Sample ID		60179430005	60179430006	60179430007	60179430008	60179430009	60179430010	60179430011	60179430012	60179430013	60179430014	60179517001
Collection Depth (ft bgs)		23	26	34.5	5	10	15	19	24	30	33	5
Sample Method												
Sample Date		10/02/2014	10/02/2014	10/02/2014	10/02/2014	10/02/2014	10/02/2014	10/02/2014	10/02/2014	10/02/2014	10/02/2014	10/03/2014
Comments												
Volatile Organic Compounds												
Acetone	NE	U (0.0181)	0.0126 J (0.0171)	0.0114 J (0.0174)	0.0207 (0.0205)	0.025 (0.0189)	U (0.0192)	0.0106 J (0.0191)	U (0.018)	U (0.0207)	U (0.0194)	0.0114 J (0.0198)
Benzene	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
Bromodichloromethane	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
Bromoform	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	0.0061 (0.005)
Bromomethane	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
2-Butanone	NE	U (0.009)	U (0.0085)	U (0.0087)	U (0.0103)	U (0.0094)	U (0.0096)	U (0.0096)	U (0.009)	U (0.0103)	U (0.0097)	U (0.0099)
Carbon Disulfide	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
Carbon Tetrachloride	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
Chlorobenzene	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
Chloroethane	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
Chloroform	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
Chloromethane	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
Dibromochloromethane	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
1,1-Dichloroethane	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
1,2-Dichloroethane	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	0.0072 (0.005)
1,1-Dichloroethene	NE	0.0042 J (0.0045)	0.0037 J (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	0.0278 (0.0052)	0.0025 J (0.0049)	U (0.005)
cis-1,2-Dichloroethene	NE	0.0155 (0.0045)	0.0168 (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	0.0108 (0.0045)	0.0502 (0.0052)	0.0505 (0.0049)	U (0.005)
trans-1,2-Dichloroethene	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
1,2-Dichloropropane	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
1,3-Dichloropropene (total)	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
cis-1,3-Dichloropropene	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
trans-1,3-Dichloropropene	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
Ethyl Benzene	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
2-Hexanone	NE	U (0.0181)	U (0.0171)	U (0.0174)	U (0.0205)	U (0.0189)	U (0.0192)	U (0.0191)	U (0.018)	U (0.0207)	U (0.0194)	0.059 (0.0198)
4-Methyl-2-pentanone	NE	U (0.009)	U (0.0085)	U (0.0087)	U (0.0103)	U (0.0094)	U (0.0096)	U (0.0096)	U (0.009)	U (0.0103)	U (0.0097)	U (0.0099)
Methylene Chloride	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
Styrene	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
1,1,2,2-Tetrachloroethane	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
Tetrachloroethene	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
Toluene	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
1,1,1-Trichloroethane	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
1,1,2-Trichloroethane	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
Trichloroethene	NE	3.98 (2.6)	3.25 (2.52)	0.343 (0.222)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	0.144 (0.0045)	2.17 (0.245)	0.814 (0.263)	U (0.005)
Vinyl Chloride	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)
Xylenes (total)	NE	U (0.0045)	U (0.0043)	U (0.0044)	U (0.0051)	U (0.0047)	U (0.0048)	U (0.0048)	U (0.0045)	U (0.0052)	U (0.0049)	U (0.005)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location		MW-95	MW-95	MW-95	MW-95	MW-95	MW-95	MW-172	MW-172	MW-172	MW-172	MW-172
ENVIRON Sample ID	Remedial Action	MW-95-SL-7FT-20141003	MW-95-SL-14FT-20141003	MW-95-SL-20FT-20141003	MW-95-SL-25FT-20141003	MW-95-SL-28FT-20141003	MW-95-SL-33FT-20141003	MW-172-SL-4FT-20141010	MW-172-SL-9.5FT-20141010	MW-172-SL-14FT-20141010	MW-172-SL-18FT-20141010	MW-172-SL-24FT-20141010
Lab Sample ID	Levels per ADEQ	60179517002	60179517003	60179517004	60179517005	60179517006	60179517007	60180133001	60180133002	60180133003	60180133004	60180133005
Collection Depth (ft bgs)	RADD Issued	7	14	20	25	28	33	4	9.5	14	18	24
Sample Method	December 2013											
Sample Date		10/03/2014	10/03/2014	10/03/2014	10/03/2014	10/03/2014	10/03/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014
Comments												
Volatile Organic Compounds												
Acetone	NE	0.0164 J (0.022)	U (0.0195)	U (0.0192)	U (0.0182)	0.0116 J (0.0182)	U (0.0173)	0.0123 J (0.019)	0.0586 (0.0187)	U (0.0192)	U (0.0187)	0.01 J (0.0163)
Benzene	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
Bromodichloromethane	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
Bromoform	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
Bromomethane	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
2-Butanone	NE	U (0.011)	U (0.0098)	U (0.0096)	U (0.0091)	U (0.0091)	U (0.0087)	U (0.0095)	U (0.0094)	U (0.0096)	U (0.0094)	U (0.0082)
Carbon Disulfide	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
Carbon Tetrachloride	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
Chlorobenzene	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
Chloroethane	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
Chloroform	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
Chloromethane	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
Dibromochloromethane	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
1,1-Dichloroethane	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
1,2-Dichloroethane	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
1,1-Dichloroethene	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	0.0055 (0.0046)	0.0069 (0.0043)	U (0.0047)	U (0.0047)	0.0041 J (0.0048)	0.0046 J (0.0047)	0.0066 (0.0041)
cis-1,2-Dichloroethene	NE	0.0185 (0.0055)	0.0504 (0.0049)	0.0187 (0.0048)	0.0041 J (0.0046)	0.0268 (0.0046)	0.0224 (0.0043)	0.01 (0.0047)	U (0.0047)	0.0026 J (0.0048)	0.0106 (0.0047)	0.0138 (0.0041)
trans-1,2-Dichloroethene	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
1,2-Dichloropropane	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
1,3-Dichloropropene (total)	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
cis-1,3-Dichloropropene	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
trans-1,3-Dichloropropene	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
Ethyl Benzene	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
2-Hexanone	NE	U (0.022)	U (0.0195)	U (0.0192)	U (0.0182)	U (0.0182)	U (0.0173)	U (0.019)	U (0.0187)	U (0.0192)	U (0.0187)	U (0.0163)
4-Methyl-2-pentanone	NE	U (0.011)	U (0.0098)	U (0.0096)	U (0.0091)	U (0.0091)	U (0.0087)	U (0.0095)	U (0.0094)	U (0.0096)	U (0.0094)	U (0.0082)
Methylene Chloride	NE	U (0.0055)	U (0.0049)	U (0.0048)	0.0027 (0.0046)	0.0041 (0.0046)	0.003 (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
Styrene	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
1,1,2,2-Tetrachloroethane	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
Tetrachloroethene	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
Toluene	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
1,1,1-Trichloroethane	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
1,1,2-Trichloroethane	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)
Trichloroethene	NE	0.0189 (0.0055)	0.0872 (0.0049)	0.0503 (0.0048)	0.971 (0.247)	4.02 (0.473)	4.92 (0.508)	U (0.0047)	0.0068 (0.0047)	0.288 (0.0048)	2.49 (0.251)	2.76 (0.454)
Vinyl Chloride	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	0.0039 J (0.0046)	0.0031 J (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	0.0031 J (0.0041)
Xylenes (total)	NE	U (0.0055)	U (0.0049)	U (0.0048)	U (0.0046)	U (0.0046)	U (0.0043)	U (0.0047)	U (0.0047)	U (0.0048)	U (0.0047)	U (0.0041)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location		MW-172	DP-01	DP-01	DP-02	DP-02	DP-02	DP-03	DP-03	DP-04	DP-04	DP-05	DP-05	DP-06	DP-06	DP-06	DP-06 DUP	DP-07	DP-07
ENVIRON Sample ID	Remedial Action	MW-172-SL-27FT-20141010																	
Lab Sample ID	Levels per ADEQ	60180133006																	
Collection Depth (ft bgs)	RADD Issued	27	15.5-16	19-19.5	2.5-3	6-6.5	15-15.5	4-4.5	12-12.5	18-18.5	25-25.5	21.5-22	24.5-25	5.5-6	8.5-9	25.5-26	25.5-26	5.5-6	12.5-13
Sample Method	December 2013																		
Sample Date		10/10/2014	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
Comments																	Field Duplicate		
Volatile Organic Compounds																			
Acetone	NE	0.0115 J (0.0155)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromoform	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromomethane	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone	NE	U (0.0078)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon Disulfide	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon Tetrachloride	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloromethane	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	NE	0.0061 (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	NE	0.0043 (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichloropropene (total)	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethyl Benzene	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NE	U (0.0155)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	NE	U (0.0078)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene Chloride	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	NE	3.04 (0.409)	0.0017 J	0.016	0.0013 J	<0.0038	0.087	0.0026 J	0.0019 J	0.0049	0.027	0.0039 J	0.0021 J	13	2.1	3.2	4.6	270	200
Vinyl Chloride	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes (total)	NE	U (0.0039)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
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ENVIRON

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	DP-07	DP-08	DP-08	DP-08	DP-09	DP-09	DP-11	DP-11 DUP	DP-12	DP-12	DP-14	DP-14	DP-14	DP-14 DUP	DP-14 DUP	DP-15	DP-15	DP-15
ENVIRON Sample ID																			
Lab Sample ID																			
Collection Depth (ft bgs)		23.5-24	5.5-6	11-11.5	18.5-19	3-3.5	5-5.5	19.5-20	19.5-20	4-4.5	11.5-12	11.5-12	15.5-16	28.5-29	15.5-16	28.5-29	18.5-19	22.5-23	25-25.5
Sample Method																			
Sample Date		1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
Comments								Field Duplicate						Field Duplicate		Field Duplicate			
Volatile Organic Compounds																			
Acetone	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromoform	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromomethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon Disulfide	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon Tetrachloride	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloromethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichloropropene (total)	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethyl Benzene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene Chloride	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	NE	1	66	110	3,300	0.96	1.3	1.2	1.1	0.63	0.84	0.57	0.63	1	0.73	1	0.4	5.8	5.7
Vinyl Chloride	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes (total)	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

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SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	DP-16	DP-16	DP-17	DP-18	DP-18 DUP	DP-22	DP-22	DP-38	DP-38	DP-38	DP-38	DP-38	DP-39
ENVIRON Sample ID									DP-38 (5.0 FT) - 082014	DP-38 (14.5 FT) - 082014	DP-38 (18.0 FT) - 082014	DP-38 (22.0 FT) - 082014	DP-38 (25.0 FT) - 082014	DP-39 (4.0 FT) - 082014
Lab Sample ID									60175122001	60175122002	60175122003	60175122004	60175122005	60175235001
Collection Depth (ft bgs)		9-9.5	29.5-30	9-9.5	27.5-28	27.5-28	8.5-9	27.5-28	5.0	14.5	18.0	22.0	25.0	4.0
Sample Method														
Sample Date		1999	1999	1999	1999	1999	1999	1999	8/5/2014	8/5/2014	8/5/2014	8/5/2014	8/5/2014	8/6/2014
Comments						Field Duplicate								
Volatile Organic Compounds														
Acetone	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0172)	U (0.0186)	U (0.0172)	U (0.0180)	U (0.0173)	U (0.0217)
Benzene	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Bromodichloromethane	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Bromoform	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Bromomethane	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
2-Butanone	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0107)	U (0.0093)	U (0.0086)	U (0.0090)	U (0.0043)	U (0.0108)
Carbon Disulfide	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Carbon Tetrachloride	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Chlorobenzene	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Chloroethane	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Chloroform	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Chloromethane	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Dibromochloromethane	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
1,1-Dichloroethane	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
1,2-Dichloroethane	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
1,1-Dichloroethene	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
cis-1,2-Dichloroethene	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	0.0195 (0.0047)	0.0042 J (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
trans-1,2-Dichloroethene	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
1,2-Dichloropropane	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
1,3-Dichloropropene (total)	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
cis-1,3-Dichloropropene	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
trans-1,3-Dichloropropene	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Ethyl Benzene	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
2-Hexanone	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0214)	U (0.0186)	U (0.0172)	U (0.0180)	U (0.0173)	U (0.0217)
4-Methyl-2-pentanone	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0107)	U (0.0093)	U (0.0086)	U (0.0090)	U (0.0083)	U (0.0108)
Methylene Chloride	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Styrene	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
1,1,2,2-Tetrachloroethane	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Tetrachloroethene	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Toluene	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
1,1,1-Trichloroethane	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
1,1,2-Trichloroethane	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Trichloroethene	NE	1.7	0.01	0.011	0.35	0.38	<0.0044	0.0049 J	U (0.0054)	0.0224 (0.0047)	0.0037 J (0.0043)	U (0.0045)	U (0.0043)	0.0032 J (0.0054)
Vinyl Chloride	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)
Xylenes (total)	NE	NS	NS	NS	NS	NS	NS	NS	U (0.0054)	U (0.0047)	U (0.0043)	U (0.0045)	U (0.0043)	U (0.0054)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location		DP-39	DP-39	DP-39	DP-39	DP-39	DP-40	DP-40	DP-40	DP-41	DP-41	DP-41
ENVIRON Sample ID	Remedial Action	DP-39 (7.0 FT) - 082014	DP-39 (7.0 FT) - 082014 DUP	DP-39 (16.5 FT) - 082014	DP-39 (23.5 FT) - 082014	DP-39 (28.0 FT) - 082014	DP-40 (4.0 FT) - 082014	DP-40 (11.0 FT) - 082014	DP-40 (14.5 FT) - 082014	DP-41 (4.0 FT) - 082014	DP-41 (10.0 FT) - 082014	DP-41 (14.0 FT) - 082014
Lab Sample ID	Levels per ADEQ	60175235002	60175235002	60175235003	60175235004	60175235005	60175335001	60175335002	60175335003	60175425001	60175425002	60175425003
Collection Depth (ft bgs)	RADD Issued	7.0	7.0	16.5	23.5	28.0	4.0	11.0	14.5	4.0	10.0	14.0
Sample Method	December 2013											
Sample Date		8/6/2014	8/6/2014	8/6/2014	8/6/2014	8/6/2014	8/7/2014	8/7/2014	8/7/2014	8/8/2014	8/8/2014	8/8/2014
Comments										MW-98	MW-98	MW-98
Volatile Organic Compounds												
Acetone	NE	U (0.0177)	U (0.0183)	U (0.0183)	U (0.0166)	U (0.0199)	U (0.0195)	U (0.0177)	U (0.0194)	U (0.0240)	U (0.0182)	U (0.0181)
Benzene	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Bromodichloromethane	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Bromoform	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Bromomethane	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	0.0031 J (0.0060)	U (0.0043)	U (0.0045)
2-Butanone	NE	U (0.0089)	U (0.0091)	U (0.0091)	U (0.0083)	U (0.0099)	U (0.0097)	U (0.0089)	U (0.0097)	U (0.0120)	U (0.0091)	U (0.0091)
Carbon Disulfide	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Carbon Tetrachloride	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Chlorobenzene	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Chloroethane	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Chloroform	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Chloromethane	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Dibromochloromethane	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
1,1-Dichloroethane	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
1,2-Dichloroethane	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
1,1-Dichloroethene	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
cis-1,2-Dichloroethene	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
trans-1,2-Dichloroethene	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
1,2-Dichloropropane	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
1,3-Dichloropropene (total)	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
cis-1,3-Dichloropropene	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
trans-1,3-Dichloropropene	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Ethyl Benzene	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
2-Hexanone	NE	U (0.0177)	U (0.0183)	U (0.0176)	U (0.0166)	U (0.0199)	U (0.0195)	U (0.0177)	U (0.0194)	U (0.0240)	U (0.0182)	U (0.0181)
4-Methyl-2-pentanone	NE	U (0.0089)	U (0.0091)	U (0.0088)	U (0.0083)	U (0.0099)	U (0.0097)	U (0.0089)	U (0.0097)	U (0.0120)	U (0.0091)	U (0.0091)
Methylene Chloride	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Styrene	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
1,1,2,2-Tetrachloroethane	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Tetrachloroethene	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Toluene	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
1,1,1-Trichloroethane	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
1,1,2-Trichloroethane	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Trichloroethene	NE	U (0.0044)	U (0.0046)	U (0.0044)	0.0022 J (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Vinyl Chloride	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)
Xylenes (total)	NE	U (0.0044)	U (0.0046)	U (0.0044)	U (0.0042)	U (0.0050)	U (0.0049)	U (0.0044)	U (0.0048)	U (0.0060)	U (0.0043)	U (0.0045)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location		DP-42	DP-42	DP-42	DP-43	DP-43	DP-43	DP-44	DP-44	DP-44	DP-44	DP-45
ENVIRON Sample ID	Remedial Action	DP-42 (4.0 FT) - 082014	DP-42 (8.0 FT) - 082014	DP-42 (12.0 FT) - 082014	DP-43-SL (4.0 FT) - 20140811	DP-43-SL (10.0 FT) - 20140811	DP-43-SL (19.0 FT) - 20140811	DP-44-SL (4.0 FT) - 20140811	DP-44-SL (11.0 FT) - 20140811	DP-44-SL (18.0 FT) - 20140811	DP-44-SL (21.5 FT) - 20140811	DP-45-SL (4.0 FT) - 20140811
Lab Sample ID	Levels per ADEQ	60175425004	60175425005	60175425006	60175525001	60175525002	60175525003	60175525004	60175525005	60175525006	60175525007	60175525008
Collection Depth (ft bgs)	RADD Issued	4.0	8.0	12.0	4.0	10.0	19.0	4.0	11.0	18.0	21.5	4.0
Sample Method	December 2013											
Sample Date		8/8/2014	8/8/2014	8/8/2014	8/11/2014	8/11/2014	8/11/2014	8/11/2014	8/11/2014	8/11/2014	8/11/2014	8/11/2014
Comments								MW-99	MW-99	MW-99	MW-99	
Volatile Organic Compounds												
Acetone	NE	U (0.0196)	U (0.0185)	U (0.0171)	U (0.0243)	U (0.0173)	U (0.0167)	U (0.0233)	U (0.0184)	U (0.0196)	U (0.0204)	0.0371 (0.0177)
Benzene	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Bromodichloromethane	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Bromoform	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Bromomethane	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
2-Butanone	NE	U (0.0098)	U (0.0092)	U (0.0086)	U (0.0121)	U (0.0089)	U (0.0084)	U (0.0117)	U (0.0092)	U (0.0098)	U (0.0102)	U (0.0089)
Carbon Disulfide	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Carbon Tetrachloride	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Chlorobenzene	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Chloroethane	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Chloroform	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Chloromethane	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Dibromochloromethane	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
1,1-Dichloroethane	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
1,2-Dichloroethane	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
1,1-Dichloroethene	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
cis-1,2-Dichloroethene	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
trans-1,2-Dichloroethene	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
1,2-Dichloropropane	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
1,3-Dichloropropene (total)	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
cis-1,3-Dichloropropene	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
trans-1,3-Dichloropropene	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Ethyl Benzene	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
2-Hexanone	NE	U (0.0196)	U (0.0185)	U (0.0171)	U (0.0243)	U (0.0173)	U (0.0167)	U (0.0233)	U (0.0184)	U (0.0196)	U (0.0204)	U (0.0177)
4-Methyl-2-pentanone	NE	U (0.0196)	U (0.0092)	U (0.0086)	U (0.0121)	U (0.0089)	U (0.0084)	U (0.0117)	U (0.0092)	U (0.0098)	U (0.0102)	U (0.0089)
Methylene Chloride	NE	U (0.0098)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Styrene	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
1,1,2,2-Tetrachloroethane	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Tetrachloroethene	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Toluene	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
1,1,1-Trichloroethane	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
1,1,2-Trichloroethane	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Trichloroethene	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Vinyl Chloride	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)
Xylenes (total)	NE	U (0.0049)	U (0.0046)	U (0.0043)	U (0.0061)	U (0.0044)	U (0.0042)	U (0.0058)	U (0.0046)	U (0.0049)	U (0.0051)	U (0.0044)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	DP-45	DP-45	DP-46	DP-46	DP-46	DP-47	DP-47	DP-48	DP-48	DP-49	DP-49
ENVIRON Sample ID		DP-45-SL (12.0 FT) - 20140811	DP-45-SL (18.0 FT) - 20140811	DP-46-SL (4.5 FT) - 20140811	DP-46-SL (13.5 FT) - 20140811	DP-46-SL (18.0 FT) - 20140811	DP-47-SL (5.0 FT) - 20140811	DP-47-SL (22.0 FT) - 20140811	DP-48-SL (4.0 FT) - 20140814	DP-48-SL (11.5 FT) - 20140814	DP-49-SL (4.0 FT) - 20140814	DP-49-SL (10.0 FT) - 20140814
Lab Sample ID		60175525009	60175525008	60175646001	60175646002	60175646003	60175646004	60175646005	60175927001	60175927002	60175927003	60175927004
Collection Depth (ft bgs)		12.0	18.0	4.5	13.5	18.0	5.0	22.0	4.0	11.5	4.0	10.0
Sample Method												
Sample Date		8/11/2014	8/11/2014	8/12/2014	8/12/2014	8/12/2014	8/12/2014	8/12/2014	8/14/2014	8/14/2014	8/14/2014	8/14/2014
Comments											MW-96	MW-96
Volatile Organic Compounds												
Acetone	NE	U (0.0197)	U (0.0180)	U (0.0210)	U (0.0166)	U (0.0167)	U (0.0202)	U (0.0173)	0.0153 J (0.0185)	0.0093 J (0.0172)	0.0154 J (0.0194)	0.0123 J (0.0174)
Benzene	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Bromodichloromethane	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Bromoform	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Bromomethane	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
2-Butanone	NE	U (0.0098)	U (0.0090)	U (0.0105)	U (0.0083)	U (0.0083)	U (0.0101)	U (0.0087)	U (0.0092)	U (0.0086)	U (0.0097)	U (0.0087)
Carbon Disulfide	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Carbon Tetrachloride	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Chlorobenzene	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Chloroethane	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Chloroform	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Chloromethane	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Dibromochloromethane	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
1,1-Dichloroethane	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
1,2-Dichloroethane	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
1,1-Dichloroethene	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
cis-1,2-Dichloroethene	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
trans-1,2-Dichloroethene	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
1,2-Dichloropropane	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
1,3-Dichloropropene (total)	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
cis-1,3-Dichloropropene	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
trans-1,3-Dichloropropene	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Ethyl Benzene	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
2-Hexanone	NE	U (0.0197)	U (0.0180)	U (0.0210)	U (0.0166)	U (0.0167)	U (0.0202)	U (0.0173)	U (0.0185)	U (0.0172)	U (0.0194)	U (0.0174)
4-Methyl-2-pentanone	NE	U (0.0098)	U (0.0090)	U (0.0105)	U (0.0083)	U (0.0083)	U (0.0101)	U (0.0087)	U (0.0092)	U (0.0086)	U (0.0097)	U (0.0087)
Methylene Chloride	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Styrene	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
1,1,2,2-Tetrachloroethane	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Tetrachloroethene	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Toluene	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
1,1,1-Trichloroethane	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
1,1,2-Trichloroethane	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Trichloroethene	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Vinyl Chloride	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)
Xylenes (total)	NE	U (0.0049)	U (0.0045)	U (0.0052)	U (0.0042)	U (0.0042)	U (0.0050)	U (0.0043)	U (0.0046)	U (0.0043)	U (0.0048)	U (0.0043)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-1
SUMMARY SOIL ANALYTICAL RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Location		DP-49	DP-50	DP-50	DP-51	DP-51	DP-52	DP-52	DP-53	DP-53
ENVIRON Sample ID	Remedial Action Levels per ADEQ RADD Issued December 2013	DP-49-SL (13.0 FT) - 20140814	DP-50 - SL (4.0 FT) - 20140814	DP-50 - SL (10.0 FT) 20140814	DP-51-SL-(1.0) FT - 20140818	DP-51-SL-(14.0 FT) - 20140818	DP-52-SL-(4.0 FT) - 20140818	DP-52-SL-(11.0 FT) - 20140818	DP-53-SL-(1.0 FT) - 20140818	DP-53-SL-(8.5 FT) - 20140818
Lab Sample ID		60175927005	60175927006	60175927007	60176014001	60176014002	60176014003	60176014004	60176014004	60176014005
Collection Depth (ft bgs)		13.0	4.0	10.0	1.0	14.0	4.0	11.0	1.0	8.5
Sample Method										
Sample Date		8/14/2014	8/14/2014	8/14/2014	8/19/2014	8/19/2014	8/19/2014	8/19/2014	8/19/2014	8/19/2014
Comments		MW-96					MW-97	MW-97		
Volatile Organic Compounds										
Acetone	NE	0.0142 J (0.0226)	U (0.0184)	U (0.0159)	0.0414 (0.0197)	U (0.0159)	0.0202 (0.0185)	0.0094 J (0.0164)	0.0587 (0.0179)	0.0101 (0.0177)
Benzene	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Bromodichloromethane	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Bromoform	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Bromomethane	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	0.0081 (0.0040)	0.0093 (0.0046)	U (0.0041)	0.0093 (0.0045)	U (0.0044)
2-Butanone	NE	U (0.0113)	U (0.0092)	U (0.0079)	U (0.0098)	U (0.0079)	U (0.0093)	U (0.0093)	0.0063 J (0.0082)	U (0.0089)
Carbon Disulfide	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Carbon Tetrachloride	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Chlorobenzene	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Chloroethane	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Chloroform	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Chloromethane	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Dibromochloromethane	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
1,1-Dichloroethane	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
1,2-Dichloroethane	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
1,1-Dichloroethene	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
cis-1,2-Dichloroethene	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
trans-1,2-Dichloroethene	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
1,2-Dichloropropane	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
1,3-Dichloropropene (total)	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
cis-1,3-Dichloropropene	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
trans-1,3-Dichloropropene	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Ethyl Benzene	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
2-Hexanone	NE	U (0.0226)	U (0.0184)	U (0.0159)	U (0.0197)	U (0.0159)	U (0.0185)	U (0.0164)	U (0.0179)	U (0.0177)
4-Methyl-2-pentanone	NE	U (0.0113)	U (0.0092)	U (0.0079)	U (0.0098)	U (0.0079)	U (0.0093)	U (0.0093)	U (0.0082)	U (0.0089)
Methylene Chloride	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Styrene	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
1,1,2,2-Tetrachloroethane	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Tetrachloroethene	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Toluene	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
1,1,1-Trichloroethane	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
1,1,2-Trichloroethane	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Trichloroethene	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Vinyl Chloride	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)
Xylenes (total)	NE	U (0.0056)	U (0.0046)	U (0.0040)	U (0.0049)	U (0.0040)	U (0.0046)	U (0.0041)	U (0.0045)	U (0.0044)

Notes:

1 All concentrations are presented in mg/kg (ppm).

2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled

TABLE 4-2
THICKNESS OF SATURATED SOILS OF THE NORTH AND SOUTH PLUMES
Whirlpool Facility - Fort Smith, Arkansas

Plume	Well ID	Ground Elevation	Top of Saturated Soils	Bottom of Saturated Soils	Saturated Soil Interval
North	IW-72	472.2	450.2	446.4	3.8
North	IW-73	472.1	NA[2]	NA[2]	NA[2]
North	IW-74	472.3	454.3	446.3	8.0
North	IW-75	472.8	NA[2]	NA[2]	NA[2]
North	IW-76	473.2	NA[2]	NA[2]	NA[2]
North	IW-77	473.8	454.8	445.8	9.0
North	IW-78	474.2	NA[2]	NA[2]	NA[2]
North	IW-79	474.1	NA[2]	NA[2]	NA[2]
North	IW-80	473.7	454.7	446.7	8.0
North	MW-23	475.8	453.8	447.8	6.0
North	MW-24	476.6	453.6	447.1	6.5
North	MW-27	475.7	451.7	447.4	4.3
North	MW-28	470.6	447.1	445.9	1.2
North	MW-31	476.1	448.1	447.1	1.0
North	MW-32	475.7	NA[2]	NA[2]	NA[2]
North	MW-33	474.9	NA[2]	NA[2]	NA[2]
North	MW-35R	474.0	NA[2]	NA[2]	NA[2]
North	MW-36	473.4	NA[2]	NA[2]	NA[2]
North	MW-39	475.6	450.1	447.6	2.5
North	MW-40	473.4	450.1	447.1	3.0
North	MW-41	472.3	453.3	445.8	7.5
North	MW-42B	471.8	449.8	446.3	3.5
North	MW-43	471.0	451.0	446.3	4.7
North	MW-46R	466.5	450.5	445.8	4.7
North	MW-50	463.2	451.2	445.6	5.6
North	MW-55	465.5	447.5	446.8	0.7
North	MW-56	463.4	445.4	444.9	0.5
North	MW-57	463.1	447.1	446.5	0.6
North	MW-58	462.9	446.3	445.9	0.4
North	MW-60	461.0	447.2	445.6	1.6 [3]
North	MW-61	459.8	445.5	444.7	0.8 [3]
North	MW-62	464.5	446.0	444.2	1.8
North	MW-63	464.0	444.7	444.5	0.2 [3]
North	MW-65	474.1	453.6	445.7	7.9
North	MW-66	462.7	450.7	446.5	4.2 [3]
North	MW-67	459.4	448.4	445.2	3.2 [3]
North	MW-68	470.0	448.0	446.5	1.5
North	MW-70	471.7	NA[2]	NA[2]	NA[2]
North	MW-71	471.5	NA[2]	NA[2]	NA[2]
North	RW-69	471.5	449.5	445.5	4.0
				Average Thickness (ft)	**3.7**

Notes: 1. Saturated thickness calculated from soil description in boring log.

2. NA - Boring log not available

3. No saturated soil observation recorded in boring log during drilling. Interval inferred based on soil description.

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TABLE 4-2
THICKNESS OF SATURATED SOILS OF THE NORTH AND SOUTH PLUMES
Whirlpool Facility - Fort Smith, Arkansas

Plume	Well ID	Ground Elevation	Top of Saturated Soils	Bottom of Saturated Soils	Saturated Soil Interval
South	ITMW-1	474.6	450.6	444.1	6.5
South	ITMW-10	478.6	451.6	446.1	5.5
South	ITMW-11	474.0	457.5	444.5	13.0
South	ITMW-12	474.7	456.7	444.7	12.0
South	ITMW-13	475.4	450.4	446.4	4.0
South	ITMW-14	475.7	455.7	445.7	10.0
South	ITMW-15	474.8	454.0	444.8	9.2
South	ITMW-16	476.5	458.5	445.3	13.2
South	ITMW-17	476.1	454.1	447.1	7.0
South	ITMW-18	473.9	457.9	444.9	13.0
South	ITMW-19	474.3	457.8	445.3	12.5
South	ITMW-2	475.1	457.1	445.6	11.5
South	ITMW-20	475.7	453.2	447.4	5.8
South	ITMW-21	474.4	449.4	446.4	3.0
South	ITMW-3	472.8	451.6	444.6	7.0
South	ITMW-4	477.6	458.1	447.1	11.0
South	ITMW-5	476.6	452.1	446.1	6.0
South	ITMW-6	481.1	455.4	445.6	9.8
South	ITMW-7	479.7	NA[2]	NA[2]	NA[2]
South	ITMW-9	479.5	460.2	446.3	13.9
South	MW-22	473.9	450.9	449.9	1.0
South	MW-25	474.7	446.7	445.0	1.8
South	MW-26	476.1	451.1	446.9	4.2
South	MW-29	475.1	452.1	447.1	5.0
South	MW-30	479.2	446.7	443.7	3.0
South	MW-37	474.0	457.0	445.5	11.5
South	MW-38	474.9	NA[2]	NA[2]	NA[2]
South	MW-92	473.9	451.9	444.9	7.0
South	MW-93	478.0	456.0	443.5	12.5
South	MW-94	478.0	455.0	445.0	10.0
South	MW-95	478.0	452.0	445.0	7.0
South	MW-172	473.4	459.4	445.8	13.6
				Average Thickness (ft)	**8.3**

Notes: 1. Saturated thickness calculated from soil description in boring log.

2. NA - Boring log not available

3. No saturated soil observation recorded in boring log during drilling. Interval inferred based on soil description.

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TABLE 4-2
THICKNESS OF SATURATED SOILS OF THE NORTH AND SOUTH PLUMES
Whirlpool Facility - Fort Smith, Arkansas

Plume	Well ID	Ground Elevation	Top of Saturated Soils	Bottom of Saturated Soils	Saturated Soil Interval
NE Corner	MW-87	471.0	451.0	447.8	3.2
NE Corner	MW-88	469.1	453.6	449.1	4.5
NE Corner	MW-89	467.1	451.6	449.5	2.1
NE Corner	MW-90	467.0	452.0	447.0	5.0
NE Corner	MW-91	469.2	451.7	449.2	2.5
NE Corner	MW-96	458.3	449.8	444.0	5.8
NE Corner	MW-97	459.9	451.9	445.9	6.0
NE Corner	MW-98	462.0	451.0	444.4	6.6
NE Corner	MW-99	467.1	449.3	445.1	4.2
				Average Thickness (ft)	**4.4**

Notes: 1. Saturated thickness calculated from soil description in boring log.

2. NA - Boring log not available

3. No saturated soil observation recorded in boring log during drilling. Interval inferred based on soil description.

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TABLE 4-3
ESTIMATED QUANTITY OF TCE IN GROUNDWATER
Whirlpool Facility - Fort Smith, Arkansas

GROUNDWATER	Volume of Water						TCE Concentration		Mass of TCE		Volume of TCE	
Date	Plume Area (Square Feet)	Saturated Thickness (Feet)	Total Porosity[2]	Plume Area (Cubic Feet)	Gallons	Liters	Estimated Avg. Min. Concentration Assumed to be Present Throughout the Respective Section of Plume (µg/L)	Estimated Avg. Max. Concentration Assumed to be Present Throughout the Respective Section of Plume (µg/L)	Min. Kg.	Max. Kg.	Min. Vol. (Gallons)	Max. Vol. (Gallons)
North Plume												
March 2014 - 5 to 100 ug/l	*246,800*	3.7[1]	0.4	366,251	2,739,559	10,369,231	5	100	0.1	1.0	0.0	0.2
March 2014 - 100 to 1,000 ug/l	*184,500*	3.7[1]	0.4	273,798	2,048,009	7,751,714	100	1,000	0.8	7.8	0.1	1.4
March 2014 - > 1,000 ug/l	*100*	3.7[1]	0.4	148	1,110	4,201	1,000	1,500	0.0	0.0	0.0	0.0
March 2014 Subtotal	431,400								0.8	8.8	0.2	1.6
May 2014 - 5 to 100 ug/l	*279,000*	3.7[1]	0.4	414,036	3,096,989	11,722,104	5	100	0.1	1.2	0.0	0.2
May 2014 - 100 to 1,000 ug/l	*185,110*	3.7[1]	0.4	274,703	2,054,780	7,777,343	100	1,000	0.8	7.8	0.1	1.4
May 2014 - > 1,000 ug/l	*100*	3.7[1]	0.4	148	1,110	4,201	1,000	1,500	0.0	0.0	0.0	0.0
May 2014 Subtotal	464,210								0.8	9.0	0.2	1.6
July 2014 - 5 to 100 ug/l	*294,300*	3.7[1]	0.4	436,741	3,266,824	12,364,930	5	100	0.1	1.2	0.0	0.2
July 2014 - 100 to 1,000 ug/l	*192,500*	3.7[1]	0.4	285,670	2,136,812	8,087,832	100	1,000	0.8	8.1	0.1	1.5
July 2014 - > 1,000 ug/l	*200*	3.7[1]	0.4	297	2,220	8,403	1,000	1,500	0.0	0.0	0.0	0.0
July 2014 Subtotal	487,000								0.9	9.3	0.2	1.7
October 2014 - 5 to 100 ug/l	*299,500*	3.7[1]	0.4	444,458	3,324,546	12,583,406	5	100	0.1	1.3	0.0	0.2
October 2014 - 100 to 1,000 ug/l	*199,900*	3.7[1]	0.4	296,652	2,218,954	8,398,741	100	1,000	0.8	8.4	0.2	1.5
October 2014 - > 1,000 ug/l	*400*	3.7[1]	0.4	594	4,440	16,806	1,000	1,500	0.0	0.0	0.0	0.0
October 2014 Subtotal	499,800								0.9	9.7	0.2	1.8
South Plume												
October 2014 - 5 to 100 ug/l	*519,800*	8.3[1]	0.4	1,727,815	12,924,058	48,917,558	5	100	0.2	4.9	0.0	0.9
October 2014 - 100 to 1,000 ug/l	*261,500*	8.3[1]	0.4	869,226	6,501,810	24,609,353	100	1,000	2.5	24.6	0.4	4.5
October 2014 - > 1,000 ug/l	*119,000*	8.3[1]	0.4	395,556	2,958,759	11,198,902	1,000	1,500	11.2	16.8	2.0	3.0
October 2014 Subtotal	900,300								13.9	46.3	2.5	8.4
Northeast Plume												
October 2014 - 5 to 100 ug/l	*187,600*	4.4[1]	0.4	330,926	2,475,329	9,369,122	5	100	0.0	0.9	0.0	0.2
October 2014 - 100 to 1,000 ug/l	*69,200*	4.4[1]	0.4	122,069	913,075	3,455,987	100	1,000	0.3	3.5	0.1	0.6
October 2014 - > 1,000 ug/l	*0*	4.4[1]	0.4	0	0	0	1,000	1,500	0.0	0.0	0.0	0.0
October 2014 Subtotal	256,800								0.4	4.4	0.1	0.8

Notes:

1 - Saturated Thickness estimated from 4th Quarter 2014 RADD sampled wells and new 4th Quarter well completions (see Table 1).

2 - Total Porosity estimated from Freeze and Cherry (1979).

TCE - Trichloroethylene

µg/L - Micrograms per liter

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TABLE 4-4
SUMMARY OF MATRICES ENCOUNTERED AND SAMPLED AT SOIL VAPOR MONITORING POINTS
Whirlpool Facility - Fort Smith, Arkansas

Quarter of Collection	Date of Collection	In Neighborhood		South of Neighborhood	
		VP-1S	VP-1D	VP-2S	VP-2D
4th Q 2014	10/2014	**Water**	*Air*	**Water**	**Water**
3rd Q 2014	9/2014	**Water**	*Air**	**Water**	**Water**
3rd Q 2014	7/2014	*Water*	*Water*	**Water**	**Water**
2nd Q 2014	5/2014	Water	**Air**	Water	Water
1st Q 2014	3/2014	**Air**	**Air**	Water	**Air**

Notes:

* During the September 2014 sampling event, no air or water sample could be collected at VP-1D; a water sample was collected at the nearby port SV-04D to characterize VOC concentrations in the area.
Shaded and **bolded** cells indicate that a sample was collected.
Italicized cells indicate that insufficient volume was available for sample collection

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TABLE 4-5
VAPOR INTRUSION RISK ESTIMATES BASED ON GROUNDWATER DATA FROM WELLS IN THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Sampling Period	Risk	HI
2012	6E-06	1E+00
1st Q 2014	2E-06	5E-01
2nd Q 2014	2E-06	4E-01
3rd Q 2014	2E-06	4E-01
4th Q 2014	2E-06	4E-01

Note:
Only VOCs detected in wells in the neighborhood are shown. Risks were calculated using the model derived by Johnson & Ettinger (1991), as discussed in Section 3.3.1 of the April 2013 Revised Risk Management Plan.

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TABLE 4-6
CUMULATIVE RISK ESTIMATES FOR VAPOR INTRUSION AT SOIL VAPOR MONITORING POINTS
Whirlpool Facility - Fort Smith, Arkansas

Sampling Period	Matrix Analyzed	In Neighborhood				South of Neighborhood			
		VP-1S		MW-71		VP-2S		MW-33	
		Risk	HI	Risk	HI	Risk	HI	Risk	HI
2012[†]	Soil Vapor	2E-07	4E-02	NA[‡]	NA[‡]	NC	NC	3E-06	8E-01
1st Q 2014	Soil Vapor	8E-08	3E-03	6E-07	1E-01	NA*	NA*	3E-06	7E-01
2nd Q 2014	Soil Vapor	NA**	NA**	6E-07	1E-01	NA	NA	NA	NA
3rd Q 2014	Water	NC	NC	7E-07	1E-01	1E-07	3E-02	6E-06	1E+00
4th Q 2014	Water	3E-08	7E-03	7E-07	1E-01	2E-07	4E-02	5E-06	1E+00

Notes:

[†] Risk estimates are based on TCE only, as presented in the RRMP. In 2012, shallow soil vapor samples were collected from SV-01, which was subsequently replaced by VP-2S, and from SV-03, which was subsequently replaced by VP-1S.

[‡] During 2012, the highest TCE concentrations in groundwater in nearby monitoring wells occurred at MW-70. The cancer risk and noncancer HQ associated with TCE at this location were $1x10^{-6}$ and 0.3, respectively.

* During the First Quarter 2014, the shallow screen at this location was saturated. The cumulative cancer risk and noncancer HI based in concentrations in soil vapor at VP-2D were $7x10^{-7}$ and 0.1, respectively.

** During the Second Quarter 2014, the shallow screen at this location was saturated. The cumulative cancer risk and noncancer HI based in concentrations in soil vapor at VP-1D were $8x10^{-8}$ and $1x10^{-3}$, respectively.

NA – No soil vapor sample was collected at this location, or groundwater vapor intrusion risks were not calculated.

NC – No chemicals were detected in the sample.

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

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

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-2	4/13/2004	< 5 U	< 5 U	< 10 U
ITMW-2	4/13/2004	< 5 U	< 5 U	< 10 U
ITMW-2	9/21/2004	< 5 U	< 5 U	< 10 U
ITMW-2	9/21/2004	< 5 U	< 5 U	< 10 U
ITMW-2	9/29/2005	< 5 U	< 5 U	< 10 U
ITMW-2	10/14/2006	4 J	< 5 U	< 10 U
ITMW-2	9/20/2007	< 5 U	< 5 U	< 10 U
ITMW-2	12/9/2008	< 5 U	< 5 U	< 5 U
ITMW-2	11/3/2010	< 5 U	< 5 U	< 5 U
ITMW-2	10/26/2011	< 5 U	< 5 U	< 5 U
ITMW-2	4/17/2012	< 5 U	< 5 U	< 5 U
ITMW-2	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-2	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-2	10/14/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-2	3/6/2014	0.23 J	0.40 J	< 0.13 U
ITMW-2	3/6/2014	0.28 J	0.51 J	< 0.13 U
ITMW-2	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
ITMW-2	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-2	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-3	10/1/1989	ND	NT	ND
ITMW-3	1/1/1990	ND	NT	ND
ITMW-3	11/1/1993	3	NT	ND
ITMW-3	12/1/1996	1.7	NT	ND
ITMW-3	2/1/1999	ND	ND	ND
ITMW-3	3/1/2000	ND	ND	ND
ITMW-3	3/1/2000	ND	ND	ND
ITMW-3	9/19/2000	< 5 U	< 5 U	< 10 U
ITMW-3	3/27/2001	< 5 U	< 5 U	< 10 U
ITMW-3	9/11/2001	< 5 U	< 5 U	< 10 U
ITMW-3	9/10/2002	15	< 5 U	< 10 U
ITMW-3	2/27/2003	< 5 U	< 5 U	< 10 U
ITMW-3	9/23/2003	< 5 U	< 5 U	< 10 U
ITMW-3	4/13/2004	< 5 U	< 5 U	< 10 U
ITMW-3	9/21/2004	< 5 U	< 5 U	< 10 U
ITMW-3	9/28/2005	< 5 U	< 5 U	< 10 U
ITMW-3	10/14/2006	< 5 U	< 5 U	< 10 UJ
ITMW-3	9/20/2007	< 5 U	< 5 U	< 10 U
ITMW-3	12/9/2008	< 5 U	< 5 U	< 5 U
ITMW-3	11/4/2010	190	3.9 J	< 5 U
ITMW-3	10/27/2011	4.1 J	< 5 U	< 5 U
ITMW-3	4/17/2012	< 5 U	< 5 U	< 5 U
ITMW-3	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-3	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-3	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-4	10/1/1989	ND	NT	ND
ITMW-4	11/1/1989	ND	NT	ND
ITMW-4	1/1/1990	ND	NT	ND
ITMW-4	11/1/1993	ND	NT	ND
ITMW-4	12/1/1996	75	NT	ND
ITMW-4	2/1/1999	93	54	ND
ITMW-4	3/1/2000	22	16	ND
ITMW-4	9/20/2000	13.9	10.6	< 10 U
ITMW-4	3/28/2001	9	< 5 U	< 10 U
ITMW-4	9/13/2001	6	8	< 10 U
ITMW-4	9/10/2002	9	< 5 U	< 10 U
ITMW-4	2/28/2003	< 5 U	< 5 U	< 10 U
ITMW-4	9/23/2003	< 5 U	< 5 U	< 10 U
ITMW-4	4/14/2004	< 5 U	< 5 U	< 10 U
ITMW-4	9/22/2004	< 5 U	< 5 U	< 10 U
ITMW-4	9/27/2005	< 5 U	< 5 U	< 10 U
ITMW-4	10/11/2006	6	8	< 10 U
ITMW-4	9/20/2007	5 J	5 J	< 10 U
ITMW-4	12/9/2008	< 5 U	3.2 J	< 5 U
ITMW-4	10/25/2011	4.8 J	5.1	< 5 U
ITMW-4	10/17/2012	3.3 J	4.5 J	7.9
ITMW-4	10/14/2013	3.7 J	6.1	< 0.11 U
ITMW-4	3/6/2014	1.4 J	2.0 J	0.19 J
ITMW-4	5/13/2014	2.0 J	2.1 J	0.18 J
ITMW-4	7/30/2014	2.8 J	4.6 J	< 0.50 U
ITMW-4	10/16/2014	3.4 J	4.9 J	< 0.50 U
ITMW-5	10/1/1989	ND	NT	ND
ITMW-5	1/1/1990	ND	NT	ND
ITMW-5	12/1/1996	21	NT	ND
ITMW-5	2/1/1999	86	39	ND
ITMW-5	3/1/2000	73	59	ND
ITMW-5	9/20/2000	85	64.4	< 10 U
ITMW-5	3/28/2001	100	46	< 10 U
ITMW-5	9/13/2001	72	64	< 10 U
ITMW-5	9/10/2002	108	72	< 10 U
ITMW-5	2/28/2003	90.4	68.7	< 10 U
ITMW-5	9/24/2003	97.3	73.7	< 10 U
ITMW-5	4/14/2004	83.9	55.4	< 10 U
ITMW-5	9/22/2004	105	75.8	< 10 U
ITMW-5	4/6/2005	93.2	72.6	< 10 U
ITMW-5	4/6/2005	87	71	< 10 U
ITMW-5	9/28/2005	79	53.5	< 10 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-5	9/28/2005	82.1	54.4	< 10 U
ITMW-5	3/14/2006	92	66.1	< 10 U
ITMW-5	3/14/2006	98.4	66.1	< 10 U
ITMW-5	10/10/2006	110	51	4 J
ITMW-5	4/18/2007	115	39.3	< 10 U
ITMW-5	9/20/2007	120	49	4 J
ITMW-5	4/29/2008	120	43	< 10 U
ITMW-5	12/9/2008	200 E	42	< 5 U
ITMW-5	4/27/2009	160	34	< 5 U
ITMW-5	5/11/2010	190 EF	40	< 5 U
ITMW-5	11/6/2010	350	50	< 5 U
ITMW-5	3/22/2011	370	39	< 5 U
ITMW-5	10/25/2011	150	35	< 5 U
ITMW-5	4/17/2012	290	26	< 5 U
ITMW-5	10/18/2012	260	33	0.64 J
ITMW-5	4/25/2013	220	20	0.50 J
ITMW-5	10/16/2013	260	27	0.55 J
ITMW-6	10/1/1989	ND	NT	ND
ITMW-6	1/1/1990	ND	NT	ND
ITMW-6	12/1/1996	6.8	NT	ND
ITMW-6	5/1/1997	7	ND	ND
ITMW-6	2/1/1999	25	ND	ND
ITMW-6	2/1/1999	6	ND	ND
ITMW-6	3/1/2000	ND	ND	ND
ITMW-6	9/20/2000	< 5 U	< 5 U	< 10 U
ITMW-6	3/28/2001	< 5 U	< 5 U	< 10 U
ITMW-6	9/13/2001	< 5 U	< 5 U	< 10 U
ITMW-6	9/10/2002	< 5 U	< 5 U	< 10 U
ITMW-6	9/10/2002	< 5 U	< 5 U	< 10 U
ITMW-6	2/27/2003	< 5 U	< 5 U	< 10 U
ITMW-6	9/24/2003	< 5 U	< 5 U	< 10 U
ITMW-6	4/14/2004	< 5 U	< 5 U	< 10 U
ITMW-6	9/22/2004	< 5 U	< 5 U	< 10 U
ITMW-6	9/28/2005	< 5 U	< 5 U	< 10 U
ITMW-6	10/11/2006	< 5 U	4 J	< 10 U
ITMW-6	9/20/2007	< 5 U	< 5 U	< 10 U
ITMW-6	12/10/2008	< 5 U	< 5 U	< 5 U
ITMW-6	10/28/2009	< 5 U	2.1 J	< 5 U
ITMW-6	5/10/2010	< 5 U	1.9 J	< 5 U
ITMW-6	10/25/2011	< 5 U	2.7 J	< 5 U
ITMW-6	10/25/2011	< 5 U	2.4 J	< 5 U
ITMW-6	4/17/2012	< 5 U	2.9 J	< 5 U
ITMW-6	10/17/2012	< 1.6 U	3.1 J	< 0.11 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-6	4/22/2013	< 1.6 U	2.1 J	0.33 J
ITMW-6	10/14/2013	3.4 J	5.5	0.18 J
ITMW-6	3/6/2014	2.7 J	4.9 J	0.18 J
ITMW-6	5/13/2014	3.6 J	5.3	0.17 J
ITMW-6	7/30/2014	4.4 J	6.7	< 0.50 U
ITMW-6	10/15/2014	3.1 J	5.2	< 0.50 U
ITMW-7	11/1/1989	ND	NT	ND
ITMW-7	1/1/1990	ND	NT	ND
ITMW-7	12/1/1996	290	NT	3
ITMW-7	5/1/1997	380	180	ND
ITMW-7	2/1/1999	ND	ND	ND
ITMW-7	6/1/1999	320	144	ND
ITMW-7	6/1/1999	300	140	ND
ITMW-7	3/1/2000	262	100	ND
ITMW-7	3/1/2000	207	92	ND
ITMW-7	9/19/2000	207	100	< 10 U
ITMW-7	9/21/2000	109	< 5 U	< 10 U
ITMW-7	3/28/2001	161	66	< 10 U
ITMW-7	9/13/2001	139	68	< 10 U
ITMW-7	9/10/2002	137	56	< 10 U
ITMW-7	9/10/2002	128	54	< 10 U
ITMW-7	2/27/2003	172	92.5	< 10 U
ITMW-7	9/24/2003	125	57.3	< 10 U
ITMW-7	4/14/2004	201	80.7	< 10 U
ITMW-7	9/22/2004	132	48.4	< 10 U
ITMW-7	4/7/2005	122	39	< 10 U
ITMW-7	9/28/2005	100	30.5	< 10 U
ITMW-7	3/14/2006	153	59.5	< 10 U
ITMW-7	10/10/2006	140	44	1 J
ITMW-7	4/17/2007	83	29.4	< 10 U
ITMW-7	9/21/2007	72	22	< 10 U
ITMW-7	4/30/2008	70	18	< 10 U
ITMW-7	12/11/2008	66	19	< 5 U
ITMW-7	4/27/2009	87	26	< 5 U
ITMW-7	10/28/2009	60	20	< 5 U
ITMW-7	5/10/2010	73	18	< 5 U
ITMW-7	3/23/2011	225 EF	93.2	56.5
ITMW-7	10/25/2011	99	26	< 5 U
ITMW-7	4/18/2012	100	20	< 5 U
ITMW-7	10/18/2012	63	17	< 0.11 U
ITMW-7	4/25/2013	69	16	0.27 J
ITMW-7	10/17/2013	47	12	< 0.11 U
ITMW-7	3/8/2014	37.4	10	0.24 J

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-7	5/14/2014	37.0	11.1	0.22 J
ITMW-7	7/30/2014	36.7	11.2	< 0.50 U
ITMW-7	10/15/2014	33.7	10.3	< 0.50 U
ITMW-9	1/1/1990	ND	NT	ND
ITMW-9	12/1/1996	230	NT	ND
ITMW-9	5/1/1997	7	ND	ND
ITMW-9	2/1/1999	40	24	ND
ITMW-9	3/1/2000	69	45	ND
ITMW-9	9/20/2000	57.3	14.3	< 10 U
ITMW-9	9/20/2000	54.8	14	< 10 U
ITMW-9	3/28/2001	40	12	< 10 U
ITMW-9	9/13/2001	40	12	< 10 U
ITMW-9	9/10/2002	61	21	< 10 U
ITMW-9	2/28/2003	54.2	37.2	< 10 U
ITMW-9	9/23/2003	91	49.5	< 10 U
ITMW-9	9/23/2003	97.6	53.9	< 10 U
ITMW-9	4/14/2004	71.8	38.8	< 10 U
ITMW-9	9/22/2004	80.7	21.1	< 10 U
ITMW-9	4/6/2005	79	30.4	< 10 U
ITMW-9	9/27/2005	98.8	54.6	< 10 U
ITMW-9	3/14/2006	101	78.7	< 10 U
ITMW-9	10/11/2006	110	77	6 J
ITMW-9	4/17/2007	79	39.6	< 10 U
ITMW-9	9/20/2007	76	26	< 10 U
ITMW-9	4/28/2008	82	37	< 10 U
ITMW-9	12/9/2008	90	62	< 5 U
ITMW-9	4/27/2009	110	51	< 5 U
ITMW-9	10/27/2009	120	67	5.7
ITMW-9	10/27/2009	120	71	6.1
ITMW-9	5/11/2010	130	38	< 5 U
ITMW-9	3/22/2011	120	48	2.4 J
ITMW-9	10/25/2011	90	57	< 5 U
ITMW-9	4/17/2012	150	50	2.5 J
ITMW-9	10/18/2012	120	53	5.2
ITMW-9	4/24/2013	140	44	1.6 J
ITMW-9	10/17/2013	83	42	16
ITMW-9	3/8/2014	112	40.4	0.41 J
ITMW-9	5/14/2014	113	42.2	0.64 J
ITMW-9	7/30/2014	143	43.9	0.54 J
ITMW-9	7/30/2014	141	44.4	0.53 J
ITMW-9	10/15/2014	75.3	38.8	1.7 J
ITMW-9	10/15/2014	76.9	39.1	1.8 J
ITMW-10	1/1/1990	ND	NT	ND

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-10	12/1/1996	4	NT	ND
ITMW-10	2/1/1999	25	13	ND
ITMW-10	3/1/2000	23	17	ND
ITMW-10	9/20/2000	18.1	15.9	< 10 U
ITMW-10	3/28/2001	40	21	< 10 U
ITMW-10	9/13/2001	29	28	< 10 U
ITMW-10	9/13/2001	30	27	< 10 U
ITMW-10	9/10/2002	55	38	< 10 U
ITMW-10	2/28/2003	57.6	50.9	< 10 U
ITMW-10	7/16/2003	55.3	49.2	< 10 U
ITMW-10	9/23/2003	65.9	56.5	< 10 U
ITMW-10	4/14/2004	80	57.4	< 10 U
ITMW-10	9/22/2004	59.6	50	< 10 U
ITMW-10	4/6/2005	72.1	57.7	< 10 U
ITMW-10	9/28/2005	57.6	41.6	< 10 U
ITMW-10	3/14/2006	82	67.2	< 10 U
ITMW-10	10/10/2006	88	54	5 J
ITMW-10	4/17/2007	76	52.4	< 10 U
ITMW-10	9/20/2007	67	48	5 J
ITMW-10	4/28/2008	61	46	< 10 U
ITMW-10	12/9/2008	78	50	< 5 U
ITMW-10	4/27/2009	87	52	4.4 J
ITMW-10	10/27/2009	110	50	4.2 J
ITMW-10	5/11/2010	85	46	2.4 J
ITMW-10	3/22/2011	92	42	2.7 J
ITMW-10	10/25/2011	94	39	2.5 J
ITMW-10	10/18/2012	100	37	2.5
ITMW-10	10/15/2013	100	32	3.1
ITMW-10	3/6/2014	166	32.3	1.2 J
ITMW-10	5/14/2014	184	32.4	1.4 J
ITMW-10	7/30/2014	273	38.3	1.8 J
ITMW-10	10/15/2014	243	32.3	1.7 J
ITMW-11	1/1/1990	19000	NT	180
ITMW-11	11/1/1990	4700	NT	93
ITMW-11	2/1/1991	3400	NT	ND
ITMW-11	11/1/1993	2300	NT	43
ITMW-11	12/1/1996	510	NT	ND
ITMW-11	2/1/1999	650	10	ND
ITMW-11	3/1/2000	3370	206	ND
ITMW-11	9/19/2000	8030	327	11.7
ITMW-11	3/27/2001	7000	200	< 10 U
ITMW-11	9/13/2001	6000	183	< 10 U
ITMW-11	11/20/2001	< 5 U	< 5 U	< 10 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-11	9/9/2002	7100	206	10
ITMW-11	9/9/2002	800	72	< 10 U
ITMW-11	2/26/2003	4110	346	58.8
ITMW-11	2/26/2003	3630	306	60.7
ITMW-11	9/24/2003	3990	269	11.8
ITMW-11	4/13/2004	3160	240	37.8
ITMW-11	9/21/2004	3450	204	< 10 U
ITMW-11	4/7/2005	4210	282	66.7
ITMW-11	9/29/2005	3910	199	18
ITMW-11	3/16/2006	14600	1290	482
ITMW-11	3/16/2006	12800	1210	381
ITMW-11	10/13/2006	8000	340	47
ITMW-11	4/19/2007	3970	199	< 200 U
ITMW-11	9/21/2007	7600	180	21
ITMW-11	4/30/2008	4500	210	58
ITMW-11	12/10/2008	5800	190	27
ITMW-11	4/27/2009	2500	200	24
ITMW-11	5/11/2010	6200	290	28
ITMW-11	5/11/2010	6200	290	45
ITMW-11	3/23/2011	9700	520	130
ITMW-11	10/26/2011	8800	310	16
ITMW-11	10/19/2012	1400	34	2.4
ITMW-11	10/17/2013	180	8.7	2.9
ITMW-11	3/8/2014	2980	187 M1	22.5
ITMW-11	5/15/2014	1470	107	4.9
ITMW-11	5/15/2014	1590	99.5	5.5
ITMW-11	7/31/2014	7380	156	6.9
ITMW-11	10/15/2014	2050	70.4	3.5
ITMW-11	12/4/2014	1530	55.0	6.4
ITMW-12	11/1/1990	2400	NT	140
ITMW-12	2/1/1991	2100	NT	ND
ITMW-12	11/1/1993	2500	NT	35
ITMW-12	12/1/1996	1200	NT	ND
ITMW-12	2/1/1999	3100	480	34
ITMW-12	3/1/2000	3110	320	19
ITMW-12	9/19/2000	3350	180	12
ITMW-12	3/27/2001	3900	200	20
ITMW-12	9/13/2001	3100	159	< 10 U
ITMW-12	11/20/2001	2400	300	20
ITMW-12	9/11/2002	4200	300	< 10 U
ITMW-12	2/26/2003	3460	287	< 10 U
ITMW-12	2/26/2003	3940	308	< 10 U
ITMW-12	9/24/2003	2920	242	< 10 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-12	4/13/2004	2410	245	< 10 U
ITMW-12	9/21/2004	1780	238	< 10 U
ITMW-12	9/29/2005	2120	273	< 10 U
ITMW-12	10/13/2006	3500	310	9 J
ITMW-12	9/21/2007	2100	220	< 10 U
ITMW-12	12/9/2008	1500	180	< 5 U
ITMW-12	10/26/2011	1600	230	1.8 J
ITMW-12	10/19/2012	2500	200	3.6
ITMW-12	10/17/2013	2300	190	3.2
ITMW-12	10/17/2013	2300	160	4.1
ITMW-12	3/8/2014	1910	148	3.4
ITMW-12	3/8/2014	2400	207	3.4
ITMW-12	5/14/2014	2740	164	14.0
ITMW-12	7/31/2014	2710	173	13.6
ITMW-12	10/15/2014	2950	192	3.7
ITMW-12	10/15/2014	2570	188	3.5
ITMW-12	12/4/2014	468	51.1	0.88 J
ITMW-13	11/1/1990	34	NT	18
ITMW-13	2/1/1991	32	NT	35
ITMW-13	11/1/1993	NT	NT	29
ITMW-13	12/1/1996	36	NT	36
ITMW-13	2/1/1999	36	140	48
ITMW-13	3/1/2000	37	121	53
ITMW-13	9/19/2000	22.4	112	50.5
ITMW-13	3/28/2001	44	92	40
ITMW-13	9/13/2001	35	111	80
ITMW-13	9/9/2002	99	110	10
ITMW-13	9/9/2002	81	86	20
ITMW-13	2/26/2003	70.2	85.5	< 10 U
ITMW-13	9/24/2003	159	130	< 10 U
ITMW-13	4/13/2004	48.4	87.2	< 10 U
ITMW-13	9/21/2004	25.5	71.6	< 10 U
ITMW-13	4/7/2005	71.8	103	< 10 U
ITMW-13	9/30/2005	72.7	114	17.9
ITMW-13	3/16/2006	141	187	< 10 U
ITMW-13	10/14/2006	100	150	17
ITMW-13	4/18/2007	83.1	78	4.3 J
ITMW-13	9/20/2007	28	40	< 10 U
ITMW-13	4/29/2008	69	72	< 10 U
ITMW-13	12/10/2008	26	23	< 5 U
ITMW-13	4/27/2009	79	78	< 5 U
ITMW-13	10/27/2009	18	22	< 5 U
ITMW-13	5/12/2010	97	72	< 5 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-13	3/23/2011	130	83	< 5 U
ITMW-13	10/27/2011	64	40	< 5 U
ITMW-13	10/27/2011	65	41	< 5 U
ITMW-13	4/19/2012	97	63	< 5 U
ITMW-13	10/18/2012	400	260	1.0 J
ITMW-13	4/25/2013	86	52	0.14 J
ITMW-13	10/16/2013	150	74	< 0.11 U
ITMW-13	3/8/2014	69.3	45.3	< 0.13 U
ITMW-13	5/14/2014	54.0	34.7	0.17 J
ITMW-13	7/30/2014	36.5	27.5	< 0.50 U
ITMW-13	10/15/2014	40.8	25.9	< 0.50 U
ITMW-14	11/1/1990	ND	NT	13
ITMW-14	2/1/1991	ND	NT	ND
ITMW-14	11/1/1993	6	NT	ND
ITMW-14	12/1/1996	ND	NT	ND
ITMW-14	2/1/1999	ND	29	20
ITMW-14	3/1/2000	ND	24	12
ITMW-14	9/19/2000	< 5 U	13.6	< 10 U
ITMW-14	3/27/2001	< 5 U	24	10
ITMW-14	9/13/2001	< 5 U	5	< 10 U
ITMW-14	9/11/2002	41	6	< 10 U
ITMW-14	2/26/2003	< 5 U	< 5 U	< 10 U
ITMW-14	9/24/2003	< 5 U	< 5 U	< 10 U
ITMW-14	4/13/2004	< 5 U	< 5 U	< 10 U
ITMW-14	9/21/2004	< 5 U	< 5 U	< 10 U
ITMW-14	9/30/2005	< 5 U	< 5 U	< 10 U
ITMW-14	10/14/2006	4 J	8	< 10 UJ
ITMW-14	9/21/2007	5 J	9	< 10 U
ITMW-14	12/10/2008	5.7	9.3	< 5 U
ITMW-14	11/4/2010	110	14	< 5 U
ITMW-14	10/27/2011	6.3	11	< 5 U
ITMW-14	4/19/2012	7.6	16	< 5 U
ITMW-14	10/19/2012	5.4	11	< 0.11 U
ITMW-14	4/25/2013	6.8	14	< 0.11 U
ITMW-14	10/16/2013	2.9 J	4.9 J	< 0.11 U
ITMW-14	3/8/2014	6.1	11.9	< 0.13 U
ITMW-14	5/14/2014	5.3	11.3	< 0.13 U
ITMW-14	7/30/2014	4.0 J	9.2	< 0.50 U
ITMW-14	10/15/2014	4.1 J	9.4	< 0.50 U
ITMW-15	11/1/1990	2500	NT	55
ITMW-15	2/1/1991	1700	NT	ND
ITMW-15	4/15/1991	2000	NT	ND
ITMW-15	4/19/1991	2100	NT	ND

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-15	4/20/1991	2400	NT	ND
ITMW-15	11/1/1993	4300	NT	10
ITMW-15	12/1/1996	240	NT	ND
ITMW-15	2/1/1999	400	120	ND
ITMW-15	3/1/2000	339	97	ND
ITMW-15	9/19/2000	362	92.7	< 10 U
ITMW-15	9/19/2000	376	91	< 10 U
ITMW-15	3/28/2001	290	57	< 10 U
ITMW-15	9/13/2001	380	87	< 10 U
ITMW-15	9/13/2001	370	80	< 10 U
ITMW-15	11/20/2001	157	30	< 10 U
ITMW-15	9/11/2002	320	75	< 10 U
ITMW-15	2/26/2003	301	98.7	< 10 U
ITMW-15	9/25/2003	490	91.9	< 10 U
ITMW-15	4/14/2004	334	126	< 10 U
ITMW-15	9/21/2004	774	118	< 10 U
ITMW-15	4/7/2005	685	133	< 10 U
ITMW-15	9/29/2005	862	189	< 10 U
ITMW-15	3/16/2006	908	183	12
ITMW-15	10/13/2006	680	140	7 J
ITMW-15	4/19/2007	591	110	8.5 J
ITMW-15	9/21/2007	1000	190	27
ITMW-15	4/29/2008	100	18	< 10 U
ITMW-15	12/10/2008	1100	150	< 5 U
ITMW-15	4/27/2009	2800	130	17
ITMW-15	5/11/2010	2800	160	11
ITMW-15	10/26/2011	1100	74	< 5 U
ITMW-15	10/19/2012	240	14	1.1 J
ITMW-15	10/16/2013	2800	170	14
ITMW-15	3/8/2014	1630	152	11.6
ITMW-15	5/14/2014	899	61.7	4.4
ITMW-15	5/14/2014	729	60.7	4.1
ITMW-15	7/30/2014	1850	82.8	3.0
ITMW-15	7/30/2014	1820	82.5	3.1
ITMW-15	10/16/2014	1660	66.4	1.8 J
ITMW-15	10/16/2014	1490	63.0	2.0
ITMW-15	12/5/2014	63.0	< 0.50 U	< 0.50 U
ITMW-16	2/1/1991	31	NT	ND
ITMW-16	11/1/1993	41	NT	7
ITMW-16	12/1/1996	ND	NT	ND
ITMW-16	2/1/1999	ND	ND	ND
ITMW-16	3/1/2000	7	ND	ND
ITMW-16	9/21/2000	< 5 U	< 5 U	< 10 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-16	3/26/2001	< 5 U	< 5 U	< 10 U
ITMW-16	9/13/2001	< 5 U	< 5 U	< 10 U
ITMW-16	9/11/2002	< 5 U	< 5 U	< 10 U
ITMW-16	2/27/2003	< 5 U	< 5 U	< 10 U
ITMW-16	9/25/2003	< 5 U	< 5 U	< 10 U
ITMW-16	4/15/2004	< 5 U	< 5 U	< 10 U
ITMW-16	9/23/2004	< 5 U	< 5 U	< 10 U
ITMW-16	9/29/2005	< 5 U	< 5 U	< 10 U
ITMW-16	9/29/2005	< 5 U	< 5 U	< 10 U
ITMW-16	10/14/2006	< 5 U	< 5 U	< 10 U
ITMW-16	9/20/2007	< 5 U	< 5 U	< 10 U
ITMW-16	12/10/2008	< 5 U	< 5 U	< 5 U
ITMW-16	11/6/2010	17	< 5 U	< 5 U
ITMW-16	10/27/2011	< 5 U	< 5 U	< 5 U
ITMW-16	4/18/2012	< 5 U	< 5 U	< 5 U
ITMW-16	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-16	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-16	10/16/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-16	3/7/2014	0.30 J	< 0.080 U	< 0.13 U
ITMW-16	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
ITMW-16	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-16	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-17	2/1/1991	21000	NT	ND
ITMW-17	4/15/1991	21000	NT	ND
ITMW-17	4/24/1991	21000	NT	ND
ITMW-17	11/1/1993	18000	NT	15
ITMW-17	12/1/1996	9300	NT	ND
ITMW-17	2/1/1999	11000	240	ND
ITMW-17	3/1/2000	6780	171	ND
ITMW-17	9/19/2000	5500	180	< 10 U
ITMW-17	1/5/2001	8310	179	< 10 U
ITMW-17	3/28/2001	6700	134	< 10 U
ITMW-17	9/13/2001	6300	158	< 10 U
ITMW-17	9/11/2002	6500	153	< 10 U
ITMW-17	2/26/2003	4380	134	< 10 U
ITMW-17	9/25/2003	6090	136	< 10 U
ITMW-17	4/14/2004	5050	184	< 10 U
ITMW-17	4/14/2004	4920	182	< 10 U
ITMW-17	9/21/2004	5760	156	< 10 U
ITMW-17	4/7/2005	5750	156	< 10 U
ITMW-17	9/29/2005	5460	111	< 10 U
ITMW-17	3/15/2006	15900	211 E	26.3
ITMW-17	10/12/2006	19000	220	21

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-17	4/18/2007	13000	298	< 10 U
ITMW-17	9/21/2007	11000	210	3 J
ITMW-17	4/29/2008	6200	140	< 10 U
ITMW-17	12/10/2008	5600	130	< 5 U
ITMW-17	4/27/2009	5200	130	< 5 U
ITMW-17	5/11/2010	4500	85	< 5 U
ITMW-17	11/4/2010	5400	110	< 5 U
ITMW-17	3/22/2011	5300	100	< 5 U
ITMW-17	10/26/2011	4500	98	< 5 U
ITMW-17	4/19/2012	4700	110	< 5 U
ITMW-17	10/19/2012	3500	100	0.48 J
ITMW-17	4/25/2013	5600	130	0.90 J
ITMW-17	10/17/2013	4800	79	< 0.11 U
ITMW-17	3/8/2014	3770	86.1	0.57 J
ITMW-17	3/8/2014	4040	87.3	0.74 J
ITMW-17	5/15/2014	3370	88.5	1.1 J
ITMW-17	5/15/2014	3630	82.9	1.3 J
ITMW-17	7/30/2014	2260	64.7	< 0.50 U
ITMW-17	10/16/2014	3510	70.5	3.2
ITMW-17	12/5/2014	4630	210 J	7.7
ITMW-18	2/1/1991	3700	NT	ND
ITMW-18	11/1/1993	4500	NT	6
ITMW-18	12/1/1996	1600	NT	ND
ITMW-18	2/1/1999	6300	480	ND
ITMW-18	3/1/2000	3560	401	ND
ITMW-18	9/19/2000	4080	409	< 10 U
ITMW-18	3/27/2001	4000	400	< 10 U
ITMW-18	3/27/2001	4200	370	< 100 U
ITMW-18	9/11/2001	4100	300	< 10 U
ITMW-18	9/11/2002	6700	300	< 10 U
ITMW-18	2/26/2003	5110	290	< 10 U
ITMW-18	9/24/2003	7700	415	< 10 U
ITMW-18	4/13/2004	7740	410	< 10 U
ITMW-18	9/21/2004	7050	380	< 10 U
ITMW-18	4/8/2005	7080	389	< 10 U
ITMW-18	9/29/2005	4660	241	< 10 U
ITMW-18	3/15/2006	5750	373	< 50 U
ITMW-18	10/13/2006	6600	300	< 10 U
ITMW-18	4/18/2007	15000	387	< 10 U
ITMW-18	9/21/2007	8300	310	< 100 U
ITMW-18	4/30/2008	9000	350	< 10 U
ITMW-18	12/9/2008	7200	320	< 5 U
ITMW-18	4/27/2009	7100	320	< 5 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-18	10/27/2009	7800	360	< 5 U
ITMW-18	5/11/2010	11000	360	< 5 U
ITMW-18	10/26/2011	8500	290	< 5 U
ITMW-18	4/19/2012	9800	360	2.9 J
ITMW-18	10/19/2012	7600	260	1.2 J
ITMW-18	4/25/2013	7200	270	0.90 J
ITMW-18	10/17/2013	7000	280	0.64 J
ITMW-18	3/8/2014	9380	285	< 6.5 U
ITMW-18	3/8/2014	8550	242 J	1.7 J
ITMW-18	5/15/2014	2500	108	< 0.13 U
ITMW-18	5/15/2014	2940	101	< 0.13 U
ITMW-18	7/31/2014	5360	139	1.6 J
ITMW-18	10/15/2014	3540	68.5	< 0.50 U
ITMW-18	12/4/2014	3690	74.3	< 0.50 U
ITMW-19	2/1/1991	9900	NT	ND
ITMW-19	11/1/1993	27000	NT	7
ITMW-19	12/1/1996	25000	NT	ND
ITMW-19	2/1/1999	33000	150	ND
ITMW-19	3/1/2000	33100	128	ND
ITMW-19	9/19/2000	35700	197	< 10 U
ITMW-19	1/5/2001	34000	166	< 10 U
ITMW-19	3/28/2001	38000	119	< 10 U
ITMW-19	9/13/2001	19000	132	< 10 U
ITMW-19	9/11/2002	27000	167	< 10 U
ITMW-19	2/26/2003	16200	126	< 10 U
ITMW-19	9/24/2003	27300	186	< 10 U
ITMW-19	4/13/2004	19400	186	< 10 U
ITMW-19	9/21/2004	20000	148	< 10 U
ITMW-19	4/7/2005	18300	146	< 10 U
ITMW-19	4/7/2005	16200	145	< 10 U
ITMW-19	9/29/2005	25700	144	< 10 U
ITMW-19	3/15/2006	21300	177	< 100 U
ITMW-19	10/12/2006	16000	150	2 J
ITMW-19	4/18/2007	20000	131	< 10 U
ITMW-19	9/21/2007	19000	110	< 200 U
ITMW-19	4/29/2008	17000	98	< 100 U
ITMW-19	12/10/2008	11000	93	< 5 U
ITMW-19	4/27/2009	13000	100	< 5 U
ITMW-19	5/11/2010	19000	130	< 5 U
ITMW-19	11/4/2010	19000	150	< 5 U
ITMW-19	11/4/2010	18000	140	< 5 U
ITMW-19	3/22/2011	16000	110	1 J
ITMW-19	10/26/2011	17000	120	< 5 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-19	4/19/2012	15000	110	< 5 U
ITMW-19	4/19/2012	18000	110	< 5 U
ITMW-19	10/19/2012	15000	110	0.89 J
ITMW-19	4/25/2013	13000	110	0.57 J
ITMW-19	10/18/2013	16000	91 J	< 0.11 U
ITMW-19	10/18/2013	14000	100 J	< 0.11 U
ITMW-19	3/8/2014	8850	66.7	0.57 J
ITMW-19	3/8/2014	8270	60.8 J	< 6.5 U
ITMW-19	5/15/2014	15300 J	67.2	0.87 J
ITMW-19	5/15/2014	9780 J	65.8	0.85 J
ITMW-19	7/31/2014	13300	85.5	0.96 J
ITMW-19	10/16/2014	12800	76.7	1.9 J
ITMW-19	12/5/2014	33.5	< 0.50 U	< 0.50 U
ITMW-20	3/1/1991	ND	NT	ND
ITMW-20	11/1/1993	ND	NT	ND
ITMW-20	12/1/1996	290	NT	ND
ITMW-20	5/1/1997	ND	ND	ND
ITMW-20	2/1/1999	ND	ND	ND
ITMW-20	3/1/2000	ND	ND	ND
ITMW-20	9/21/2000	< 5 U	< 5 U	< 10 U
ITMW-20	3/27/2001	< 5 U	< 5 U	< 10 U
ITMW-20	9/11/2001	21	< 5 U	< 10 U
ITMW-20	9/10/2002	< 5 U	< 5 U	< 10 U
ITMW-20	2/27/2003	< 5 U	< 5 U	< 10 U
ITMW-20	9/24/2003	< 5 U	< 5 U	< 10 U
ITMW-20	4/14/2004	< 5 U	< 5 U	< 10 U
ITMW-20	9/22/2004	< 5 U	< 5 U	< 10 U
ITMW-20	9/29/2005	< 5 U	< 5 U	< 10 U
ITMW-20	10/12/2006	< 5 U	< 5 U	< 10 U
ITMW-20	9/19/2007	< 5 U	< 5 U	< 10 U
ITMW-20	12/10/2008	< 5 U	< 5 U	< 5 U
ITMW-20	10/29/2009	< 5 U	< 5 U	< 5 U
ITMW-20	5/12/2010	< 5 U	< 5 U	< 5 U
ITMW-20	11/5/2010	15	< 5 U	< 5 U
ITMW-20	10/26/2011	< 5 U	< 5 U	< 5 U
ITMW-20	10/26/2011	< 5 U	< 5 U	< 5 U
ITMW-20	4/18/2012	< 5 U	< 5 U	< 5 U
ITMW-20	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-20	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-20	10/14/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-20	3/5/2014	< 0.17 U	< 0.080 U	0.15 J
ITMW-20	5/12/2014	0.21 J	< 0.080 U	< 0.13 U
ITMW-20	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-20	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-21	3/1/1991	21	NT	ND
ITMW-21	11/1/1993	37	NT	ND
ITMW-21	12/1/1996	150	NT	ND
ITMW-21	2/1/1999	190	ND	ND
ITMW-21	3/1/2000	196	ND	ND
ITMW-21	9/19/2000	192	< 5 U	< 10 U
ITMW-21	3/28/2001	123	< 5 U	< 10 U
ITMW-21	9/13/2001	116	< 5 U	< 10 U
ITMW-21	9/10/2002	13	< 5 U	< 10 U
ITMW-21	2/26/2003	39.5	< 5 U	< 10 U
ITMW-21	9/23/2003	9.09	< 5 U	< 10 U
ITMW-21	4/14/2004	52.9	< 5 U	< 10 U
ITMW-21	9/22/2004	7.8	< 5 U	< 10 U
ITMW-21	9/28/2005	6.45	< 5 U	< 10 U
ITMW-21	10/12/2006	9	< 5 U	< 10 U
ITMW-21	9/21/2007	10	< 5 U	< 10 U
ITMW-21	12/9/2008	15	< 5 U	< 5 U
ITMW-21	10/27/2009	14	< 5 U	< 5 U
ITMW-21	11/4/2010	1100	4.4 J	< 5 U
ITMW-21	3/22/2011	24	< 5 U	< 5 U
ITMW-21	10/25/2011	11	< 5 U	< 5 U
ITMW-21	4/17/2012	30	< 5 U	< 5 U
ITMW-21	10/19/2012	7.7	< 0.56 U	< 0.11 U
ITMW-21	4/24/2013	18	< 0.56 U	< 0.11 U
ITMW-21	10/15/2013	20	< 0.56 U	< 0.11 U
ITMW-21	3/6/2014	14.8	< 0.080 U	< 0.13 U
ITMW-21	5/14/2014	17.6	< 0.080 U	< 0.13 U
ITMW-21	7/30/2014	9.3	< 0.50 U	< 0.50 U
ITMW-21	7/30/2014	9.4	< 0.50 U	< 0.50 U
ITMW-21	10/15/2014	6.0	< 0.50 U	< 0.50 U
MW-22	12/1/1996	ND	NT	ND
MW-22	5/1/1997	ND	5	ND
MW-22	2/1/1999	ND	5	ND
MW-22	3/1/2000	ND	ND	ND
MW-22	9/19/2000	< 5 U	< 5 U	< 10 U
MW-22	3/27/2001	< 5 U	< 5 U	< 10 U
MW-22	9/13/2001	< 5 U	< 5 U	< 10 U
MW-22	9/10/2002	9	< 5 U	< 10 U
MW-22	2/27/2003	< 5 U	< 5 U	< 10 U
MW-22	9/23/2003	< 5 U	< 5 U	< 10 U
MW-22	9/23/2003	< 5 U	< 5 U	< 10 U
MW-22	4/13/2004	< 5 U	< 5 U	< 10 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-22	9/21/2004	< 5 U	< 5 U	< 10 U
MW-22	9/30/2005	< 5 U	< 5 U	< 10 U
MW-22	10/14/2006	< 5 U	< 5 U	< 10 UJ
MW-22	9/20/2007	< 5 U	< 5 U	< 10 U
MW-22	12/9/2008	< 5 U	< 5 U	< 5 U
MW-22	10/27/2009	< 5 U	< 5 U	< 5 U
MW-22	11/3/2010	< 5 U	< 5 U	< 5 U
MW-22	10/27/2011	2.1 J	< 5 U	< 5 U
MW-22	4/18/2012	< 5 U	< 5 U	< 5 U
MW-22	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-22	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-22	10/14/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-22	3/5/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-22	5/12/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-22	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-22	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-23	12/1/1996	210	NT	ND
MW-23	5/1/1997	2400	NT	ND
MW-23	2/1/1999	350	10	ND
MW-23	2/1/1999	440	10	ND
MW-23	3/1/2000	147	ND	ND
MW-23	9/21/2000	67	< 5 U	< 10 U
MW-23	1/5/2001	137	< 5 U	< 10 U
MW-23	3/26/2001	87	< 5 U	< 10 U
MW-23	9/11/2001	23	< 5 U	< 10 U
MW-23	9/11/2002	111	< 5 U	< 10 U
MW-23	9/11/2002	105	< 5 U	< 10 U
MW-23	2/27/2003	54	< 5 U	< 10 U
MW-23	9/25/2003	83.9	< 5 U	< 10 U
MW-23	4/15/2004	70.3	< 5 U	< 10 U
MW-23	9/22/2004	73.4	< 5 U	< 10 U
MW-23	4/5/2005	55.5	< 5 U	< 10 U
MW-23	9/29/2005	65.8	< 5 U	< 10 U
MW-23	3/17/2006	47.1	< 5 U	< 10 U
MW-23	10/14/2006	59	< 5 U	< 10 UJ
MW-23	4/19/2007	39.9	9.79	< 10 U
MW-23	9/19/2007	47	< 5 U	< 10 U
MW-23	4/29/2008	29	< 5 U	< 10 U
MW-23	12/10/2008	69	< 5 U	< 5 U
MW-23	4/27/2009	32	< 5 U	< 5 U
MW-23	10/29/2009	45	< 5 U	< 5 U
MW-23	5/12/2010	55	< 5 U	< 5 U
MW-23	5/12/2010	52	< 5 U	< 5 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-23	11/5/2010	76	< 5 U	< 5 U
MW-23	3/23/2011	46	< 5 U	< 5 U
MW-23	10/27/2011	41	< 5 U	< 5 U
MW-23	4/18/2012	36	< 5 U	< 5 U
MW-23	10/19/2012	43	< 0.56 U	< 0.11 U
MW-23	4/25/2013	20	< 0.56 U	< 0.11 U
MW-23	10/16/2013	54	< 0.56 U	< 0.11 U
MW-23	5/22/2014	22.8	< 0.080 U	< 0.13 U
MW-23	7/8/2014	27.8	0.68 J	< 0.50 U
MW-23	9/12/2014	62.1	1.8 J	< 0.50 U
MW-23	10/23/2014	189	3.5 J	< 0.50 U
MW-24	2/1/1999	1400	49	ND
MW-24	3/1/2000	403	25	ND
MW-24	3/1/2000	595	24	ND
MW-24	9/21/2000	128	11	< 10 U
MW-24	1/5/2001	247	12	< 10 U
MW-24	3/26/2001	330	11	< 10 U
MW-24	9/11/2001	124	6	< 10 U
MW-24	9/11/2002	199	6	< 10 U
MW-24	2/27/2003	253	7.01	< 10 U
MW-24	9/25/2003	155	< 5 U	< 10 U
MW-24	4/15/2004	181	5.12	< 10 U
MW-24	9/23/2004	116	< 5 U	< 10 U
MW-24	4/6/2005	152	6.04	< 10 U
MW-24	9/29/2005	161	< 5 U	< 10 U
MW-24	3/16/2006	347	7.57	< 10 U
MW-24	10/14/2006	620	11	2 J
MW-24	4/19/2007	196	11.6	< 10 U
MW-24	9/20/2007	140	< 5 U	< 10 U
MW-24	9/20/2007	150	< 5 U	< 10 U
MW-24	4/29/2008	150	3 J	< 10 U
MW-24	12/10/2008	150	3.4 J	< 5 U
MW-24	12/10/2008	130	3.4 J	< 5 U
MW-24	4/27/2009	120	< 5 U	< 5 U
MW-24	10/29/2009	110	2.6 J	< 5 U
MW-24	5/12/2010	150	4.3 J	< 5 U
MW-24	3/23/2011	170	3.6 J	< 5 U
MW-24	10/27/2011	170	1.9 J	< 5 U
MW-24	10/27/2011	170	1.4 J	< 5 U
MW-24	4/18/2012	150	2.9 J	< 5 U
MW-24	10/19/2012	190	3.7 J	< 0.11 U
MW-24	4/25/2013	110	3.5 J	0.23 J
MW-24	5/22/2014	79.7	1.2 J	< 0.13 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-24	7/8/2014	102	1.4 J	< 0.50 U
MW-24	9/12/2014	55.7	0.66 J	< 0.50 U
MW-24	10/23/2014	33.1	< 0.50 U	< 0.50 U
MW-25	2/1/1999	29000	170	100
MW-25	2/1/1999	27000	180	110
MW-25	12/1/1999	94500	ND	ND
MW-25	3/1/2000	35900	245	63
MW-25	9/21/2000	59000	300	50
MW-25	3/28/2001	34000	117	60
MW-25	9/13/2001	60000	300	< 200 U
MW-25	9/9/2002	157000	440	180
MW-25	9/9/2002	56000	370	200
MW-25	2/26/2003	45900	557	75.7
MW-25	7/17/2003	62200	621	243
MW-25	9/24/2003	103000	775	< 500 U
MW-25	4/14/2004	25600	255	31.8
MW-25	9/21/2004	85200	819	422
MW-25	4/7/2005	21100	353	61.1
MW-25	9/28/2005	136000	837	< 500 U
MW-25	3/15/2006	36300	774	< 200 U
MW-25	10/12/2006	64000	1300	610
MW-25	10/12/2006	65000	1400	600
MW-25	4/18/2007	19000	321	20
MW-25	4/18/2007	18000	319	20
MW-25	9/21/2007	54000	1200	800
MW-25	9/21/2007	55000	1200	780
MW-25	4/29/2008	23000	470	10 J
MW-25	4/29/2008	25000	510	10 J
MW-25	12/10/2008	100000	1200	430
MW-25	4/27/2009	36000	2100	140
MW-25	4/27/2009	39000	2000	190
MW-25	10/27/2009	140000	1500	570
MW-25	5/11/2010	81000	1400	11
MW-25	11/4/2010	270000	1500	400
MW-25	3/22/2011	57000	2400	34
MW-25	10/26/2011	120000	2100	< 250 U
MW-25	4/17/2012	18000	690	18
MW-25	10/19/2012	56000	4200	1500
MW-25	10/19/2012	49000	3600	1500
MW-25	4/25/2013	9100	330	7.9
MW-25	4/25/2013	9500	380	11
MW-25	10/18/2013	43000	2900	1300
MW-25	3/8/2014	14500	625	33.6 J

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-25	5/15/2014	18500	600 J	30.3
MW-25	7/9/2014	49900	1750	< 0.50 U
MW-25	7/31/2014	71700	2310 J	< 500 U
MW-25	10/16/2014	42500	2870 J	540 J
MW-25	10/24/2014	59800	2650 J	0.66 J
MW-25	12/5/2014	2620 J	31.5	2.1
MW-26	2/1/1999	360	150	ND
MW-26	6/1/1999	ND	ND	ND
MW-26	3/1/2000	ND	ND	ND
MW-26	9/21/2000	< 5 U	< 5 U	< 10 U
MW-26	3/26/2001	< 5 U	< 5 U	< 10 U
MW-26	9/11/2001	< 5 U	< 5 U	< 10 U
MW-26	9/11/2001	< 5 U	< 5 U	< 10 U
MW-26	9/10/2002	< 5 U	< 5 U	< 10 U
MW-26	2/27/2003	< 5 U	< 5 U	< 10 U
MW-26	9/24/2003	< 5 U	< 5 U	< 10 U
MW-26	4/14/2004	< 5 U	< 5 U	< 10 U
MW-26	9/22/2004	< 5 U	< 5 U	< 10 U
MW-26	9/29/2005	< 5 U	< 5 U	< 10 U
MW-26	10/12/2006	< 5 U	< 5 U	< 10 U
MW-26	9/19/2007	< 5 U	< 5 U	< 10 U
MW-26	12/10/2008	< 5 U	< 5 U	< 5 U
MW-26	10/29/2009	< 5 U	< 5 U	< 5 U
MW-26	5/12/2010	< 5 U	< 5 U	< 5 U
MW-26	11/5/2010	22	< 5 U	< 5 U
MW-26	10/26/2011	< 5 U	< 5 U	< 5 U
MW-26	4/18/2012	< 5 U	< 5 U	< 5 U
MW-26	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-26	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-26	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-26	3/5/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-26	5/12/2014	0.25 J	< 0.080 U	< 0.13 U
MW-26	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-26	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-27	12/1/1999	ND	ND	ND
MW-27	12/7/1999	< 5 U	< 5 U	< 10 U
MW-27	12/9/1999	< 5 U	< 5 U	< 10 U
MW-27	3/1/2000	ND	ND	ND
MW-27	9/21/2000	< 5 U	< 5 U	< 10 U
MW-27	1/5/2001	< 5 U	< 5 U	< 10 U
MW-27	1/5/2001	5.55	< 5 U	< 10 U
MW-27	3/26/2001	< 5 U	< 5 U	< 10 U
MW-27	9/11/2001	< 5 U	< 5 U	< 10 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-27	9/11/2002	< 5 U	< 5 U	< 10 U
MW-27	9/11/2002	< 5 U	< 5 U	< 10 U
MW-27	2/27/2003	< 5 U	< 5 U	< 10 U
MW-27	9/25/2003	< 5 U	< 5 U	< 10 U
MW-27	4/15/2004	< 5 U	< 5 U	< 10 U
MW-27	9/22/2004	< 5 U	< 5 U	< 10 U
MW-27	9/29/2005	< 5 U	< 5 U	< 10 U
MW-27	10/14/2006	2 J	< 5 U	< 10 U
MW-27	9/19/2007	< 5 U	< 5 U	< 10 U
MW-27	12/10/2008	< 5 U	< 5 U	< 5 U
MW-27	5/12/2010	3.1 J	< 5 U	< 5 U
MW-27	11/5/2010	42	< 5 U	< 5 U
MW-27	10/27/2011	< 5 U	< 5 U	< 5 U
MW-27	4/18/2012	2.6 J	< 5 U	< 5 U
MW-27	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-27	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-27	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-27	3/7/2014	0.31 J	< 0.080 U	< 0.13 U
MW-27	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-27	7/30/2014	0.63 J	< 0.50 U	< 0.50 U
MW-27	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-28	12/1/1999	ND	ND	ND
MW-28	12/9/1999	< 5 U	< 5 U	< 10 U
MW-28	12/9/1999	< 5 U	< 5 U	< 10 U
MW-28	3/1/2000	ND	ND	ND
MW-28	9/21/2000	< 5 U	< 5 U	< 10 U
MW-28	3/27/2001	< 5 U	< 5 U	< 10 U
MW-28	3/27/2001	< 5 U	< 5 U	< 10 U
MW-28	9/11/2001	< 5 U	< 5 U	< 10 U
MW-28	9/11/2002	< 5 U	< 5 U	< 10 U
MW-28	2/27/2003	< 5 U	< 5 U	< 10 U
MW-28	9/25/2003	< 5 U	< 5 U	< 10 U
MW-28	4/15/2004	< 5 U	< 5 U	< 10 U
MW-28	9/22/2004	< 5 U	< 5 U	< 10 U
MW-28	9/30/2005	< 5 U	< 5 U	< 10 U
MW-28	10/14/2006	< 5 U	< 5 U	< 10 UJ
MW-28	9/19/2007	< 5 U	< 5 U	< 10 U
MW-28	12/10/2008	< 5 U	< 5 U	< 5 U
MW-28	10/29/2009	< 5 U	< 5 U	< 5 U
MW-28	5/12/2010	2.6 J	< 5 U	< 5 U
MW-28	11/5/2010	54	< 5 U	< 5 U
MW-28	3/23/2011	1.6 J	< 5 U	< 5 U
MW-28	10/27/2011	< 5 U	< 5 U	< 5 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-28	4/19/2012	< 5 U	< 5 U	< 5 U
MW-28	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-28	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-28	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-28	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-28	5/13/2014	0.30 J	< 0.080 U	< 0.13 U
MW-28	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-28	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-29	12/1/1999	ND	ND	ND
MW-29	12/9/1999	< 5 U	< 5 U	< 10 U
MW-29	3/1/2000	ND	ND	ND
MW-29	9/20/2000	< 5 U	< 5 U	< 10 U
MW-29	3/27/2001	< 5 U	< 5 U	< 10 U
MW-29	9/11/2001	< 5 U	< 5 U	< 10 U
MW-29	9/10/2002	< 5 U	< 5 U	< 10 U
MW-29	2/27/2003	< 5 U	< 5 U	< 10 U
MW-29	9/24/2003	< 5 U	< 5 U	< 10 U
MW-29	4/14/2004	< 5 U	< 5 U	< 10 U
MW-29	9/22/2004	< 5 U	< 5 U	< 10 U
MW-29	9/28/2005	< 5 U	< 5 U	< 10 U
MW-29	10/12/2006	< 5 U	< 5 U	< 10 U
MW-29	9/19/2007	< 5 U	< 5 U	< 10 U
MW-29	12/10/2008	< 5 U	< 5 U	< 5 U
MW-29	12/10/2008	< 5 U	< 5 U	< 5 U
MW-29	10/29/2009	< 5 U	< 5 U	< 5 U
MW-29	10/25/2011	< 5 U	< 5 U	< 5 U
MW-29	4/18/2012	< 5 U	< 5 U	< 5 U
MW-29	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-29	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-29	10/14/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-29	3/5/2014	0.52 J	< 0.080 U	< 0.13 U
MW-29	5/13/2014	0.18 J	< 0.080 U	< 0.13 U
MW-29	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-29	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-30	12/1/1999	115	34	ND
MW-30	12/9/1999	115	34	< 10 U
MW-30	3/1/2000	86	25	ND
MW-30	9/20/2000	102	25	< 10 U
MW-30	3/27/2001	43	11	< 10 U
MW-30	9/11/2001	63	18	< 10 U
MW-30	9/10/2002	48	14	< 10 U
MW-30	2/27/2003	60	20.3	< 10 U
MW-30	9/24/2003	46.8	13.7	< 10 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-30	4/14/2004	36.6	11.8	< 10 U
MW-30	9/22/2004	36.2	12.1	< 10 U
MW-30	9/28/2005	59.6	15.6	< 10 U
MW-30	10/12/2006	53	15	< 10 U
MW-30	9/20/2007	39	11	< 10 U
MW-30	12/10/2008	37	11	< 5 U
MW-30	11/3/2010	50	15	< 5 U
MW-30	10/26/2011	57	16	< 5 U
MW-30	4/18/2012	150	32	< 5 U
MW-30	10/18/2012	65	19	< 0.11 U
MW-30	4/25/2013	49	18	0.49 J
MW-30	10/14/2013	40	16	< 0.11 U
MW-31	1/5/2001	< 5 U	< 5 U	< 10 U
MW-31	3/26/2001	< 5 U	< 5 U	< 10 U
MW-31	9/13/2001	< 5 U	< 5 U	< 10 U
MW-31	9/11/2002	< 5 U	< 5 U	< 10 U
MW-31	2/28/2003	< 5 U	< 5 U	< 10 U
MW-31	9/25/2003	< 5 U	< 5 U	< 10 U
MW-31	4/15/2004	< 5 U	< 5 U	< 10 U
MW-31	9/23/2004	< 5 U	< 5 U	< 10 U
MW-31	4/5/2005	< 5 U	< 5 U	< 10 U
MW-31	9/27/2005	< 5 U	< 5 U	< 10 U
MW-31	3/15/2006	< 5 U	< 5 U	< 10 U
MW-31	10/11/2006	3 J	< 5 U	< 10 U
MW-31	4/19/2007	< 5 U	< 5 U	< 10 U
MW-31	9/18/2007	< 5 U	< 5 U	< 10 U
MW-31	4/30/2008	2 J	< 5 U	< 10 U
MW-31	12/11/2008	< 5 U	< 5 U	< 5 U
MW-31	4/25/2009	< 5 U	< 5 U	< 5 U
MW-31	5/12/2010	< 5 U	< 5 U	< 5 U
MW-31	11/7/2010	48	< 5 U	< 5 U
MW-31	3/23/2011	< 5 U	< 5 U	< 5 U
MW-31	10/26/2011	< 5 U	< 5 U	< 5 U
MW-31	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-31	10/18/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-31	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-31	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-31	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-31	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-31	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-32	1/5/2001	108	< 5 U	< 10 U
MW-32	3/27/2001	174	< 5 U	< 10 U
MW-32	9/13/2001	95	< 5 U	< 10 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-32	9/11/2002	109	< 5 U	< 10 U
MW-32	2/28/2003	133	< 5 U	< 10 U
MW-32	9/25/2003	32.3	< 5 U	< 10 U
MW-32	4/15/2004	76.9	< 5 U	< 10 U
MW-32	9/23/2004	51.4	< 5 U	< 10 U
MW-32	4/5/2005	158	< 5 U	< 10 U
MW-32	9/27/2005	97.6	< 5 U	< 10 U
MW-32	3/15/2006	111	< 5 U	< 10 U
MW-32	10/12/2006	85	4 J	< 10 U
MW-32	4/19/2007	66.3	10.1	< 10 U
MW-32	9/18/2007	78	< 5 U	< 10 U
MW-32	4/30/2008	70	2 J	< 10 U
MW-32	12/11/2008	60	< 5 U	< 5 U
MW-32	4/25/2009	47	< 5 U	< 5 U
MW-32	10/28/2009	68	1.8 J	< 5 U
MW-32	5/12/2010	58	< 5 U	< 5 U
MW-32	11/6/2010	120	< 5 U	< 5 U
MW-32	3/24/2011	66	1.4 J	< 5 U
MW-32	10/26/2011	73	< 5 U	< 5 U
MW-32	10/19/2012	61	1.2 J	< 0.11 U
MW-32	10/18/2013	48	1.4 J	< 0.11 U
MW-32	3/8/2014	36.8	1.1 J	< 0.13 U
MW-32	5/13/2014	33.1	0.19 J	< 0.13 U
MW-32	7/29/2014	37.2	1.0 J	< 0.50 U
MW-32	10/14/2014	29.7	0.80 J	< 0.50 U
MW-33	1/5/2001	120	< 5 U	< 10 U
MW-33	3/27/2001	260	7	< 10 U
MW-33	9/13/2001	310	8	< 10 U
MW-33	9/11/2002	450	8	< 10 U
MW-33	2/28/2003	274	6.62	< 10 U
MW-33	9/25/2003	198	5.95	< 10 U
MW-33	4/15/2004	871	21.3	< 10 U
MW-33	9/23/2004	798	15.3	< 10 U
MW-33	4/5/2005	1430	24.5	< 10 U
MW-33	9/27/2005	1030	15.2	< 10 U
MW-33	3/15/2006	1610	20.5	< 10 U
MW-33	10/12/2006	1300	19	< 10 U
MW-33	4/19/2007	1430	9.2 J	< 50 U
MW-33	9/18/2007	1700	25	< 10 U
MW-33	4/30/2008	1100	16	< 10 U
MW-33	12/11/2008	1200	18	< 5 U
MW-33	4/25/2009	1200	19	< 5 U
MW-33	5/27/2009	1000	19	< 5 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-33	10/28/2009	1200	20	< 5 U
MW-33	5/12/2010	1100	21	< 5 U
MW-33	11/6/2010	1200	17	< 5 U
MW-33	3/4/2011	500	14	< 0.85 U
MW-33	5/23/2011	1300	18	NT
MW-33	10/26/2011	1000	16	< 5 U
MW-33	10/19/2012	1300	18	0.56 J
MW-33	10/18/2013	1100	19	< 0.11 U
MW-33	3/8/2014	918	15.9	0.56 J
MW-33	5/14/2014	954	15.1	0.56 J
MW-33	7/29/2014	1600	20.8	0.59 J
MW-33	10/15/2014	1290	15.3	< 0.50 U
MW-34	3/28/2001	83	< 5 U	< 10 U
MW-34	9/13/2001	61	< 5 U	< 10 U
MW-34	9/9/2002	84	< 5 U	< 10 U
MW-34	2/28/2003	< 5 U	< 5 U	< 10 U
MW-34	9/25/2003	28.4	< 5 U	< 10 U
MW-34	11/14/2003	121	< 5 U	< 10 U
MW-34	4/15/2004	119	< 5 U	< 10 U
MW-34	9/23/2004	81.1	< 5 U	< 10 U
MW-34	12/9/2004	93.3	< 5 U	< 10 U
MW-34	4/5/2005	65.8	< 5 U	< 10 U
MW-34	9/30/2005	83.7	< 5 U	< 10 U
MW-34	3/14/2006	77.1	< 5 U	< 10 U
MW-34	10/11/2006	63	4 J	< 10 U
MW-34	4/18/2007	41	9.79	< 10 U
MW-34	9/19/2007	61	< 5 U	< 10 U
MW-34	4/30/2008	32	< 5 U	< 10 U
MW-34	12/10/2008	53	< 5 U	< 5 U
MW-34	4/24/2009	43	< 5 U	< 5 U
MW-34	5/27/2009	12	< 5 U	< 5 U
MW-34	10/28/2009	34	< 5 U	< 5 U
MW-34	5/12/2010	38	< 5 U	< 5 U
MW-34	11/7/2010	70	< 5 U	< 5 U
MW-34	11/7/2010	73	< 5 U	< 5 U
MW-34	3/24/2011	40	< 5 U	< 5 U
MW-34	3/24/2011	42	< 5 U	< 5 U
MW-34	10/26/2011	56	< 5 U	< 5 U
MW-34	10/20/2012	90	1.6 J	< 0.11 U
MW-34	10/17/2013	43	0.90 J	< 0.11 U
MW-34	3/8/2014	28.7	0.61 J	< 0.13 U
MW-34	5/13/2014	19.9	< 0.080 U	< 0.13 U
MW-34	7/29/2014	78.2	1.7 J	< 0.50 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-34	10/15/2014	47.7	0.96 J	< 0.50 U
MW-35R	3/28/2001	960	34	< 10 U
MW-35R	9/13/2001	1030	40	< 20 U
MW-35R	9/9/2002	900	31	< 10 U
MW-35R	2/28/2003	246	15.1	< 10 U
MW-35R	9/25/2003	297	19.8	< 10 U
MW-35R	11/14/2003	990	34.9	< 10 U
MW-35R	4/15/2004	1150	45.8	< 10 U
MW-35R	9/23/2004	685	28.4	< 10 U
MW-35R	12/9/2004	880	42	< 10 U
MW-35R	4/6/2005	886	35	< 10 U
MW-35R	9/30/2005	804	29.3	< 10 U
MW-35R	3/14/2006	858	24.2	< 10 U
MW-35R	4/6/2006	1540	52.5	< 10 U
MW-35R	10/11/2006	910	29	< 10 U
MW-35R	4/18/2007	900	27.6	< 10 U
MW-35R	9/19/2007	1100	28	< 10 U
MW-35R	4/30/2008	1100	33	< 10 U
MW-35R	12/11/2008	790	27	< 5 U
MW-35R	4/24/2009	1100	37	< 5 U
MW-35R	5/7/2009	< 5 U	< 5 U	< 5 U
MW-35R	5/27/2009	< 5 U	< 5 U	< 5 U
MW-35R	11/5/2010	240	9.9	< 5 U
MW-35R	3/4/2011	180	8.4	< 0.85 U
MW-35R	5/23/2011	260	13	NT
MW-35R	10/25/2011	280	12	< 5 U
MW-35R	10/20/2012	280	10	< 0.11 U
MW-35R	10/17/2013	200	12	< 0.11 U
MW-35R	10/17/2013	220	13	< 0.11 U
MW-35R	3/8/2014	345	14.9	< 0.13 U
MW-35R	5/13/2014	183	6.1	< 0.13 U
MW-35R	7/30/2014	64.7	2.8 J	< 0.50 U
MW-35R	10/14/2014	79.2	2.6 J	< 0.50 U
MW-36	3/28/2001	< 5 U	< 5 U	< 10 U
MW-36	9/13/2001	< 5 U	< 5 U	< 10 U
MW-36	9/9/2002	< 5 U	< 5 U	< 10 U
MW-36	2/28/2003	< 5 U	< 5 U	< 10 U
MW-36	9/25/2003	< 5 U	< 5 U	< 10 U
MW-36	11/14/2003	< 5 U	< 5 U	< 10 U
MW-36	4/15/2004	< 5 U	< 5 U	< 10 U
MW-36	9/23/2004	< 5 U	< 5 U	< 10 U
MW-36	4/6/2005	< 5 U	< 5 U	< 10 U
MW-36	9/30/2005	< 5 U	< 5 U	< 10 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-36	3/17/2006	< 5 U	< 5 U	< 10 U
MW-36	10/11/2006	< 5 U	< 5 U	< 10 U
MW-36	4/18/2007	< 5 U	< 5 U	< 10 U
MW-36	9/20/2007	< 5 U	< 5 U	< 10 U
MW-36	4/30/2008	< 5 U	< 5 U	< 10 U
MW-36	12/11/2008	< 5 U	< 5 U	< 5 U
MW-36	4/24/2009	< 5 U	< 5 U	< 5 U
MW-36	5/7/2009	< 5 U	< 5 U	< 5 U
MW-36	5/8/2009	< 5 U	< 5 U	< 5 U
MW-36	5/28/2009	< 5 U	< 5 U	< 5 U
MW-36	10/28/2009	< 5 U	< 5 U	< 5 U
MW-36	5/12/2010	< 5 U	< 5 U	< 5 U
MW-36	11/7/2010	9.9	< 5 U	< 5 U
MW-36	3/24/2011	< 5 U	< 5 U	< 5 U
MW-36	10/26/2011	< 5 U	< 5 U	< 5 U
MW-36	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-36	10/17/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-36	3/6/2014	0.22 J	< 0.080 U	< 0.13 U
MW-36	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-36	7/29/2014	0.61 J	< 0.50 U	< 0.50 U
MW-36	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-37	9/14/2001	5000	340	< 100 U
MW-37	11/20/2001	< 5 U	< 5 U	< 10 U
MW-37	9/11/2002	1400	10000	300
MW-37	2/27/2003	4050	5660	2500
MW-37	7/17/2003	2560	1710	316
MW-37	9/24/2003	3700	7020	973
MW-37	4/13/2004	5190	3160	1180
MW-37	9/21/2004	5030	5650	1370
MW-37	4/5/2005	5310	2360	1030 E
MW-37	9/29/2005	6780	3210	910 E
MW-37	3/16/2006	11200	5020	1730
MW-37	10/13/2006	13000	5300	1200
MW-37	10/13/2006	13000	5000	1200
MW-37	4/19/2007	9490	3010	780
MW-37	9/21/2007	22000	9100	2800
MW-37	4/30/2008	16000	3300	1800
MW-37	12/10/2008	24000	6300	1800
MW-37	4/27/2009	11000	3200	1200
MW-37	10/27/2009	37000	7400	2200
MW-37	5/11/2010	33000	7200	2400
MW-37	11/4/2010	54000	10000	2200
MW-37	3/22/2011	36000	6000	2300

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-37	10/26/2011	57000	9700	2500
MW-37	4/18/2012	29000	5300	2100
MW-37	10/19/2012	4800	1100	230
MW-37	4/25/2013	1700	900	230
MW-37	10/17/2013	1100	1500	1300
MW-38	9/14/2001	620	90	< 20 U
MW-38	9/29/2005	< 5 U	98.9	2150
MW-38	10/13/2006	26	130	2000 J
MW-38	12/10/2008	44	110	1400
MW-38	10/26/2011	580	870	1100
MW-38	10/18/2012	1000	750	700
MW-38	10/16/2013	2300	1200	560
MW-38	3/8/2014	1790	535	68.4
MW-38	5/14/2014	2040	426 J	98.2
MW-38	5/14/2014	1650	428	97.9
MW-38	7/31/2014	1720	637	197
MW-38	10/16/2014	6970	869	370
MW-38	10/16/2014	6750	781	321
MW-38	12/4/2014	3190	697	193
MW-39	7/18/2003	< 5 U	< 5 U	< 10 U
MW-39	9/25/2003	< 5 U	< 5 U	< 10 U
MW-39	11/14/2003	< 5 U	< 5 U	< 10 U
MW-39	4/15/2004	< 5 U	< 5 U	< 10 U
MW-39	9/23/2004	< 5 U	< 5 U	< 10 U
MW-39	4/8/2005	< 5 U	< 5 U	< 10 U
MW-39	9/30/2005	< 5 U	< 5 U	< 10 U
MW-39	3/17/2006	< 5 U	< 5 U	< 10 U
MW-39	10/11/2006	< 5 U	< 5 U	< 10 U
MW-39	4/18/2007	< 5 U	< 5 U	< 10 U
MW-39	9/19/2007	< 5 U	< 5 U	< 10 U
MW-39	4/30/2008	< 5 U	< 5 U	< 10 U
MW-39	12/9/2008	< 5 U	< 5 U	< 5 U
MW-39	4/24/2009	< 5 U	< 5 U	< 5 U
MW-39	10/27/2009	< 5 U	< 5 U	< 5 U
MW-39	5/11/2010	< 5 U	< 5 U	< 5 U
MW-39	11/7/2010	20	< 5 U	< 5 U
MW-39	3/24/2011	< 5 U	< 5 U	< 5 U
MW-39	10/26/2011	< 5 U	< 5 U	< 5 U
MW-39	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-39	10/18/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-39	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-39	5/13/2014	0.23 J	< 0.080 U	< 0.13 U
MW-39	7/29/2014	0.79 J	< 0.50 U	< 0.50 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-39	10/13/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-40	7/18/2003	< 5 U	< 5 U	< 10 U
MW-40	9/25/2003	< 5 U	< 5 U	< 10 U
MW-40	11/14/2003	< 5 U	< 5 U	< 10 U
MW-40	11/14/2003	< 5 U	< 5 U	< 10 U
MW-40	4/15/2004	< 5 U	< 5 U	< 10 U
MW-40	9/23/2004	< 5 U	< 5 U	< 10 U
MW-40	4/7/2005	< 5 U	< 5 U	< 10 U
MW-40	9/29/2005	< 5 U	< 5 U	< 10 U
MW-40	3/14/2006	< 5 U	< 5 U	< 10 U
MW-40	10/10/2006	< 5 U	< 5 U	< 10 U
MW-40	4/18/2007	< 5 U	< 5 U	< 10 U
MW-40	9/18/2007	< 5 U	< 5 U	< 10 U
MW-40	4/28/2008	< 5 U	< 5 U	< 10 U
MW-40	12/11/2008	< 5 U	< 5 U	< 5 U
MW-40	4/24/2009	< 5 U	< 5 U	< 5 U
MW-40	5/27/2009	< 5 U	< 5 U	< 5 U
MW-40	10/29/2009	< 5 U	< 5 U	< 5 U
MW-40	5/12/2010	< 5 U	< 5 U	< 5 U
MW-40	11/4/2010	< 5 U	< 5 U	< 5 U
MW-40	3/23/2011	< 5 U	< 5 U	< 5 U
MW-40	10/26/2011	< 5 U	< 5 U	< 5 U
MW-40	4/18/2012	3.9 J	< 5 U	< 5 U
MW-40	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-40	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-40	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-40	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-40	5/12/2014	0.76 J	< 0.080 U	< 0.13 U
MW-40	7/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-40	10/13/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-41	7/18/2003	972	50.6	< 10 U
MW-41	7/18/2003	964	45.5	< 10 U
MW-41	9/25/2003	722	37.8	< 10 U
MW-41	11/14/2003	331	205	< 10 U
MW-41	4/15/2004	760	54.2	< 10 U
MW-41	9/23/2004	1060	48	< 10 U
MW-41	4/7/2005	1170	58	< 10 U
MW-41	9/30/2005	1120	55.8	< 10 U
MW-41	3/17/2006	917	52.5	< 10 U
MW-41	10/13/2006	970	43	< 10 UJ
MW-41	4/18/2007	900	30.1	< 10 U
MW-41	9/20/2007	850	32	< 10 U
MW-41	4/30/2008	730	31	< 10 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-41	12/11/2008	820	29	< 5 U
MW-41	4/24/2009	660	25	< 5 U
MW-41	5/7/2009	180	4.7 J	< 5 U
MW-41	5/8/2009	180	4.7 J	< 5 U
MW-41	5/27/2009	230	16	< 5 U
MW-41	10/28/2009	180	4 J	< 5 U
MW-41	5/13/2010	610	19	< 5 U
MW-41	11/5/2010	930	31	< 5 U
MW-41	3/4/2011	120	20	< 0.85 U
MW-41	5/23/2011	370	15	NT
MW-41	10/25/2011	420	18	< 5 U
MW-41	10/20/2012	620	23	< 0.11 U
MW-41	10/20/2012	550	21	< 0.11 U
MW-41	10/16/2013	520	24	< 0.11 U
MW-41	3/7/2014	501	19.7	0.68 J
MW-41	5/14/2014	518	18.0	0.50 J
MW-41	7/30/2014	511	19.1	< 0.50 U
MW-41	7/30/2014	480	19.7	< 0.50 U
MW-41	10/15/2014	491	16.9	< 0.50 U
MW-42B	11/14/2003	481	21.1	< 10 U
MW-42B	4/15/2004	856	29.3	< 10 U
MW-42B	9/23/2004	400	19.8	< 10 U
MW-42B	4/5/2005	1310	32	< 10 U
MW-42B	9/27/2005	1470	27.3	< 10 U
MW-42B	3/15/2006	2270	37.2	< 10 U
MW-42B	10/10/2006	2000	35	2 J
MW-42B	4/17/2007	1600	36.8	< 10 U
MW-42B	9/18/2007	2100	39	4 J
MW-42B	4/29/2008	1600	33	3 J
MW-42B	12/9/2008	1100	30	< 5 U
MW-42B	4/25/2009	1500	35	< 5 U
MW-43	11/14/2003	223	18.5	< 10 U
MW-43	4/15/2004	510	12.1	< 10 U
MW-43	9/23/2004	64.7	6.31	< 10 U
MW-43	4/5/2005	304	11.9	< 10 U
MW-43	9/27/2005	518	21.3	< 10 U
MW-43	3/15/2006	1300	35	< 10 U
MW-43	10/11/2006	920	30	< 10 U
MW-43	4/17/2007	220	14.1	< 10 U
MW-43	9/18/2007	350	13	< 10 U
MW-43	4/28/2008	120	4 J	< 10 U
MW-43	12/9/2008	150	5.3	< 5 U
MW-43	4/25/2009	120	< 5 U	< 5 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-43	5/7/2009	180	6	< 5 U
MW-43	5/8/2009	180	6	< 5 U
MW-46R	11/14/2003	39.9	< 5 U	< 10 U
MW-46R	4/15/2004	77.1	27.2	< 10 U
MW-46R	9/23/2004	142	21.2	< 10 U
MW-46R	4/6/2005	210	28.4	< 10 U
MW-46R	9/28/2005	222	15.6	< 10 U
MW-46R	3/16/2006	111	6.37	< 10 U
MW-46R	4/6/2006	300	< 5 U	< 10 U
MW-46R	10/11/2006	450	8	< 10 U
MW-46R	4/17/2007	440	12.5	< 10 U
MW-46R	9/18/2007	420	9	< 10 U
MW-46R	4/29/2008	430	8	< 10 U
MW-46R	12/9/2008	310	19	< 5 U
MW-46R	4/25/2009	460	11	< 5 U
MW-46R	5/27/2009	< 5 U	< 5 U	< 5 U
MW-46R	10/27/2009	390	12	< 5 U
MW-46R	12/21/2009	410	10	< 1.6 U
MW-46R	5/11/2010	610	13	< 5 U
MW-46R	11/5/2010	650	12	< 5 U
MW-46R	3/7/2011	670	14	< 0.85 U
MW-46R	3/22/2011	680	11	< 5 U
MW-46R	5/23/2011	610	13	NT
MW-46R	10/26/2011	460	10	< 5 U
MW-46R	4/18/2012	680	14	< 5 U
MW-46R	10/20/2012	410	7.9	0.44 J
MW-46R	4/23/2013	470	7.6	0.91 J
MW-46R	10/18/2013	410	11	< 0.11 U
MW-46R	3/7/2014	469	12.8	0.46 J
MW-46R	5/14/2014	471	12.8	0.76 J
MW-46R	7/29/2014	472	13.7	0.64 J
MW-46R	10/16/2014	373	25.2	< 0.50 U
MW-46R	10/16/2014	410	24.6	< 0.50 U
MW-50	4/15/2004	6.51	< 5 U	< 10 U
MW-50	9/23/2004	< 5 U	< 5 U	< 10 U
MW-50	12/10/2004	< 5 U	< 5 U	< 10 U
MW-50	4/6/2005	< 5 U	< 5 U	< 10 U
MW-50	9/28/2005	< 5 U	< 5 U	< 10 U
MW-50	3/17/2006	< 5 U	< 5 U	< 10 U
MW-50	10/12/2006	< 5 U	< 5 U	< 10 U
MW-50	4/19/2007	< 5 U	< 5 U	< 10 U
MW-50	9/19/2007	< 5 U	< 5 U	< 10 U
MW-50	4/29/2008	< 5 U	< 5 U	< 10 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-50	12/10/2008	< 5 U	< 5 U	< 5 U
MW-50	4/24/2009	< 5 U	< 5 U	< 5 U
MW-50	10/27/2009	< 5 U	< 5 U	< 5 U
MW-50	5/11/2010	< 5 U	< 5 U	< 5 U
MW-50	11/5/2010	< 5 U	< 5 U	< 5 U
MW-50	3/23/2011	< 5 U	< 5 U	< 5 U
MW-50	10/25/2011	< 5 U	< 5 U	< 5 U
MW-50	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-50	10/16/2013	1.6 J	< 0.56 U	< 0.11 U
MW-50	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-50	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-50	7/28/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-50	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-55	12/9/2004	< 5 U	< 5 U	< 10 U
MW-55	4/8/2005	< 5 U	< 5 U	< 10 U
MW-55	9/28/2005	< 5 U	< 5 U	< 10 U
MW-55	3/16/2006	< 5 U	< 5 U	< 10 U
MW-55	10/13/2006	2 J	< 5 U	< 10 UJ
MW-55	4/19/2007	2.6 J	< 5 U	< 10 U
MW-55	9/19/2007	5 J	< 5 U	< 10 U
MW-55	4/29/2008	< 5 U	< 5 U	< 10 U
MW-55	12/10/2008	< 5 U	< 5 U	< 5 U
MW-55	4/24/2009	< 5 U	< 5 U	< 5 U
MW-55	10/27/2009	3.6 J	< 5 U	< 5 U
MW-55	5/12/2010	4.2 J	< 5 U	< 5 U
MW-55	11/6/2010	14	< 5 U	< 5 U
MW-55	3/23/2011	5.5	< 5 U	< 5 U
MW-55	10/25/2011	7	< 5 U	< 5 U
MW-55	10/20/2012	9.2	< 0.56 U	< 0.11 U
MW-55	10/16/2013	13	< 0.56 U	< 0.11 U
MW-56	12/10/2004	90.2	< 5 U	< 10 U
MW-56	4/8/2005	88.2	< 5 U	< 10 U
MW-56	9/28/2005	207	< 5 U	< 10 U
MW-56	3/16/2006	8.7	< 5 U	< 10 U
MW-56	10/14/2006	110	2 J	< 10 UJ
MW-56	4/19/2007	< 5 U	< 5 U	< 10 U
MW-56	9/19/2007	38	< 5 U	< 10 U
MW-56	4/29/2008	4 J	< 5 U	< 10 U
MW-56	12/10/2008	93	< 5 U	< 5 U
MW-56	4/24/2009	14	< 5 U	< 5 U
MW-56	10/27/2009	8.7	< 5 U	< 5 U
MW-56	5/12/2010	230	6.4	< 5 U
MW-56	3/23/2011	71	2.6 J	< 5 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-56	10/25/2011	150	11	1.9 J
MW-56	10/20/2012	470	11	< 0.11 U
MW-56	10/17/2013	590	17	< 0.11 U
MW-56	3/7/2014	618	15.3	0.15 J
MW-56	6/11/2014	307	17.6	0.16 J
MW-56	7/29/2014	516	19.3	< 0.50 U
MW-56	10/15/2014	408	12.1	< 0.50 U
MW-57	12/10/2004	207	6.72	< 10 U
MW-57	4/8/2005	282	6.83	< 10 U
MW-57	9/28/2005	96	< 5 U	< 10 U
MW-57	3/16/2006	254	7.56	< 10 U
MW-57	10/13/2006	64	< 5 U	< 10 UJ
MW-57	4/19/2007	201	3.77 J	< 10 U
MW-57	9/20/2007	250	5 J	< 10 U
MW-57	4/30/2008	14	< 5 U	< 10 U
MW-57	12/10/2008	130	7.4	< 5 U
MW-57	4/24/2009	96	4.2 J	< 5 U
MW-57	10/27/2009	100	2.6 J	< 5 U
MW-57	5/12/2010	210	6	< 5 U
MW-57	3/23/2011	110	2.3 J	< 5 U
MW-57	10/25/2011	59	2 J	< 5 U
MW-57	10/20/2012	120	5.1	< 0.11 U
MW-57	10/17/2013	210	7.4	< 0.11 U
MW-57	3/7/2014	134	3.0 J	0.14 J
MW-57	6/11/2014	167	4.4 J	< 0.13 U
MW-57	7/29/2014	308	8.2	< 0.50 U
MW-57	10/15/2014	172	4.2 J	< 0.50 U
MW-58	12/9/2004	526	14.5	< 10 U
MW-58	4/7/2005	809	18.8	< 10 U
MW-58	9/28/2005	486	10.9	< 10 U
MW-58	3/16/2006	421	8.66	< 10 U
MW-58	10/13/2006	620	14	< 10 UJ
MW-58	4/19/2007	784	30.7	< 25 U
MW-58	4/19/2007	717	9.54 J	< 25 U
MW-58	9/19/2007	650	17	< 10 U
MW-58	9/19/2007	640	16	< 10 U
MW-58	4/30/2008	630	15	< 10 U
MW-58	4/30/2008	580	14	< 10 U
MW-58	12/11/2008	530	12	< 5 U
MW-58	12/11/2008	510	13	< 5 U
MW-58	4/25/2009	590	14	< 5 U
MW-58	4/25/2009	580	15	< 5 U
MW-58	10/28/2009	480	11	< 5 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-58	10/28/2009	480	11	< 5 U
MW-58	5/12/2010	660	14	< 5 U
MW-58	11/6/2010	560	11	< 5 U
MW-58	11/6/2010	580	12	< 5 U
MW-58	3/24/2011	710	12	< 5 U
MW-58	3/24/2011	700	14	1.1 J
MW-58	10/20/2012	440	18	0.84 J
MW-58	10/17/2013	410	13	1.5 J
MW-58	10/17/2013	420	12	1.1 J
MW-58	3/7/2014	293	22.3	0.93 J
MW-58	5/12/2014	397	12.1	0.72 J
MW-58	7/29/2014	399	12.7	0.76 J
MW-58	10/15/2014	360	10.8	0.68 J
MW-60	4/1/2005	< 5 U	< 5 U	< 10 U
MW-60	9/30/2005	< 5 U	< 5 U	< 10 U
MW-60	3/17/2006	< 5 U	< 5 U	< 10 U
MW-60	10/12/2006	< 5 U	< 5 U	< 10 U
MW-60	4/19/2007	< 5 U	< 5 U	< 10 U
MW-60	9/19/2007	< 5 U	< 5 U	< 10 U
MW-60	4/29/2008	< 5 U	< 5 U	< 10 U
MW-60	12/10/2008	< 5 U	< 5 U	< 5 U
MW-60	4/24/2009	< 5 U	< 5 U	< 5 U
MW-60	10/27/2009	< 5 U	< 5 U	< 5 U
MW-60	5/11/2010	< 5 U	< 5 U	< 5 U
MW-60	11/4/2010	< 5 U	< 5 U	< 5 U
MW-60	3/23/2011	< 5 U	< 5 U	< 5 U
MW-60	10/25/2011	< 5 U	< 5 U	< 5 U
MW-60	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-60	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-60	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-60	5/13/2014	0.21 J	< 0.080 U	< 0.13 U
MW-60	7/28/2014	1.0 J	< 0.50 U	< 0.50 U
MW-60	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-61	4/1/2005	< 5 U	< 5 U	< 10 U
MW-61	4/1/2005	< 5 U	< 5 U	< 10 U
MW-61	9/30/2005	< 5 U	< 5 U	< 10 U
MW-61	3/17/2006	< 5 U	< 5 U	< 10 U
MW-61	10/12/2006	< 5 U	< 5 U	< 10 U
MW-61	4/19/2007	< 5 U	< 5 U	< 10 U
MW-61	9/19/2007	< 5 U	< 5 U	< 10 U
MW-61	4/29/2008	< 5 U	< 5 U	< 10 U
MW-61	12/10/2008	< 5 U	< 5 U	< 5 U
MW-61	4/24/2009	4 J	< 5 U	< 5 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-61	10/27/2009	< 5 U	< 5 U	< 5 U
MW-61	5/11/2010	< 5 U	< 5 U	< 5 U
MW-61	11/4/2010	< 5 U	< 5 U	< 5 U
MW-61	3/23/2011	1.8 J	< 5 U	< 5 U
MW-61	10/25/2011	< 5 U	< 5 U	< 5 U
MW-61	10/17/2012	2.4 J	< 0.56 U	< 0.11 U
MW-61	10/16/2013	4.0 J	< 0.56 U	< 0.11 U
MW-61	3/6/2014	4.7 J	< 0.080 U	< 0.13 U
MW-61	5/13/2014	6.6	< 0.080 U	< 0.13 U
MW-61	7/28/2014	8.1	< 0.50 U	< 0.50 U
MW-61	10/14/2014	7.9	< 0.50 U	< 0.50 U
MW-62	4/1/2005	< 5 U	< 5 U	< 10 U
MW-62	9/30/2005	< 5 U	< 5 U	< 10 U
MW-62	3/16/2006	< 5 U	< 5 U	< 10 U
MW-62	10/12/2006	< 5 U	< 5 U	< 10 U
MW-62	4/19/2007	< 5 U	< 5 U	< 10 U
MW-62	9/19/2007	< 5 U	< 5 U	< 10 U
MW-62	4/29/2008	< 5 U	< 5 U	< 10 U
MW-62	12/10/2008	< 5 U	< 5 U	< 5 U
MW-62	4/24/2009	< 5 U	< 5 U	< 5 U
MW-62	10/27/2009	< 5 U	< 5 U	< 5 U
MW-62	5/11/2010	< 5 U	< 5 U	< 5 U
MW-62	3/23/2011	< 5 U	< 5 U	< 5 U
MW-62	10/25/2011	1.9 J	< 5 U	< 5 U
MW-62	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-62	10/17/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-62	3/7/2014	0.18 J	< 0.080 U	< 0.13 U
MW-62	5/14/2014	0.62 J	< 0.080 U	< 0.13 U
MW-62	7/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-62	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-63	4/1/2005	8.14	< 5 U	< 10 U
MW-63	9/30/2005	< 5 U	< 5 U	< 10 U
MW-63	3/16/2006	9.76	< 5 U	< 10 U
MW-63	4/6/2006	11.6	< 5 U	< 10 U
MW-63	10/12/2006	4 J	< 5 U	< 10 U
MW-63	4/19/2007	4.08 J	< 5 U	< 10 U
MW-63	9/19/2007	8	< 5 U	< 10 U
MW-63	4/30/2008	3 J	< 5 U	< 10 U
MW-63	12/10/2008	< 5 U	< 5 U	< 5 U
MW-63	4/24/2009	4.3 J	< 5 U	< 5 U
MW-63	10/27/2009	7.7	< 5 U	< 5 U
MW-63	5/11/2010	7.6	< 5 U	< 5 U
MW-63	11/6/2010	11	< 5 U	< 5 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-63	3/23/2011	12	< 5 U	< 5 U
MW-63	10/25/2011	9.8	< 5 U	< 5 U
MW-63	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-63	10/17/2013	7.5	< 0.56 U	< 0.11 U
MW-63	3/7/2014	9.4	1.3 J	< 0.13 U
MW-63	5/14/2014	12.2	0.61 J	0.13 J
MW-63	7/28/2014	8.3	0.99 J	< 0.50 U
MW-63	10/14/2014	9.4	0.98 J	< 0.50 U
MW-65	10/11/2006	470	19	< 10 U
MW-65	10/11/2006	560	18	< 10 U
MW-65	4/19/2007	1350	23.4	< 10 U
MW-65	9/20/2007	580	17	< 10 U
MW-65	4/30/2008	570	16	< 10 U
MW-65	12/11/2008	460	11	< 5 U
MW-65	4/24/2009	620	19	< 5 U
MW-65	11/7/2010	400	11	< 5 U
MW-65	3/4/2011	370	13	< 0.85 U
MW-65	10/25/2011	310	10	< 5 U
MW-65	10/20/2012	280	8.9	< 0.11 U
MW-65	10/17/2013	220	8.6	< 0.11 U
MW-65	3/8/2014	199	6.6	< 0.13 U
MW-65	5/14/2014	195	6.9	< 0.13 U
MW-65	7/30/2014	17.1	< 0.50 U	< 0.50 U
MW-65	10/14/2014	30.8	0.54 J	< 0.50 U
MW-66	4/6/2006	< 5 U	< 5 U	< 10 U
MW-66	10/12/2006	2 J	< 5 U	< 10 U
MW-66	4/18/2007	< 5 U	< 5 U	< 10 U
MW-66	9/19/2007	4 J	< 5 U	< 10 U
MW-66	4/29/2008	< 5 U	< 5 U	< 10 U
MW-66	12/10/2008	< 5 U	< 5 U	< 5 U
MW-66	4/25/2009	< 5 U	< 5 U	< 5 U
MW-66	10/28/2009	< 5 U	< 5 U	< 5 U
MW-66	5/11/2010	< 5 U	< 5 U	< 5 U
MW-66	11/3/2010	< 5 U	< 5 U	< 5 U
MW-66	3/24/2011	1.6 J	< 5 U	< 5 U
MW-66	10/26/2011	1.8 J	< 5 U	< 5 U
MW-66	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-66	10/17/2013	2.1 J	< 0.56 U	< 0.11 U
MW-66	3/7/2014	3.5 J	< 0.080 U	< 0.13 U
MW-66	5/13/2014	3.1 J	< 0.080 U	< 0.13 U
MW-66	7/28/2014	2.6 J	< 0.50 U	< 0.50 U
MW-66	10/13/2014	2.3 J	< 0.50 U	< 0.50 U
MW-67	4/6/2006	< 5 U	< 5 U	< 10 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-67	10/12/2006	1 J	< 5 U	< 10 U
MW-67	4/19/2007	< 5 U	< 5 U	< 10 U
MW-67	9/18/2007	< 5 U	< 5 U	< 10 U
MW-67	4/29/2008	< 5 U	< 5 U	< 10 U
MW-67	12/10/2008	< 5 U	< 5 U	< 5 U
MW-67	4/25/2009	< 5 U	< 5 U	< 5 U
MW-67	10/28/2009	< 5 U	< 5 U	< 5 U
MW-67	5/11/2010	< 5 U	< 5 U	< 5 U
MW-67	11/3/2010	< 5 U	< 5 U	< 5 U
MW-67	3/24/2011	< 5 U	< 5 U	< 5 U
MW-67	10/26/2011	< 5 U	< 5 U	< 5 U
MW-67	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-67	10/17/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-67	3/7/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-67	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-67	7/28/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-67	10/13/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-68	1/15/2009	< 5 U	< 5 U	< 5 U
MW-68	4/24/2009	< 5 U	< 5 U	< 5 U
MW-68	10/28/2009	< 5 U	< 5 U	< 5 U
MW-68	5/13/2010	< 5 U	< 5 U	< 5 U
MW-68	11/6/2010	9.5	< 5 U	< 5 U
MW-68	10/26/2011	< 5 U	< 5 U	< 5 U
MW-68	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-68	10/16/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-68	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-68	5/14/2014	0.49 J	< 0.080 U	< 0.13 U
MW-68	7/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-68	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
RW-69	1/15/2009	170	7.1	< 5 U
RW-69	4/24/2009	62	< 5 U	< 5 U
RW-69	5/27/2009	290	10	< 5 U
RW-69	12/21/2009	200	6.3	< 1.6 U
RW-69	5/13/2010	170	8.2	< 5 U
RW-69	11/4/2010	320	9	< 5 U
RW-69	3/3/2011	200	7.1	< 0.85 U
RW-69	5/23/2011	130	3.0 J	NT
RW-69	10/26/2011	210	5.7	< 5 U
RW-69	4/18/2012	150	3.6 J	< 5 U
RW-69	10/18/2012	180	5.0	< 0.11 U
RW-69	4/23/2013	190	2.8 J	< 0.11 U
RW-69	10/16/2013	190	7.7	< 0.11 U
RW-69	3/7/2014	105	3.5 J	0.41 J

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
RW-69	5/13/2014	110	3.3 J	0.30 J
RW-69	7/29/2014	164	5.6	0.50 J
RW-69	10/14/2014	173	6.9	< 0.50 U
MW-70	11/4/2010	540	14	< 5 U
MW-70	3/22/2011	170	9.2	1.2 J
MW-70	10/26/2011	320	7.7	< 5 U
MW-70	4/18/2012	330	11	< 5 U
MW-70	10/18/2012	200	11	< 0.11 U
MW-70	4/23/2013	180	3.6 J	0.32 J
MW-70	10/16/2013	270	7.2	0.30 J
MW-71	10/28/2009	190	6.3	< 5 U
MW-71	5/13/2010	160	7.4	< 5 U
MW-71	11/4/2010	250	7.2	< 5 U
MW-71	3/22/2011	76	1.6 J	< 5 U
MW-71	10/26/2011	130	2.7 J	< 5 U
MW-71	4/18/2012	160	5.3	< 5 U
MW-71	10/20/2012	210	7.3	< 0.11 U
MW-71	4/23/2013	220	4.8 J	0.23 J
MW-71	10/16/2013	160	6.1	0.57 J
MW-71	3/7/2014	166	5.8	0.19 J
MW-71	5/13/2014	164	5.3	0.33 J
MW-71	7/29/2014	181	6.4	< 0.50 U
MW-71	10/14/2014	185	6.0	< 0.50 U
IW-72	1/16/2009	27	< 5 U	< 5 U
IW-72	4/23/2009	40	< 5 U	< 5 U
IW-72	5/8/2009	40	< 5 U	< 5 U
IW-72	3/3/2011	3.1 J	< 0.56 U	< 0.85 U
IW-72	5/19/2011	< 1.6 U	< 0.56 U	NT
IW-72	10/24/2011	< 5 U	< 5 U	< 5 U
IW-72	4/17/2012	3.8 J	< 5 U	< 5 U
IW-72	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
IW-72	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U
IW-72	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
IW-72	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
IW-72	5/12/2014	< 0.17 U	< 0.080 U	< 0.13 U
IW-72	7/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
IW-72	10/13/2014	< 0.50 U	< 0.50 U	< 0.50 U
IW-73	4/23/2009	400	16	< 5 U
IW-73	5/19/2011	160	3.6 J	NT
IW-73	10/25/2011	250	4.9 J	< 5 U
IW-73	4/17/2012	180	5.8	< 5 U
IW-73	10/20/2012	170	7.0	< 0.11 U
IW-73	4/24/2013	200	6.5	< 0.11 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-73	4/24/2013	180	6.4	< 0.11 U
IW-73	10/15/2013	140	47	6.3
IW-73	3/7/2014	183	20.9	4.6
IW-73	5/14/2014	31.9	0.81 J	< 0.13 U
IW-73	7/29/2014	138	24.3	26.1
IW-73	10/14/2014	8.5	0.84 J	1.1 J
IW-74	4/23/2009	260	8.1	< 5 U
IW-74	5/19/2011	74	< 0.56 U	NT
IW-74	10/25/2011	150	3.1 J	< 5 U
IW-74	4/17/2012	130	2.4 J	< 5 U
IW-74	10/20/2012	160	3.4 J	< 0.11 U
IW-74	4/24/2013	160	4.8 J	< 0.11 U
IW-74	10/15/2013	190	5.7	< 0.11 U
IW-74	3/7/2014	135	4.3 J	1.5 J
IW-74	3/7/2014	151	4.5 J	2.2
IW-74	5/14/2014	169	4.3 J	0.80 J
IW-74	7/29/2014	177	5.8	0.91 J
IW-74	10/14/2014	143	3.3 J	< 0.50 U
IW-74	10/14/2014	144	3.3 J	< 0.50 U
IW-75	1/16/2009	140	2.4 J	< 5 U
IW-75	10/25/2011	< 5 U	< 5 U	< 5 U
IW-75	4/17/2012	2.9 J	< 5 U	< 5 U
IW-75	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
IW-75	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
IW-76	4/23/2009	730	28	< 5 U
IW-76	5/7/2009	460	28	< 5 U
IW-76	3/4/2011	380	11	< 0.85 U
IW-76	5/23/2011	460	12	NT
IW-76	10/25/2011	130	2.2 J	< 5 U
IW-76	4/17/2012	400	8.9	< 5 U
IW-76	10/20/2012	610	16	< 0.11 U
IW-76	4/24/2013	420	13	0.39 J
IW-76	10/15/2013	450	8.7	< 0.11 U
IW-76	3/8/2014	127	1.5 J	< 0.13 U
IW-76	5/14/2014	10.3	< 0.080 U	< 0.13 U
IW-76	7/29/2014	319	2.7 J	< 0.50 U
IW-76	10/15/2014	214	6.7	< 0.50 U
IW-77	4/23/2009	570	20	< 5 U
IW-77	5/7/2009	300	17	< 5 U
IW-77	5/27/2009	250	13	< 5 U
IW-77	10/28/2009	380	13	< 5 U
IW-77	12/21/2009	250	12	< 1.6 U
IW-77	5/13/2010	260	11	< 5 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-77	11/5/2010	1400	41	< 5 U
IW-77	3/4/2011	430	14	< 0.85 U
IW-77	5/23/2011	440	15	NT
IW-77	10/25/2011	1400	32	< 5 U
IW-77	4/17/2012	520	20	< 5 U
IW-77	4/17/2012	510	23	< 5 U
IW-77	10/19/2012	1000	32	0.65 J
IW-77	4/24/2013	530	21	< 0.11 U
IW-77	10/16/2013	1000	39	1.6 J
IW-77	10/16/2013	990	39	0.49 J
IW-77	3/8/2014	546	24.4	0.22 J
IW-77	5/14/2014	1460	36.0	0.66 J
IW-77	7/9/2014	1200	21.1	< 0.50 U
IW-77	7/29/2014	1540	35.2	< 0.50 U
IW-77	10/15/2014	741	15.8	< 0.50 U
IW-77	10/23/2014	554	11.9	< 0.50 U
IW-78	10/25/2011	350	12	< 5 U
IW-78	4/18/2012	120	2.3 J	< 5 U
IW-78	10/20/2012	310	8.7	< 0.11 U
IW-78	4/24/2013	7.0	< 0.56 U	< 0.11 U
IW-78	10/17/2013	190	4.6 J	< 0.11 U
IW-78	5/28/2014	255	6.2	< 0.13 U
IW-78	9/11/2014	39.6	1.2 J	< 0.50 U
IW-79	10/25/2011	570	13	< 5 U
IW-79	4/17/2012	430	2.1 J	< 5 U
IW-79	10/20/2012	670	20	0.45 J
IW-79	10/20/2012	480	16	< 0.11 U
IW-79	4/24/2013	420	9.0	< 0.11 U
IW-79	10/17/2013	440	12	< 0.11 U
IW-79	5/28/2014	426	6.9	< 0.13 U
IW-79	9/11/2014	105	1.8 J	< 0.50 U
IW-80	4/23/2009	170	4 J	< 5 U
IW-80	5/7/2009	69	< 5 U	< 5 U
IW-80	5/19/2011	27	< 0.56 U	NT
IW-80	10/25/2011	9.7	< 5 U	< 5 U
IW-80	4/17/2012	55	2.2 J	< 5 U
IW-80	10/19/2012	48	< 0.56 U	< 0.11 U
IW-80	4/24/2013	40	< 0.56 U	< 0.11 U
IW-80	10/17/2013	58	2.4 J	< 0.11 U
IW-80	10/17/2013	62	2.4 J	< 0.11 U
IW-80	3/8/2014	79.1 J	2.7 J	< 0.13 U
IW-80	5/13/2014	24.2	< 0.080 U	< 0.13 U
IW-80	7/30/2014	25.6	0.85 J	< 0.50 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-80	10/14/2014	11.8	< 0.50 U	< 0.50 U
MW-81	5/29/2014	512	14.3	0.21 J
MW-81	7/9/2014	518	11.4	< 0.50 U
MW-81	9/11/2014	463	13.5	< 0.50 U
MW-82	5/28/2014	285	4.8 J	0.14 J
MW-82	7/9/2014	48.2	1.2 J	< 0.50 U
MW-82	9/11/2014	50.0	1.1 J	< 0.50 U
MW-83	5/23/2014	470	8.3	< 0.13 U
MW-83	9/12/2014	213	4.9 J	< 0.50 U
MW-83	10/23/2014	210	5.2	< 0.50 U
MW-84	5/27/2014	214	4.6 J	0.16 J
MW-84	9/12/2014	0.93 J	< 0.50 U	< 0.50 U
MW-84	10/23/2014	0.68 J	< 0.50 U	< 0.50 U
MW-85	5/29/2014	1970	99.4	23.1
MW-85	7/8/2014	3780	133	3.9
MW-85	9/11/2014	5820	226 J	35.3
MW-85	12/5/2014	27700	280	7.7
MW-86	5/29/2014	533000	1220 J	341 J
MW-86	9/11/2014	129000	91.6	4.1
MW-86	12/5/2014	169000	290 E	24.7
MW-87	6/25/2014	564	41.8	< 0.50 U
MW-87	10/16/2014	594	47.8	< 0.50 U
MW-88	6/24/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-88	10/16/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-89	6/24/2014	19.5	< 0.50 U	< 0.50 U
MW-89	10/15/2014	11.3	< 0.50 U	< 0.50 U
MW-90	6/25/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-90	10/16/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-91	6/25/2014	234	21.7	< 0.50 U
MW-91	10/16/2014	319	28.8	< 0.50 U
MW-92	10/22/2014	2160	16.0	7.2
MW-92	12/4/2014	2200	23.4	10.3
MW-93	10/22/2014	18200	145	5.0
MW-93	12/4/2014	14600	85.7	2.5
MW-94	10/22/2014	11100	309 J	2.5
MW-94	12/4/2014	9570	250 J	3.0
MW-95	10/22/2014	22300	151	25.7
MW-95	12/4/2014	20900	159	29.9
MW-96	10/22/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-97	10/22/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-98	10/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-99	10/22/2014	< 0.50 U	< 0.50 U	< 0.50 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-101	3/23/2014	314	7.5	0.21 J
IW-101	4/30/2014	794	18.9	< 0.13 U
IW-101	5/23/2014	509	11.2	< 0.13 U
IW-101	7/8/2014	150	4.5 J	< 0.50 U
IW-101	9/12/2014	139	3.4 J	< 0.50 U
IW-102	3/23/2014	685	14.6	0.45 J
IW-102	4/30/2014	239	5.4	< 0.13 U
IW-103	3/23/2014	692	13.1	0.76 J
IW-103	4/30/2014	729	22.8	0.83 J
IW-104	3/23/2014	637	13.5	0.69 J
IW-104	4/30/2014	527	12.6	< 0.13 U
IW-105	3/23/2014	901	14.4	0.54 J
IW-105	4/30/2014	185	4.9 J	< 0.13 U
IW-106	3/23/2014	198	4.2 J	< 2 U
IW-106	4/30/2014	163	6.8	< 0.13 U
IW-106	5/23/2014	132	2.6 J	< 0.13 U
IW-107	3/23/2014	198	4.3 J	0.14 J
IW-107	4/30/2014	110	3.3 J	< 0.13 U
IW-108	3/23/2014	1280	27.8	0.83 J
IW-108	4/29/2014	72.1	4.1 J	< 0.13 U
IW-108	5/23/2014	59.0	1.5 J	< 0.13 U
IW-109	3/23/2014	362	7.4	0.23 J
IW-109	4/29/2014	91.2	2.5 J	< 0.13 U
IW-109	5/23/2014	110	1.9 J	< 0.13 U
IW-110	3/23/2014	464	9.8	0.5 J
IW-110	4/16/2014	397	9.4	0.17 J
IW-110	4/30/2014	268	8.2	0.33 J
IW-111	3/23/2014	704	14	0.63 J
IW-111	4/29/2014	260	6.4	< 0.13 U
IW-112	3/23/2014	219	4.9 J	0.23 J
IW-112	4/16/2014	200	4.8 J	< 0.13 U
IW-112	4/30/2014	104	3.8 J	< 0.13 U
IW-113	3/24/2014	510	11.1	0.43 J
IW-113	4/14/2014	435	8.7	< 0.13 U
IW-114	3/24/2014	397	9.7	0.25 J
IW-114	4/14/2014	336	8.1	< 0.13 U
IW-115	3/24/2014	622	14	0.25 J
IW-115	4/7/2014	455	9.1 J	< 1.3 U
IW-115	4/14/2014	449	9.3	< 0.13 U
IW-115	5/28/2014	504	11.2	0.27 J
IW-115	7/9/2014	352	7.4	< 0.50 U
IW-115	9/11/2014	355	8.0	< 0.50 U

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-116	3/24/2014	486	10.9	0.33 J
IW-116	4/15/2014	546	10.8	0.34 J
IW-117	3/24/2014	384	9.1	0.23 J
IW-117	4/15/2014	384	9.9	< 0.13 U
IW-118	3/24/2014	496	11.6	0.34 J
IW-118	4/15/2014	395	9.7	< 0.13 U
IW-118	5/28/2014	437	9.3	< 0.13 U
IW-119	3/24/2014	524	11.5	0.33 J
IW-119	4/7/2014	478	9.1 J	< 1.3 U
IW-119	4/15/2014	509	11.3	< 0.13 U
IW-120	3/24/2014	289	7.9	0.14 J
IW-120	4/15/2014	390	10.2	< 0.13 U
IW-121	3/24/2014	402	8.9 J	< 10 U
IW-121	4/15/2014	445	11.7	< 0.13 U
IW-122	3/24/2014	473	11.5	0.29 J
IW-122	4/15/2014	384	10.0	< 0.13 U
IW-123	3/24/2014	532	12.2	0.40 J
IW-123	4/7/2014	539	8.8 J	< 1.3 U
IW-123	4/15/2014	488	10.0	< 0.13 U
IW-124	3/24/2014	455	6.8 J	< 10 U
IW-124	4/15/2014	448	8.7	0.26 J
IW-125	3/25/2014	2140	207	3.1
IW-125	5/29/2014	17.1	2.9 J	< 0.13 U
IW-125	9/11/2014	7.3	1.0 J	< 0.50 U
IW-126	3/25/2014	2020	197	10.4
IW-126	5/29/2014	787	59.1	< 0.13 U
IW-127	3/24/2014	3700	219 J	7.6
IW-127	5/29/2014	639	34.7	< 0.13 U
IW-127	9/11/2014	1020	38.5	2.6
IW-127	12/4/2014	182	7.2	< 0.50 U
IW-128	3/25/2014	2980	178	11.7
IW-128	4/29/2014	1250	68.4	4.9
IW-128	5/29/2014	1190	62.7	< 0.13 U
IW-129	3/25/2014	2540	192	< 0.13 U
IW-129	5/29/2014	25.8	1.8 J	< 0.13 U
IW-130	3/23/2014	358	7.6 J	< 10 U
IW-130	5/23/2014	75.5	0.78 J	< 0.13 U
IW-131	3/24/2014	526	11.5	0.35 J
IW-131	4/30/2014	318	8.5	0.31 J
IW-131	5/28/2014	443	8.8	0.30 J
IW-132	10/23/2014	714	3.5 J	< 0.50 U
IW-135	10/23/2014	3840	43.3	2.0

TABLE 5-1
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-141	10/23/2014	368000	< 1000 U	82.6
IW-141	12/5/2014	46300	232 E	31.0
IW-143	10/23/2014	13100	44.8	2.5
IW-147	10/23/2014	199000	1640 J	< 1000 U
IW-147	12/5/2014	91600	1420 J	176
IW-152	10/22/2014	17600	224 J	8.2
IW-152	12/4/2014	< 0.50 U	< 0.50 U	< 0.50 U
IW-153	10/23/2014	293	85.3	12.3
IW-153	12/4/2014	1.6 J	< 0.50 U	< 0.50 U
IW-155	10/23/2014	14600	36.4	5.8
IW-157	10/23/2014	74200	712 J	195
IW-157	12/5/2014	31700	391 E	66.8
IW-169	10/22/2014	163	1.7 J	< 0.50 U
MW-172	10/22/2014	3010	21.4	2.4
MW-172	12/5/2014	1810	15.6	1.3 J

Notes:
E,J - Estimated Concentration
F - MS/MSD or RPD out of laboratory control limits
ND - Result is not detected at the associated method quantitation limit
NT - Analyte not tested
U - Not Detected (MDL included where available, RDL included for older analyses)
M1 - Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample

TABLE 5-2
SUMMARY OF STATISTICAL TEMPORAL TREND ANALYSIS (2009 - 2014)
Whirpool Facility - Fort Smith, Arkansas

Well ID	Start Date	End Date	Number of Samples	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
Northern Plume Wells						
MW-23	4/27/2009	10/16/2013	10	Stable	ND	ND
MW-24	4/27/2009	4/25/2013	8	Stable	<PQL	<PQL
MW-27	5/12/2010	10/14/2014	11	Decreasing	ND	ND
MW-28	10/29/2009	10/14/2014	13	Decreasing	ND	ND
MW-31	4/25/2009	10/14/2014	11	No Trend	ND	ND
MW-32	4/25/2009	10/14/2014	12	Decreasing	<PQL	ND
MW-33	4/25/2009	10/15/2014	14	Stable	Decreasing	<PQL
MW-34	4/24/2009	10/15/2014	13	Stable	<PQL	ND
MW-35R	4/24/2009	10/14/2014	14	No Trend	Stable	ND
MW-36	4/24/2009	10/14/2014	15	No Trend	ND	ND
MW-39	4/24/2009	10/13/2014	12	No Trend	ND	ND
MW-40	4/24/2009	10/13/2014	15	<PQL	ND	ND
MW-41	4/24/2009	10/15/2014	16	Stable	Stable	<PQL
MW-42B	4/25/2009	4/25/2009	1	<4 Results	<4 Results	<4 Results
MW-43	4/25/2009	5/8/2009	3	<4 Results	<4 Results	<4 Results
MW-46R	4/25/2009	10/16/2014	18	Stable	Increasing	<PQL
MW-50	4/24/2009	10/14/2014	12	<PQL	ND	ND
MW-55	4/24/2009	10/16/2013	8	Increasing	ND	ND
MW-56	4/24/2009	10/15/2014	11	Increasing	Increasing	<PQL
MW-57	4/24/2009	10/15/2014	11	Increasing	Stable	<PQL
MW-58	4/25/2009	10/15/2014	13	Decreasing	Stable	<PQL
MW-60	4/24/2009	10/14/2014	12	<PQL	ND	ND
MW-61	4/24/2009	10/14/2014	12	Increasing	ND	ND
MW-62	4/24/2009	10/14/2014	11	<PQL	ND	ND
MW-63	4/24/2009	10/14/2014	12	Stable	<PQL	<PQL
MW-65	4/24/2009	10/14/2014	10	Decreasing	Decreasing	ND
MW-66	4/25/2009	10/13/2014	12	<PQL	ND	ND
MW-67	4/25/2009	10/13/2014	12	ND	ND	ND
MW-68	1/15/2009	10/14/2014	12	No Trend	ND	ND
RW-69	1/15/2009	10/14/2014	17	Stable	Stable	<PQL
MW-70	11/4/2010	10/16/2013	7	Stable	Decreasing	<PQL
MW-71	10/28/2009	10/14/2014	13	Stable	Stable	<PQL
IW-72	1/16/2009	10/13/2014	14	Decreasing	ND	ND
IW-73	4/23/2009	10/14/2014	11	Decreasing	No Trend	Increasing
IW-74	4/23/2009	10/14/2014	11	Stable	Stable	Increasing
IW-75	1/16/2009	10/15/2013	5	No Trend	<PQL	ND
IW-76	4/23/2009	10/15/2014	13	Decreasing	Decreasing	No Trend
IW-77	4/23/2009	10/15/2014	18	Increasing	Increasing	<PQL
IW-78	10/25/2011	10/17/2013	5	Stable	Stable	ND
IW-79	10/25/2011	10/17/2013	5	Stable	Stable	<PQL
IW-80	4/23/2009	10/14/2014	12	Decreasing	<PQL	ND
Southern Plume Wells (includes Source Area Wells as indicated by bold font well ID)						
ITMW-1	10/27/2011	10/15/2014	9	Decreasing	Decreasing	ND
ITMW-2	11/3/2010	10/15/2014	11	<PQL	<PQL	ND
ITMW-3	11/4/2010	10/15/2013	6	Decreasing	<PQL	ND
ITMW-4	10/25/2011	10/16/2014	7	<PQL	Stable	No Trend
ITMW-5	4/27/2009	10/16/2013	10	Stable	Decreasing	<PQL
ITMW-6	10/28/2009	10/15/2014	11	<PQL	Increasing	<PQL
ITMW-7	4/27/2009	10/15/2014	13	Decreasing	Decreasing	No Trend
ITMW-9	4/27/2009	10/15/2014	13	Stable	Decreasing	No Trend
ITMW-10	4/27/2009	10/15/2014	11	Increasing	Decreasing	Decreasing
ITMW-11	4/27/2009	10/15/2014	10	Stable	Decreasing	Decreasing
ITMW-12	10/26/2011	10/15/2014	8	Increasing	Decreasing	Stable
ITMW-13	4/27/2009	10/15/2014	13	Stable	Decreasing	<PQL
ITMW-14	11/4/2010	10/15/2014	10	Decreasing	Decreasing	ND
ITMW-15	4/27/2009	10/16/2014	9	Stable	Stable	Stable
ITMW-16	11/6/2010	10/15/2014	10	No Trend	ND	ND
ITMW-17	4/27/2009	10/16/2014	13	Decreasing	Decreasing	Increasing
ITMW-18	4/27/2009	10/15/2014	12	Decreasing	Decreasing	<PQL
ITMW-19	4/27/2009	10/16/2014	13	Decreasing	Decreasing	<PQL
ITMW-20	10/29/2009	10/15/2014	12	No Trend	ND	<PQL
ITMW-21	10/27/2009	10/15/2014	12	Decreasing	<PQL	ND
MW-22	10/27/2009	10/15/2014	11	<PQL	ND	ND
MW-25	4/27/2009	10/16/2014	14	Decreasing	Stable	No Trend
MW-26	10/29/2009	10/14/2014	12	No Trend	ND	ND
MW-29	10/29/2009	10/15/2014	10	<PQL	ND	ND
MW-30	11/3/2010	10/14/2013	6	Stable	Stable	<PQL
MW-37	4/27/2009	10/17/2013	10	Decreasing	Decreasing	Stable
MW-38	10/26/2011	10/16/2014	7	Increasing	Stable	Stable

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

ENVIRON

TABLE 5-3
SUMMARY OF AVERAGE DETECTED CONCENTRATIONS (2009 - 2014)
Whirlpool Facility - Fort Smith, Arkansas

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

Notes:
µg/L: Micrograms per liter

TABLE 5-4
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (2014)
Whirlpool Corporation - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	ITMW-1	ITMW-7	ITMW-9	ITMW-9	ITMW-10	ITMW-11	ITMW-12	ITMW-12	ITMW-13	ITMW-14	ITMW-15	ITMW-15	ITMW-17	ITMW-18	ITMW-19	ITMW-21	IW-80	MW-25
ENVIRON Sample ID		ITMW-1-201410	ITMW-7-201410	ITMW-9-201410	DUP-02-201410	ITMW-10-201410	ITMW-11-201410	ITMW-12-201410	DUP-04-201410	ITMW-13-201410	ITMW-14-201410	ITMW-15-201410	DUP-05-201410	ITMW-17-201410	ITMW-18-201410	ITMW-19-201410	ITMW-21-201410	IW-80-201410	MW-25-201410
Lab Sample ID(s)		137010007, 041LJ043, 137090010, 60180441010	137010003, 041LJ045, 137090022, 60180441022	137000002, 041LJ028, 137090014, 60180441014	60180441029	137000003, 041LJ027, 137090013, 60180441013	137010022, 041LJ046, 137090023, 60180441023	137010018, 041LJ029, 137090015, 60180441015	60180441028	137010016, 041LJ047, 137090024, 60180441024	137010014, 041LJ030, 137090016, 60180441016	137010019, 041LJ048, 137090025, 60180635001	60180635008	137010021, 041LJ052, 137090029, 60180635005	137010017, 041LJ031, 137090017, 60180441017	137010020, 041LJ051, 137090028, 60180635004	137010010, 041LJ036, 137090003, 60180441003	137000013, 041LJ015, 137080009, 60180331004	137010024, 041LJ049, 137090026, 60180635002
Sample Date		10/15/2014	10/15/2014	10/13/2014	10/15/2014	10/13/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/16/2014	10/16/2014	10/16/2014	10/15/2014	10/16/2014	10/15/2014	10/14/2014	10/16/2014
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments					Field Duplicate				Field Duplicate				Field Duplicate						
Volatile Organic Compounds																			
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	11.8 (5.0)	U (5.0)	U (5.0)	24.2 (5.0)	41.8 (5.0)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.51 J (0.50)	U (0.50)	U (0.50)	U (0.50)	0.68 J (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.0 J (0.50)	U (0.50)
Bromomethane	7.0	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	5.4 J (5.0)
Chlorobenzene	100	U (0.50)	0.56 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.89 J (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.52 J (0.50)	0.54 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.81 J (0.50)	2.2 J (0.50)	3.7 J (0.50)	U (0.50)	U (0.50)	5.6 (0.50)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	5.0 J (0.50)	U (0.50)	U (0.50)	0.85 J (0.50)	2.1 J (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.3 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	18.2 (0.50)
1,1-Dichloroethane	2.4	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	2.8 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	5.3 (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.55 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.7 J (0.50)
1,1-Dichloroethene	7.0	U (0.50)	U (0.50)	1.5 J (0.50)	1.6 J (0.50)	3.8 J (0.50)	0.71 J (0.50)	2.0 J (0.50)	1.8 J (0.50)	U (0.50)	U (0.50)	3.4 J (0.50)	3.9 J (0.50)	5.8 (0.50)	U (0.50)	19.9 (0.50)	U (0.50)	U (0.50)	3.1 J (0.50)
cis-1,2-Dichloroethene	70	4.5 J (0.50)	10.3 (0.50)	39.1 (0.50)	38.8 (0.50)	32.3 (0.50)	70.4 (0.50)	188 (12.5)	192 (0.50)	25.9 (0.50)	9.4 (0.50)	63.0 (0.50)	66.4 (0.50)	70.5 (0.50)	68.5 (0.50)	76.7 (0.50)	U (0.50)	U (0.50)	2870 J (500)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.54 J (0.50)	1.0 J (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	13.9 (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	595 J (500)
Methylene Chloride	5.0	U (0.50)	U (0.50)	0.88 J (0.50)	0.84 J (0.50)	0.61 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.59 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.76 J (0.50)	U (0.50)	U (0.50)	U (0.50)	57.7 (0.50)
Tetrachloroethene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.64 J (0.50)	0.94 J (0.50)	1.3 J (0.50)	1.2 J (0.50)	U (0.50)	22.0 (0.50)	U (0.50)	U (0.50)	0.82 J (0.50)	1.5 J (0.50)	2.7 J (0.50)	U (0.50)	U (0.50)	18.1 (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.7 J (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	9.7 (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.58 J (0.50)	0.92 J (0.50)	U (0.50)	U (0.50)	1.9 J (0.50)
Trichloroethene	5.0	6.1 (0.50)	33.7 (0.50)	76.9 (0.50)	75.3 (0.50)	243 (2.5)	2050 (50.0)	2570 (12.5)	2950 (50.0)	40.8 (0.50)	4.1 J (0.50)	1490 (5.0)	1660 (25.0)	3510 (25.0)	3540 (50.0)	12800 (50.0)	6.0 (0.50)	11.8 (0.50)	42500 (500)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	1.8 J (0.50)	1.7 J (0.50)	1.7 J (0.50)	3.5 (0.50)	3.5 (0.50)	3.7 (0.50)	U (0.50)	U (0.50)	2.0 (0.50)	1.8 J (0.50)	3.2 (0.50)	U (0.50)	1.9 J (0.50)	U (0.50)	U (0.50)	540 J (500)
Metals																			
Iron	NE	U (50.0)	U (50.0)	U (50.0)	NM	U (50.0)	382 (50.0)	55.7 (50.0)	NM	U (50.0)	385 (50.0)	248 (50.0)	NM	150 (50.0)	45.5 J (50.0)	U (50.0)	U (50.0)	337 (50.0)	1310 (50.0)
Manganese	NE	16.4 (5.0)	80.5 (5.0)	257 (5.0)	NM	330 (5.0)	136 (5.0)	114 (5.0)	NM	16.5 (5.0)	15.1 (5.0)	24.9 (5.0)	NM	1910 (5.0)	7.7 (5.0)	78.2 (5.0)	801 (5.0)	63.8 (5.0)	248 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																			
Total Alkalinity	NE	70900 (20000)	12100 J (20000)	91400 (20000)	NM	82800 (20000)	92900 (20000)	76800 (20000)	NM	53600 (20000)	41800 (20000)	230000 (20000)	NM	6400 J (20000)	56200 (20000)	73400 (20000)	9800 J (20000)	225000 (20000)	34800 (20000)
Ammonia	NE	U (100)	230 (100)	U (100)	NM	U (100)	U (100)	150 (100)	NM	U (100)	140 (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	350 (100)	U (100)
Bicarbonate Alkalinity	NE	70900 (20000)	12100 J (20000)	91400 (20000)	NM	82800 (20000)	92900 (20000)	76800 (20000)	NM	53600 (20000)	41800 (20000)	230000 (20000)	NM	6400 J (20000)	56200 (20000)	73400 (20000)	9800 J (20000)	225000 (20000)	34800 (20000)
Carbon Dioxide	NE	198000	0	1670000	NM	427000	356000	225000	NM	157000	145000	244000	NM	0	212000	135000	0	325000	413000
Organic Carbon (total)	NE	520 J (1000)	210 J (1000)	2600 (1000)	NM	1300 (1000)	640 J (1000)	880 J (1000)	NM	490 J (1000)	880 J (1000)	700 J (1000)	NM	290 J (1000)	630 J (1000)	260 J (1000)	U (1000)	1100 (1000)	4600 (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	96600 (10000)	278000 (50000)	61800 (10000)	NM	138000 (10000)	4600 (1000)	18500 (2000)	NM	22800 (2000)	6600 (1000)	120000 (10000)	NM	280000 (20000)	135000 (10000)	285000 (20000)	766000 (100000)	194000 (20000)	482000 (50000)
Iron, Ferric	NE	0 J (200)	80 J (200)	0 J (200)	NM	0 J (200)	380 (200)	0 J (200)	NM	14 J (200)	380 (200)	250 (200)	NM	130 J (200)	45 J (200)	6 J (200)	0 J (200)	330 (200)	1300 (200)
Nitrogen	NE	760 (100)	2700 (100)	14900 (500)	NM	5700 (200)	190 (100)	130 M1 (100)	NM	160 (100)	390 (100)	600 (100)	NM	U (100)	2900 (100)	1200 (100)	U (100)	1900 (100)	270 (100)
Nitrogen, Nitrate (As N)	NE	760 (100)	2700 (100)	14900 (500)	NM	5700 (200)	190 (100)	130 M1 (100)	NM	160 (100)	390 (100)	600 (100)	NM	U (100)	2900 (100)	1200 (100)	U (100)	1900 (100)	270 (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (500)	NM	U (200)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	6.0 (0.10)	5.0 (0.10)	5.1 (0.10)	NM	5.7 (0.10)	5.8 (0.10)	6.0 (0.10)	NM	6.0 (0.10)	5.9 (0.10)	7.0 (0.10)	NM	5.0 (0.10)	5.8 (0.10)	6.3 (0.10)	4.9 (0.10)	6.6 (0.10)	5.3 (0.10)
Phosphates (total)	NE	66 (30)	32 (30)	32 (30)	NM	66 (30)	U (30)	66 (30)	NM	U (30)	32 (30)	32 (30)	NM	35 (30)	66 (30)	35 (30)	32 (30)	1100 (30)	32 (30)
Sulfide (total)	NE	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	23800 (2000)	9700 (1000)	36100 (10000)	NM	39200 (10000)	14100 (1000)	13200 (2000)	NM	6200 (1000)	9400 M1 (1000)	8800 (1000)	NM	7100 (1000)	324000 (20000)	6100 (1000)	7000 (1000)	121000 (10000)	373000 (50000)
Gasses																			
Methane	NE	0.22 (0.10)	3.0 (0.10)	25 (0.10)	NM	4.7 (0.10)	18 (0.10)	64 (0.10)	NM	16 (0.10)	0.32 (0.10)	2.8 (0.10)	NM	4.8 (0.10)	2.0 (0.10)	0.78 (0.10)	24 (0.10)	1.7 (0.10)	130 (0.10)
Ethane	NE	0.027 (0.025)	U (0.025)	0.068 (0.025)	NM	0.056 (0.025)	0.20 (0.025)	2.2 (0.025)	NM	0.73 (0.025)	U (0.025)	0.46 (0.025)	NM	0.29 (0.025)	0.25 (0.025)	0.090 (0.025)	0.055 (0.025)	0.10 (0.025)	23 (0.025)
Ethene	NE	0.12 (0.025)	0.074 (0.025)	0.12 (0.025)	NM	0.14 (0.025)	0.057 (0.025)	0.041 (0.025)	NM	0.047 (0.025)	U (0.025)	0.050 (0.025)	NM	0.027 (0.025)	0.084 (0.025)	0.10 (0.025)	U (0.025)	U (0.025)	0.30 (0.025)
Hydrogen [nM] [4*]	NE	5.4 (0.60)	1.6 (0.60)	4.6 (0.60)	NM	5.0 (0.60)	4.8 (0.60)	1.5 (0.60)	NM	2.2 (0.60)	1.7 (0.60)	5.1 (0.60)	NM	3.7 (0.60)	7.3 (0.60)	4.7 (0.60)	2.4 (0.60)	21 (0.60)	2700 (60)
Molecular Analyses																			
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	4 (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.625)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	4.3 (0.5)	46.9 (0.5)	U (0.5)	NM	U (0.5)	0.3 J (0.5)	0.3 J (0.5)	NM	U (0.5)	U (0.625)	1.4 (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
tceA Reductase [cells/mL]	NE	0.6 (0.5)	2 (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.625)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	1 (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.625)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)

Notes:

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

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit for Volatile Organic Compounds; Reporting Limit for all other parameters.
* -- Sampled on different day than other parameters with different method
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5-4
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (2014)
Whirlpool Corporation - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-32	MW-33	MW-34	MW-35R	MW-38	MW-38	MW-65	ITMW-2	ITMW-4	ITMW-6	ITMW-16	ITMW-20	IW-72	MW-22	MW-26	MW-27	MW-28	MW-29
ENVIRON Sample ID		MW-32-201410	MW-33-201410	MW-34-201410	MW-35R-201410	MW-38-201410	DUP-06-201410	MW-65-201410	ITMW-2-201410	ITMW-4-201410	ITMW-6-201410	ITMW-16-201410	ITMW-20-201410	IW-72-201410	MW-22-201410	MW-26-201410	MW-27-201410	MW-28-201410	MW-29-201410
Lab Sample ID(s)		137000018, 041LJ017, 137080011, 60180331006	137000017, 041LJ040, 137090007, 60180441007	137000015, 041LJ042, 137090009, 60180441009	137000019, 041LJ010, 137080021, 60180331016	137010023, 041LJ053, 137090030, 60180635006	60180635010	137000020, 041LJ023, 137080023, 60180331018	137010011, 041LJ025, 137090011, 60180441011	137000001, 041LJ050, 137090027, 60180635003	137010006, 041LJ037, 137090004, 60180441004	137010012, 041LJ032, 137090018, 60180441018	137010005, 041LJ039, 137090006, 60180441006	137000006, 041LJ05, 137080005, 60180221005	137010008, 041LJ026, 137090012, 60180441012	137010009, 041LJ011, 137080022, 60180331017	137010015, 041LJ024, 137080024, 60180331019	137010013, 041LJ012, 60180331001	137010004, 041LJ038, 137090005, 60180441005
Sample Date		10/14/2014	10/15/2014	10/14/2014	10/14/2014	10/16/2014	10/16/2014	10/14/2014	10/15/2014	10/13/2014	10/15/2014	10/15/2014	10/15/2014	10/13/2014	10/15/2014	10/14/2014	10/14/2014	10/14/2014	10/15/2014
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments							Field Duplicate												
Volatile Organic Compounds																			
Acetone	12000	U (5.0)	U (5.0)	30.4 (5.0)	48.9 (5.0)	U (5.0)	U (5.0)	45.3 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	0.59 J (0.50)	U (0.50)	1.9 J (0.50)	U (0.50)	U (0.50)	U (0.50)	1.9 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	4.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7.0	2.8 J (2.5)	U (2.5)	34.9 (2.5)	U (2.5)	U (2.5)	U (2.5)	5.2 J (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	4.7 J (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.3 J (0.50)	2.4 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	190	1.6 (0.50)	U (0.50)	6.2 J (0.50)	7.2 J (0.50)	U (0.50)	U (0.50)	3.9 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.6 J (0.50)	2.4 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.98 J (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	4.8 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	10.2 (0.50)	10.8 (0.50)	U (0.50)	U (0.50)	U (0.50)	0.53 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	0.80 J (0.50)	15.3 (0.50)	0.96 J (0.50)	2.6 J (0.50)	781 (50.0)	869 (50.0)	0.54 J (0.50)	U (0.50)	4.9 J (0.50)	5.2 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	2.2 J (0.50)	U (0.50)	U (0.50)	4.1 J (0.50)	2.8 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	21.8 (0.50)	22.4 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.5 J (0.50)	2.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.0 J (0.50)	2.0 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.60 J (0.50)	0.69 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5.0	29.7 (0.50)	1290 (5.0)	47.7 (0.50)	79.2 (0.50)	6750 (50.0)	6970 (50.0)	30.8 (0.50)	U (0.50)	3.4 J (0.50)	3.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	321 (50.0)	370 (50.0)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals																			
Iron	NE	229 (50.0)	342 (50.0)	238 (50.0)	69.0 (50.0)	1270 (50.0)	NM	88.2 (50.0)	519 (50.0)	2770 (50.0)	U (50.0)	712 (50.0)	U (50.0)	166 (50.0)	U (50.0)	U (50.0)	473 (50.0)	438 (50.0)	U (50.0)
Manganese	NE	388 (5.0)	126 (5.0)	158 (5.0)	38.3 (5.0)	5670 (5.0)	NM	35.0 (5.0)	46.1 (5.0)	3540 (5.0)	155 (5.0)	18.4 (5.0)	6.4 (5.0)	5340 (5.0)	94.8 (5.0)	399 (5.0)	102 (5.0)	55.7 (5.0)	126 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																			
Total Alkalinity	NE	7400 J (20000)	10200 J (20000)	3200 J (20000)	1250000 (20000)	330000 (20000)	NM	876000 (20000)	57400 (20000)	72700 (20000)	145000 (20000)	34400 (20000)	135000 (20000)	107000 (20000)	45600 (20000)	21400 (20000)	32800 (20000)	99000 (20000)	16300 J (20000)
Ammonia	NE	U (100)	U (100)	U (100)	1000 (100)	U (100)	NM	830 (100)	110 (100)	120 (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	7400 J (20000)	10200 J (20000)	3200 J (20000)	U (20000)	330000 (20000)	NM	U (20000)	57400 (20000)	72700 (20000)	145000 (20000)	34400 (20000)	135000 (20000)	107000 (20000)	45600 (20000)	21400 (20000)	32800 (20000)	99000 (20000)	16300 J (20000)
Carbon Dioxide	NE	0	0	0	427000	397000	NM	226000	176000	122000	546000	36700	223000	298000	297000	400000	256000	234000	0
Organic Carbon (total)	NE	U (1000)	U (1000)	530 J (1000)	12900 (1000)	2400 (1000)	NM	5900 (1000)	U (1000)	12000 (1000)	700 (1000)	2900 (1000)	600 (1000)	730 J (1000)	800 J (1000)	U (1000)	1100 (1000)	820 J (1000)	880 J (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	U (20000)	U (20000)	970000 (20000)	U (20000)	NM	514000 (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	126000 (10000)	196000 (20000)	299000 (20000)	343000 (50000)	32000 (2000)	NM	307000 (20000)	110000 (10000)	9000 (1000)	161000 (10000)	1000 (1000)	108000 (10000)	175000 (10000)	14700 (1000)	416000 (50000)	31500 (2000)	23400 (2000)	113000 (10000)
Iron, Ferric	NE	230 (200)	340 (200)	240 (200)	59 J (200)	1200 (200)	NM	88 J (200)	520 (200)	0 J (200)	7 J (200)	710 (200)	0 J (200)	150 J (200)	0 J (200)	8 J (200)	63 J (200)	440 (200)	15 J (200)
Nitrogen	NE	170 (100)	2400 (100)	450 (100)	1900 (100)	6300 (200)	NM	2700 (100)	1000 (100)	U (100)	26600 (1000)	1100 (100)	1200 M1 (100)	1100 M1 (100)	U (100)	2900 (100)	310 (100)	U (100)	1900 (100)
Nitrogen, Nitrate (As N)	NE	170 (100)	2400 (100)	450 (100)	1900 (100)	4500 (200)	NM	2700 (100)	1000 (100)	U (100)	26600 (1000)	1100 (100)	1200 M1 (100)	1100 (100)	U (100)	2900 (100)	310 (100)	U (100)	1900 (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (100)	U (100)	1800 (200)	NM	U (100)	U (100)	U (100)	U (1000)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	4.8 (0.10)	5.1 (0.10)	4.7 (0.10)	11.7 (0.10)	6.8 (0.10)	NM	12.0 (0.10)	6.0 (0.10)	6.4 (0.10)	5.8 (0.10)	7.0 (0.10)	6.4 (0.10)	6.0 (0.10)	5.6 (0.10)	5.0 (0.10)	5.5 (0.10)	6.1 (0.10)	5.3 (0.10)
Phosphates (total)	NE	U (30)	32 (30)	32 (30)	3100 (60)	32 (30)	NM	2800 (60)	66 (30)	35 (30)	14 J (30)	66 (30)	32 (30)	49 (30)	14 J (30)	84 (30)	32 (30)	290 (30)	32 (30)
Sulfide (total)	NE	U (50)	U (50)	U (50)	U (50)	U (50)	NM	U (50)	U (50)	27 J (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	34900 (5000)	11000 (2000)	273000 (20000)	5110000 (500000)	135000 (10000)	NM	3080000 (500000)	19500 (2000)	17400 (1000)	86900 (10000)	32800 (5000)	18200 (2000)	9100 (1000)	10300 (1000)	8700 (1000)	15500 (2000)	39800 (2000)	57100 (10000)
Gasses																			
Methane	NE	9.3 (0.10)	0.44 (0.10)	2.9 (0.10)	17 (0.10)	24 (0.10)	NM	7.4 (0.10)	21 (0.10)	120 (0.10)	1.1 (0.10)	0.23 (0.10)	0.26 (0.10)	0.54 (0.10)	4.9 (0.10)	0.80 (0.10)	U (0.10)	1.2 (0.10)	0.65 (0.10)
Ethane	NE	U (0.025)	0.031 (0.025)	U (0.025)	0.72 (0.025)	1.0 (0.025)	NM	0.25 (0.025)	U (0.025)	0.16 (0.025)	U (0.025)	U (0.025)	U (0.025)	0.050 (0.025)	0.037 (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)
Ethene	NE	U (0.025)	U (0.025)	U (0.025)	0.16 (0.025)	42 (0.025)	NM	0.050 (0.025)	0.21 (0.025)	0.18 (0.025)	0.44 (0.025)	0.13 (0.025)	U (0.025)	U (0.025)	0.051 (0.025)	U (0.025)	U (0.025)	0.029 (0.025)	U (0.025)
Hydrogen [nM] [4*]	NE	1.3 (0.60)	1.3 (0.60)	9.6 (0.60)	2300 (60)	5.6 (0.60)	NM	160 (12)	4.9 (0.60)	6.7 (0.60)	1.7 (0.60)	1.7 (0.60)	2.1 (0.60)	4.8 (0.60)	7.0 (0.60)	1.2 (0.60)	4.9 (0.60)	5.3 (0.60)	1.7 (0.60)
Molecular Analyses																			
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	18000 (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.666667)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	0.5 (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	26600 (0.5)	NM	U (0.5)	U (0.5)	0.6 (0.5)	U (0.5)	1.4 J (0.666667)	U (0.5)	U (0.5)	19.2 (0.5)	U (0.5)	U (0.5)	3.4 (0.5)	U (0.5)
tceA Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	0.2 J (0.5)	U (0.5)	0.4 J (0.666667)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.666667)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)

Notes:

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

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit for Volatile Organic Compounds; Reporting Limit for all other parameters.
* -- Sampled on different day than other parameters with different method
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5-4
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (2014)
Whirlpool Corporation - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-31	MW-36	MW-39	MW-40	MW-50	MW-60	MW-61	MW-62	MW-63	MW-66	MW-67	MW-68	IW-73	IW-74	IW-74	IW-76	IW-77	MW-41
ENVIRON Sample ID		MW-31-201410	MW-36-201410	MW-39-201410	MW-40-201410	MW-50-201410	MW-60-201410	MW-61-201410	MW-62-201410	MW-63-201410	MW-66-201410	MW-67-201410	MW-68-201410	IW-73-201410	IW-74-201410	DUP-01-201410	IW-76-201410	IW-77-201410	MW-41-201410
Lab Sample ID(s)		041LJ016, 137080010, 60180331005	137000014, 041LJ014, 137080008, 60180331003	137000016, 041LJ01, 137080001, 60180221001	137000007, 041LJ04, 137080004, 60180221004	041LJ013, 137080007, 60180331002	041LJ08, 137080019, 60180331014	041LJ07, 137080018, 60180331013	137000022, 041LJ022, 137080016, 60180331011	041LJ06, 137080017, 60180331012	137000004, 041LJ02, 137080002, 60180221002	137000021, 041LJ03, 137080003, 60180221003	137010001, 041LJ020, 137080014, 60180331009	137000009, 041LJ09, 137080020, 60180331015	137000008, 041LJ021, 137080015, 60180331010	60180331020	137000011, 041LJ035, 137090002, 60180441002	137000012, 041LJ041, 137090008, 60180441008	137000010, 041LJ034, 137090001, 60180441001
Sample Date		10/14/2014	10/14/2014	10/13/2014	10/13/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/13/2014	10/13/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments																Field Duplicate			
Volatile Organic Compounds																			
Acetone	12000	U (5.0)	6.4 J (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	23.1 (5.0)	15.9 (5.0)	U (5.0)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	9.6 (0.50)	2.3 J (0.50)	U (0.50)
Bromomethane	7.0	U (2.5)	12.1 (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	58.5 (2.5)	15.3 (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.51 J (0.50)	U (0.50)
Chloromethane	190	U (0.50)	2.9 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	11.3 (0.50)	13.9 (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.61 J (0.50)	U (0.50)	1.6 J (0.50)
cis-1,2-Dichloroethene	70	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.98 J (0.50)	U (0.50)	U (0.50)	U (0.50)	0.84 J (0.50)	3.3 J (0.50)	3.3 J (0.50)	6.7 (0.50)	15.8 (0.50)	16.9 (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.62 J (0.50)	2.9 J (0.50)	U (0.50)
Methylene Chloride	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	7.9 (0.50)	U (0.50)	9.4 (0.50)	2.3 J (0.50)	U (0.50)	U (0.50)	8.5 (0.50)	144 (0.50)	143 (0.50)	214 (2.5)	741 (10.0)	491 (5.0)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals																			
Iron	NE	152 (50.0)	51.9 (50.0)	49.0 J (50.0)	29.8 J (50.0)	886 (50.0)	9510 (50.0)	2090 (50.0)	87.4 (50.0)	1290 (50.0)	74.2 (50.0)	1900 (50.0)	24.1 J (50.0)	1740 (50.0)	36.9 J (50.0)	NM	U (50.0)	64.9 (50.0)	4090 (50.0)
Manganese	NE	233 (5.0)	482 (5.0)	425 (5.0)	192 (5.0)	156 (5.0)	908 (5.0)	28.6 (5.0)	22.4 (5.0)	40.0 (5.0)	12.4 (5.0)	15.3 (5.0)	1630 (5.0)	196 (5.0)	591 (5.0)	NM	49.3 (5.0)	6.1 (5.0)	5760 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																			
Total Alkalinity	NE	17900 J (20000)	13700 J (20000)	10600 J (20000)	14400 J (20000)	195000 (20000)	385000 (20000)	109000 (20000)	28000 (20000)	33800 (20000)	100000 (20000)	256000 (20000)	12400 J (20000)	35800 (20000)	75200 (20000)	NM	13100 J (20000)	98900 (20000)	36100 (20000)
Ammonia	NE	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	NM	U (100)	130 (100)	95 J (100)
Bicarbonate Alkalinity	NE	17900 J (20000)	13700 J (20000)	10600 J (20000)	14400 J (20000)	195000 (20000)	385000 (20000)	109000 (20000)	28000 (20000)	33800 (20000)	100000 (20000)	256000 (20000)	12400 J (20000)	35800 (20000)	75200 (20000)	NM	13100 J (20000)	98900 (20000)	36100 (20000)
Carbon Dioxide	NE	0	0	0	0	313000	500000	201000	159000	188000	259000	328000	0	50000	251000	NM	0	348000	226000
Organic Carbon (total)	NE	640 J (1000)	U (1000)	U (1000)	U (1000)	U (1000)	1900 (1000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	7800 (1000)	550 J (1000)	NM	550 J (1000)	720 J (1000)	U (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)
Chloride	NE	96400 (10000)	248000 (20000)	379000 (50000)	247000 (20000)	240000 (20000)	135000 (10000)	104000 (10000)	149000 (10000)	161000 (10000)	172000 (10000)	113000 (10000)	313000 (50000)	23600 (2000)	220000 (20000)	NM	316000 (50000)	300000 (50000)	448000 (50000)
Iron, Ferric	NE	130 J (200)	52 J (200)	49 J (200)	30 J (200)	890 (200)	9500 (200)	2100 (200)	87 J (200)	1200 (200)	74 J (200)	740 (200)	25 J (200)	1600 (200)	37 J (200)	NM	19 J (200)	65 J (200)	790 (200)
Nitrogen	NE	210 (100)	21 J (100)	25 J (100)	40 J (100)	U (100)	U (100)	1500 (100)	740 (100)	380 (100)	220 (100)	22 J (100)	U (100)	53 J (100)	530 (100)	NM	1100 (100)	2700 (100)	39 J (100)
Nitrogen, Nitrate (As N)	NE	210 (100)	21 J (100)	25 J (100)	40 J (100)	U (100)	U (100)	1500 (100)	740 (100)	380 (100)	220 (100)	22 J (100)	U (100)	53 J (100)	530 (100)	NM	1100 (100)	2700 (100)	39 J (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	5.3 (0.10)	5.1 (0.10)	4.9 (0.10)	5.2 (0.10)	6.4 (0.10)	6.7 (0.10)	6.3 (0.10)	5.6 (0.10)	5.6 (0.10)	6.1 (0.10)	6.7 (0.10)	5.2 (0.10)	6.6 (0.10)	5.9 (0.10)	NM	5.2 (0.10)	5.9 (0.10)	5.6 (0.10)
Phosphates (total)	NE	U (30)	32 (30)	14 J (30)	49 (30)	170 (30)	210 (30)	500 (30)	18 J (30)	U (30)	39 (30)	32 (30)	U (30)	270 (30)	U (30)	NM	32 (30)	900 (30)	32 (30)
Sulfide (total)	NE	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)
Sulfate	NE	31500 (2000)	45500 (10000)	3800 (1000)	2500 (1000)	U (10000)	27700 (5000)	20900 (2000)	7200 (1000)	8000 (1000)	7100 (1000)	7400 (1000)	800 J (1000)	3000 (1000)	3100 (1000)	NM	477000 (50000)	669000 (50000)	2600 (1000)
Gasses																			
Methane	NE	2.8 (0.10)	5.8 (0.10)	0.20 (0.10)	0.32 (0.10)	0.53 (0.10)	1.8 (0.10)	U (0.10)	U (0.10)	0.40 (0.10)	U (0.10)	U (0.10)	21 (0.10)	5.4 (0.10)	1.7 (0.10)	NM	3.9 (0.10)	0.91 (0.10)	12 (0.10)
Ethane	NE	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	NM	0.047 (0.025)	0.066 (0.025)	0.031 (0.025)
Ethene	NE	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	0.025 (0.025)	0.036 (0.025)	U (0.025)	NM	U (0.025)	U (0.025)	U (0.025)
Hydrogen [nM] [4*]	NE	NM	120 (6.0)	7.3 (0.60)	8.4 (0.60)	NM	NM	NM	4.1 (0.60)	NM	5.3 (0.60)	1.4 (0.60)	1.6 (0.60)	4.5 (0.60)	6.5 (0.60)	NM	340 (12)	11 (0.60)	4.9 (0.60)
Molecular Analyses																			
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.714286)	U (0.444444)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	990 (0.5)	0.5 (0.5)	NM	U (0.5)	U (0.5)	0.2 J (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	0.6 J (0.5)	U (0.5)	2.2 (0.5)	0.6 J (0.5)	0.7 (0.5)	5.5 (0.5)	U (0.714286)	U (0.444444)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	2380 (0.5)	1.1 (0.5)	NM	U (0.5)	U (0.5)	42.3 (0.5)
tceA Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.714286)	U (0.444444)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.714286)	U (0.444444)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)

Notes:

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

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit for Volatile Organic Compounds; Reporting Limit for all other parameters.
* -- Sampled on different day than other parameters with different method
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5-4
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (2014)
Whirlpool Corporation - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-46R	MW-46R	MW-56	MW-57	MW-58	MW-71	RW-69
ENVIRON Sample ID		MW-46R-201410	DUP-03-201410	MW-56-201410	MW-57-201410	MW-58-201410	MW-71-201410	RW-69-201410
Lab Sample ID(s)		137000005, 041LJ054, 137090031, 60180635007	60180635011	041LJ044, 137090021, 60180441021	041LJ055, 137090019, 60180441019	137010002, 041LJ033, 137090020, 60180441020	137000024, 041LJ019, 137080013, 60180331008	137000023, 041LJ018, 137080012, 60180331007
Sample Date		10/14/2014	10/16/2014	10/15/2014	10/15/2014	10/15/2014	10/14/2014	10/14/2014
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments			Field Duplicate					
Volatile Organic Compounds								
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7.0	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	1.2 J (0.50)	1.3 J (0.50)	1.0 J (0.50)	0.59 J (0.50)	2.1 J (0.50)	1.3 J (0.50)	0.85 J (0.50)
cis-1,2-Dichloroethene	70	24.6 (0.50)	25.2 (0.50)	12.1 (0.50)	4.2 J (0.50)	10.8 (0.50)	6.0 (0.50)	6.9 (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5.0	410 (5.0)	373 (5.0)	408 (2.5)	172 (0.50)	360 (2.5)	185 (0.50)	173 (2.5)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.68 J (0.50)	U (0.50)	U (0.50)
Metals								
Iron	NE	128 (50.0)	NM	1210 (50.0)	7490 (50.0)	827 (50.0)	1000 (50.0)	1110 (50.0)
Manganese	NE	126 (5.0)	NM	158 (5.0)	338 (5.0)	359 (5.0)	1660 (5.0)	664 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)								
Total Alkalinity	NE	6200 J (20000)	NM	26600 (20000)	30200 (20000)	9600 J (20000)	20700 (20000)	14200 J (20000)
Ammonia	NE	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	6200 J (20000)	NM	26600 (20000)	30200 (20000)	9600 J (20000)	20700 (20000)	14200 J (20000)
Carbon Dioxide	NE	0	NM	154000	246000	0	235000	0
Organic Carbon (total)	NE	190 J (1000)	NM	480 J (1000)	330 J (1000)	290 J (1000)	U (1000)	740 J (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	248000 (20000)	NM	165000 (10000)	283000 (20000)	267000 (50000)	258000 (20000)	276000 (20000)
Iron, Ferric	NE	130 J (200)	NM	690 (200)	7100 (200)	160 J (200)	210 (200)	150 J (200)
Nitrogen	NE	U (100)	NM	130 (100)	U (100)	U (100)	U (100)	U (100)
Nitrogen, Nitrate (As N)	NE	U (100)	NM	130 (100)	U (100)	U (100)	U (100)	U (100)
Nitrogen, Nitrite	NE	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	5.0 (0.10)	NM	5.6 (0.10)	5.4 (0.10)	5.0 (0.10)	5.3 (0.10)	5.2 (0.10)
Phosphates (total)	NE	32 (30)	NM	32 (30)	32 (30)	U (30)	U (30)	U (30)
Sulfide (total)	NE	U (50)	NM	31 J (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	580 J (1000)	NM	4900 (1000)	3900 (1000)	2400 (1000)	1900 (1000)	1900 (1000)
Gasses								
Methane	NE	20 (0.10)	NM	0.49 (0.10)	2.8 (0.10)	36 (0.10)	73 (0.10)	34 (0.10)
Ethane	NE	U (0.025)	NM	U (0.025)	U (0.025)	U (0.025)	U (0.025)	0.038 (0.025)
Ethene	NE	U (0.025)	NM	0.20 (0.025)	0.091 (0.025)	0.026 (0.025)	0.050 (0.025)	0.26 (0.025)
Hydrogen [nM] [4*]	NE	7.6 (0.60)	NM	NM	NM	2.6 (0.60)	1.9 (0.60)	1.6 (0.60)
Molecular Analyses								
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	16.6 (0.5)	NM	3.1 (0.588235)	U (0.588235)	1.9 (0.5)	U (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	16.9 (0.5)	NM	37.1 (0.588235)	3.6 (0.588235)	31.7 (0.5)	0.8 (0.5)	2.1 (0.5)
tceA Reductase [cells/mL]	NE	U (0.5)	NM	2.1 (0.588235)	U (0.588235)	U (0.5)	U (0.5)	U (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	NM	0.3 J (0.588235)	U (0.588235)	U (0.5)	U (0.5)	U (0.5)

Notes:

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

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit for Volatile Organic Compounds; Reporting Limit for all other parameters.
* -- Sampled on different day than other parameters with different method
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5-5
SUMMARY OF FINAL WELL GROUNDWATER FIELD PARAMETERS MEASUREMENTS (2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (in)	Date Sampled	Water Level prior to Purging (ft btoc)	Total Depth of Well Casing (ft)	Set Tubing Depth (ft)	Time Sampled	Water Level after Purging (ft btoc)	Purge Volume (Gallons)	Purge Rate (ml/min)	Temperature (^{o}C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
ITMW-1	4	3/8/2014	15.78	34.10	29.1	11:45	15.82	1	100	16.12	624	5.99	2.28	9.6	0.14	NM	Clear	ITMW-1-201403
ITMW-1	4	3/28/2014	15.55	34.10	29.1	15:00	15.59	1.5	100	17.04	547	5.83	2.05	215.7	0.00*	0.00	Clear	ITMW-1-201403
ITMW-1	4	5/13/2014	15.51	35.50	NA	16:20	15.57	0.68	100	17.81	512	5.92	2.61	284	0.21	0.00	Clear	ITMW-1-201405
ITMW-1	4	7/30/2014	14.31	34.10	29.1	12:48	14.35	2.0	100	21.45	534	6.05	1.09	-24.1	0	0.20	Clear	ITMW-1-201407
ITMW-1	4	10/15/2014	14.00	35.50	30.5	09:20	14.03	0.9	100	17.46	551	6.02	0.54	322.1	0.54	0.00	Clear	ITMW-1-201410
ITMW-10	4	3/6/2014	19.78	34.15	29.0	17:55	19.83	1.5	100	17.57	673	6.12	2.30	578.7	0.00*	0.00	Clear	ITMW-10-201403
ITMW-10	4	3/30/2014	20.05	34.15	29.2	09:40	20.12	2.5	100	15.06	735	5.91	2.71	563.7	0.00*	0.00	Clear	ITMW-10-201403
ITMW-10	4	5/14/2014	19.72	38.04	NA	11:50	19.84	1.58	100	18.82	729	5.82	3.56	95.7	1.57	0.00	Clear	ITMW-10-201405
ITMW-10	4	7/30/2014	18.89	37.00	33.0	14:10	18.94	1.0	100	21.36	695	5.43	1.09	606.7	0.96	0.00	Clear	ITMW-10-201407
ITMW-10	4	10/15/2014	18.50	38.04	33.0	14:40	18.5	1.0	100	22.86	686	5.67	0.87	115.4	0.69	3.00	Clear	ITMW-10-201410
ITMW-11	4	3/8/2014	12.30	29.31	24.3	15:05	12.35	0.8	100	17.32	282	6.56	1.99	515.3	2.72	0.00	Clear	ITMW-11-201403
ITMW-11	4	3/30/2014	11.35	29.31	24.3	11:50	11.38	2	100	18.65	260	6.33	1.50	255	1.88	0.03	Clear	ITMW-11-201403
ITMW-11	4	5/15/2014	10.91	30.40	25.0	08:55	10.93	1.03	100	18.02	271	6.41	1.38	211.5	3.32	0.25	--	ITMW-11-201405
ITMW-11	4	7/31/2014	10.10	30.40	25.4	10:40	10.03	0.9	100	22.75	284	6.23	0.46	127.9	4.51	1.20	Clear	ITMW-11-201407
ITMW-11	4	10/15/2014	9.69	30.40	25.0	17:15	9.7	2.7	100	24.52	236	5.83	0.27	121	4.4	0.00	Clear	ITMW-11-201410
ITMW-12	4	3/8/2014	14.17	32.63	27.5	15:20	14.21	1.6	100	16.22	246	6.12	1.85	581.4	0.18	NM	Clear	ITMW-12-201403
ITMW-12	4	3/30/2014	14.17	32.63	27.6	11:00	14.22	1	100	18.78	249	6.03	1.50	77.7	0.77	0.00	Clear	ITMW-12-201403
ITMW-12	4	5/14/2014	13.81	32.70	NA	17:00	13.83	1.5	100	18.06	240	5.84	0.78	259	1.72	0.00	Clear	ITMW-12-201405
ITMW-12	4	7/31/2014	12.97	32.70	24.9	11:05	13.03	1.6	100	21.58	298	6.12	0.35	289.2	2.34	0.02	Clear	ITMW-12-201407
ITMW-12	4	10/15/2014	12.56	32.70	27.7	16:42	12.59	1.8	100	23.01	247	5.99	0.83	116.3	1.39	0.09	Clear	ITMW-12-201410
ITMW-13	4	3/8/2014	15.33	31.95	26.0	12:40	15.37	1.5	100	16.85	239	6.10	2.34	565.3	0.78	NM	Clear	ITMW-13-201403
ITMW-13	4	3/28/2014	14.90	31.95	27.0	15:10	15.04	1.5	100	17.83	222	6.12	1.96	563.6	0.95	0.00	Clear	ITMW-13-201403
ITMW-13	4	5/14/2014	14.49	31.91	26.9	09:55	15	1.14	100	16.14	245	5.31	2.07	-71.6	1.6	0.00	Clear	ITMW-13-201405
ITMW-13	4	7/30/2014	14.13	31.91	24.4	13:05	14.18	1.7	100	20.62	274	5.99	0.31	240.9	1.02	0.00	Clear	ITMW-13-201407
ITMW-13	4	10/15/2014	13.75	31.91	26.9	11:12	13.81	2.0	100	18.99	317	5.99	1.24	76	0.13	0.00	Clear	ITMW-13-201410
ITMW-14	4	3/8/2014	14.89	31.80	27.0	13:45	14.98	1	100	16.63	185	6.33	1.69	465.6	2.67	NM	Clear	ITMW-14-201403
ITMW-14	4	3/28/2014	14.50	31.80	26.8	14:55	14.61	1	100	17.43	191	5.78	1.50	96.7	2.69	NM	Clear	ITMW-14-201403
ITMW-14	4	5/14/2014	14.54	31.71	NA	08:55	14.68	1.06	100	16.53	143	5.51	3.04	90.6	0.77	0.00	Clear	ITMW-14-201405
ITMW-14	4	7/30/2014	13.70	31.71	24.2	11:20	13.8	1.2	100	20.86	155	5.80	0.49	182.2	4.31	0.00	Clear	ITMW-14-201407
ITMW-14	4	10/15/2014	13.32	31.71	26.7	13:09	13.41	2.0	100	20.50	184	5.89	1.70	97.2	2.71	0.00	Clear	ITMW-14-201410
ITMW-15	4	3/8/2014	11.76	30.31	25.3	14:57	11.81	1	100	17.33	2195	11.99	5.28	-105.4	8.96	NM	Clear	ITMW-15-201403
ITMW-15	4	3/30/2014	11.64	30.31	25.3	13:45	11.66	1	100	20.91	1620	11.73	4.67	15.1	1.32	0.59	Clear	ITMW-15-201403
ITMW-15	4	5/14/2014	11.31	31.00	NA	17:05	11.41	1.32	100	19.10	683	11.33	7.11	85.9	0.5	0.00	Clear	ITMW-15-201405
ITMW-15	4	7/30/2014	10.42	30.00	25.0	16:00	10.43	1.2	100	24.47	969	7.21	0.72	131.4	9.94	0.00	Clear	ITMW-15-201407
ITMW-15	4	10/16/2014	10.09	31.00	263.0	08:28	10.12	1.5	100	18.23	840	7.04	2.99	138.2	4.84	0.00	Clear	ITMW-15-201410
ITMW-16	4	3/7/2014	16.02	34.36	29.4	10:45	16.68	0.9	100	16.14	170	6.66	3.33	256.8	69.3	0.46	Yellow	ITMW-16-201403
ITMW-16	4	5/13/2014	14.61	35.38	NA	09:15	14.96	0.91	100	18.47	146	6.42	7.43	208.3	6.42	0.00	Light brown/clear	ITMW-16-201405
ITMW-16	4	7/30/2014	14.85	35.38	30.4	16:20	14.91	1.0	100	21.53	233	5.78	0.42	172.6	5.54	0.00	Clear	ITMW-16-201407
ITMW-16	4	10/15/2014	14.45	35.38	30.4	08:59	14.95	1.5	100	19.76	216	7.03	6.60	92.7	23.4	0.00	Clear	ITMW-16-201410
ITMW-17	4	3/8/2014	16.48	30.10	25.1	16:30	16.38	0.9	100	15.53	1015	5.34	5.58	584.4	1.42	NM	Clear	ITMW-17-201403
ITMW-17	4	3/30/2014	15.28	30.10	25.1	14:00	15.24	2.5	100	19.68	1051	5.11	3.38	311.8	0.53	0.00	Clear	ITMW-17-201403
ITMW-17	4	5/15/2014	14.91	31.52	26.5	08:50	14.92	0.9	100	17.89	1052	5.36	4.21	316.8	1.75	0.06	Clear	ITMW-17-201405
ITMW-17	4	7/30/2014	14.01	30.10	25.1	15:11	14.02	1.0	100	22.84	999	5.28	3.16	-8	0.18	0.00	Clear	ITMW-17-201407
ITMW-17	4	10/16/2014	13.70	30.10	25.0	08:55	13.7	2.6	100	18.31	908	5.03	0.28	307.4	7.62	0.00	Clear	ITMW-17-201410
ITMW-18	4	3/8/2014	11.09	39.67	25.0	15:00	11.15	1.5	100	16.36	556	5.57	1.91	510.3	0.53	NM	Clear	ITMW-18-201403
ITMW-18	4	3/30/2014	11.11	29.50	24.5	12:20	11.14	1	100	16.86	794	5.42	2.49	86.1	0.61	0.00	Clear	ITMW-18-201403
ITMW-18	4	5/15/2014	10.71	30.71	25.0	08:55	10.76	2.5	100	16.91	1149	5.91	1.79	179.6	2.47	0.20	Clear	ITMW-18-201405
ITMW-18	4	7/31/2014	9.87	30.71	23.2	09:25	9.93	1.7	100	20.90	1785	5.84	0.37	455.8	4.07	0.00	Clear	ITMW-18-201407
ITMW-18	4	10/15/2014	9.52	30.71	25.7	16:13	9.57	3.0	100	21.53	1984	5.71	2.15	237.6	0.17	0.00	Clear	ITMW-18-201410

ENVIRON

TABLE 5-5
SUMMARY OF FINAL WELL GROUNDWATER FIELD PARAMETERS MEASUREMENTS (2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (in)	Date Sampled	Water Level prior to Purging (ft btoc)	Total Depth of Well Casing (ft)	Set Tubing Depth (ft)	Time Sampled	Water Level after Purging (ft btoc)	Purge Volume (Gallons)	Purge Rate (ml/min)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
ITMW-19	4	3/8/2014	13.72	33.20	28.3	15:53	13.92	1.1	100	14.36	1207	6.62	5.09	56.5	0.64	NM	Clear	ITMW-19-201403
ITMW-19	4	3/30/2014	13.57	33.20	28.2	14:45	13.73	1	100	19.42	1119	6.46	3.82	81.8	0.05	0.04	Clear	ITMW-19-201403
ITMW-19	4	5/15/2014	13.30	34.00	27.0	10:40	13.44	1	100	18.00	1131	6.71	3.42	228.6	1.11	0.77	Clear	ITMW-19-201405
ITMW-19	4	7/31/2014	12.41	34.00	29.0	09:20	12.54	1.5	100	20.29	1204	6.08	1.16	160.4	2.94	0.00	Clear	ITMW-19-201407
ITMW-19	4	10/16/2014	12.06	34.00	29.0	08:40	12.06	1.3	100	18.64	1029	6.32	0.31	184.2	0.31	0.00	Clear	ITMW-19-201410
ITMW-2	4	3/6/2014	12.78	26.80	21.8	12:35	12.89	2	100	18.93	473	6.03	2.16	475.3	0.14	0.05	Clear	ITMW-2-201403
ITMW-2	4	5/13/2014	12.36	27.04	NA	13:50	12.48	1.02	100	19.37	588	5.9	1.89	288	1.24	0.00	Clear	ITMW-2-201405
ITMW-2	4	7/30/2014	11.38	26.80	20.8	10:37	11.47	1.0	100	22.12	761	5.96	0.79	74.4	0.09	0.00	Clear	ITMW-2-201407
ITMW-2	4	10/15/2014	11.22	26.80	21.8	12:50	11.23	1.6	100	24.04	619	5.96	0.14	277.4	8.2	0.00	Clear	ITMW-2-201410
ITMW-20	4	3/5/2014	15.03	31.17	26.2	13:27	14.94	1.4	100	15.62	306	9.93	4.58	111.9	0.71	0.00	Clear	ITMW-20-201403
ITMW-20	4	5/12/2014	13.99	32.28	27.3	16:10	14.31	1.5	100	20.10	606	6.72	3.11	203.8	0.74	0.00	Clear	ITMW-20-201405
ITMW-20	4	7/30/2014	13.79	32.28	24.8	13:00	14.13	1.6	100	21.58	715	6.58	1.83	158.4	0.63	0.30	Clear	ITMW-20-201407
ITMW-20	4	10/15/2014	13.47	32.28	27.0	09:30	13.7	3.3	100	17.19	708	6.41	1.54	355.5	0.07	0.00	Clear	ITMW-20-201410
ITMW-21	4	3/6/2014	13.57	33.00	28.0	17:35	13.87	0.75	100	16.70	2338	5.11	3.76	199.1	0.06	NM	Clear	ITMW-21-201403
ITMW-21	4	3/28/2014	13.12	33.00	28.0	16:45	13.44	1.5	75	16.49	2179	5.00	3.71	291.2	0.00*	0.00	Clear	ITMW-21-201403
ITMW-21	4	5/14/2014	13.21	33.01	NA	09:20	13.54	1.5	100	14.73	2235	4.89	2.51	309.7	0.56	0.00	Clear	ITMW-21-201405
ITMW-21	4	7/30/2014	12.51	33.00	29.0	15:50	12.85	1.0	100	20.45	2530	4.55	1.14	488.5	0.36	0.00	Clear	ITMW-21-201407
ITMW-21	4	10/15/2014	12.23	33.00	28.0	13:50	12.57	1.6	100	22.46	2579	4.91	0.34	330.1	0.9	0.00	Clear	ITMW-21-201410
ITMW-3^	4	5/12/2014	12.41	28.35	NA	11:35	16.92	1.5	100	18.53	283	6.3	0.20	81.3	23.97	0.06	Clear	NA
ITMW-3^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
ITMW-3^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
ITMW-4	4	3/6/2014	17.09	32.80	12.1	10:40	17.14	1.5	100	18.09	269	6.60	0.29	38.3	9.54	0.93	Clear	ITMW-4-201403
ITMW-4	4	5/13/2014	16.89	33.46	NA	11:35	16.92	1.5	100	18.53	283	6.3	0.20	81.3	23.97	0.06	Slightly brown	ITMW-4-201405
ITMW-4	4	7/30/2014	15.98	33.38	28.4	17:15	16:00	1.5	100	22.71	283	6.21	0.56	-5.7	1.3	2.20	Clear	ITMW-4-201407
ITMW-4	4	10/16/2014	15.55	33.46	28.5	08:25	13:12	1.0	100	17.83	263	6.40	1.35	-31.8	1.21	3.80	Clear	ITMW-4-201410
ITMW-5^	4	5/12/2014	17.56	33.38	24.3	15:05	12.35	0.8	100	17.32	282	6.56	1.99	515.3	2.72	0.00	Clear	NA
ITMW-5^	4	5/12/2014	17.56	33.38	24.3	15:05	12.31	0.8	100	17.32	282	6.56	1.99	515.3	2.72	0.00	Clear	NA
ITMW-5^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
ITMW-6	4	3/6/2014	22.22	39.40	17.2	08:30	22.25	1.25	100	14.99	1192	6.15	2.17	534.1	0.51	0.11	Clear	ITMW-6-201403
ITMW-6	4	5/13/2014	22.03	40.09	NA	16:55	22.12	1.75	100	17.36	1301	5.92	1.84	361.1	1.26	0.01	Clear	ITMW-6-201405
ITMW-6	4	7/30/2014	21.25	40.09	36.0	11:30	21.31	1.0	100	19.86	1137	5.64	1.51	610.8	0.79	0.00	Clear	ITMW-6-201407
ITMW-6	4	10/15/2014	20.81	40.09	35.0	14:45	20.85	2.9	100	22.50	1253	5.84	0.38	165	0.92	0.00	Clear	ITMW-6-201410
ITMW-7	4	3/8/2014	20.17	36.95	25.2	10:39	20.28	1	100	17.46	1152	4.98	0.90	16	0.18	NM	Clear	ITMW-7-201403
ITMW-7	4	3/30/2014	20.09	36.97	25.1	09:25	20.23	1.1	100	14.14	1040	4.79	0.63	74.9	0.09	0.00	Clear	ITMW-7-201403
ITMW-7	4	5/14/2014	20.02	37.04	32.0	13:55	20.04	0.79	100	15.79	1013	4.65	0.74	-129.9	0.88	0.00	Clear	ITMW-7-201405
ITMW-7	4	7/30/2014	19.52	37.04	32.0	15:10	NA	1.4	100	21.38	997	4.96	0.37	313.4	0.47	0.00	Clear	ITMW-7-201407
ITMW-7	4	10/15/2014	18.88	37.04	32.0	16:15	18.93	1.1	100	22.14	961	5.06	0.34	221.3	0.91	0.00	Clear	ITMW-7-201410
ITMW-9	4	3/8/2014	20.82	35.10	30.1	09:32	20.87	1.1	100	17.15	715	5.97	4.42	48.2	0.90	NM	Clear	ITMW-9-201403
ITMW-9	4	3/30/2014	21.03	35.10	30.1	09:35	21.04	1	100	18.21	673	5.96	3.28	464.7	0.22	0.00	Clear	ITMW-9-201403
ITMW-9	4	5/14/2014	20.76	36.22	NA	11:30	20.8	1.5	100	17.86	706	5.61	2.31	278.5	0.96	0.02	Clear	ITMW-9-201405
ITMW-9	4	7/30/2014	19.83	36.22	31.2	14:45	19.85	1.0	100	21.09	727	5.33	1.15	261.1	0.64	0.00	Clear	ITMW-9-201407
ITMW-9	4	10/15/2014	19.49	36.22	31.2	12:35	19.5	1.2	100	22.10	590	5.89	0.99	155.5	2.2	0.00	Clear	ITMW-9-201410
IW-72	2	3/6/2014	9.10	26.90	21.9	14:05	9.13	1.4	100	15.80	860	6.06	4.21	690	6.46	0.04	Pink	IW-72-201403
IW-72	2	5/12/2014	8.29	26.90	21.9	16:30	8.41	0.92	100	21.60	929	5.91	4.00	672.4	9.5	0.06	4 on Permanganate Chart	IW-72-201405
IW-72	2	7/29/2014	7.98	26.90	21.9	15:20	7.81	0.8	100	23.87	935	5.52	2.15	745.6	10.4	0.43	Pink - light	IW-72-201407
IW-72	2	10/13/2014	6.99	26.90	24.4	15:40	7.08	1.2	100	20.19	796	6.02	2.08	704.9	4.0	0.02	Pink - light	IW-72-201410
IW-73	2	3/7/2014	9.45	26.84	21.8	17:55	8.51	1.1	100	15.89	1085	5.94	2.50	256.6	14.9	NM	Clear	IW-73-201403
IW-73	2	3/27/2014	8.11	26.84	21.8	18:00	8.13	2	100	16.19	1175	5.75	0.35	166.7	12.7	0.99	Clear	IW-73-201403
IW-73	2	5/14/2014	8.36	29.60	24.6	16:10	8.37	1.3	100	17.16	183	6.37	2.45	185.7	25.70	0.59	Yellow tint	IW-73-201405
IW-73	2	7/29/2014	7.51	29.60	24.6	10:25	7.53	1.5	100	20.66	877	5.89	0.41	-23.7	5.18	3.30	Slight brown tint	IW-73-201407

ENVIRON

TABLE 5-5
SUMMARY OF FINAL WELL GROUNDWATER FIELD PARAMETERS MEASUREMENTS (2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (in)	Date Sampled	Water Level prior to Purging (ft btoc)	Total Depth of Well Casing (ft)	Set Tubing Depth (ft)	Time Sampled	Water Level after Purging (ft btoc)	Purge Volume (Gallons)	Purge Rate (ml/min)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
IW-73	2	10/14/2014	7.06	29.60	27.1	15:35	7.10	1.3	100	21.26	164	6.59	1.91	47.5	23.49	0.14	Slight brown tint	IW-73-201410
IW-74	2	3/7/2014	9.20	27.35	22.4	16:30	9.20	0.9	100	17.02	1059	5.88	1.82	288.1	2.06	NM	Clear	IW-74-201403
IW-74	2	3/28/2014	9.04	27.35	22.4	10:15	9.09	1.25	100	15.80	900	5.80	1.44	246.1	2.06	0.04	Clear	IW-74-201403
IW-74	2	5/14/2014	8.99	27.50	22.5	12:05	9.04	1.2	100	17.66	1229	5.86	1.23	192.3	3.91	0.00	Slight yellow tint	IW-74-201405
IW-74	2	7/29/2014	8.11	27.52	24.0	14:00	8.15	1	100	22.88	1129	5.79	0.46	113.8	0.45	0.00	Clear	IW-74-201407
IW-74	2	10/14/2014	7.72	27.52	25.0	14:05	7.80	2.2	150	21.43	969	5.91	0.77	40.5	0.81	0.00	Clear	IW-74-201410
IW-75^	0.75	5/12/2014	8.73	26.30	30.6	15:55	10.45	1.1	100	16.13	791	5.21	0.27	313	7.21	0.24	Cloudy	NA
IW-75^	0.75	5/12/2014	8.73	26.30	30.6	15:55	10.45	1.1	100	16.13	791	5.21	0.27	313	7.21	0.24	Cloudy	NA
IW-75^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-76	2	3/8/2014	8.64	28.12	23.1	09:15	9.65	2.5	100	15.72	970	5.46	1.39	683.1	1.15	NM	V. Sl. Purple	IW-76-201403
IW-76	2	3/27/2014	9.24	28.12	23.1	09:40	9.18	2.5	100	14.55	992	5.33	1.50	680.4	1.85	0.00	Pink	IW-76-201403
IW-76	2	5/14/2014	9.30	28.17	23.1	11:15	9.31	1.5	100	15.68	1027	5.25	1.81	735.1	4.13	0.00	Pink	IW-76-201405
IW-76	2	7/29/2014	8.42	28.12	23.1	10:10	8.43	1.75	100	18.95	2751	5.19	0.58	727.2	8.38	0.00	Clear	IW-76-201407
IW-76	2	10/15/2014	8.19	28.12	26.6	10:55	8.20	1.7	100	18.75	3023	5.16	0.22	694.4	2.12	0.00	Clear	IW-76-201410
IW-77	2	3/8/2014	10.25	27.62	22.0	10:30	10.27	1.5	100	16.77	741	5.52	1.43	512.1	2.55	NM	Clear	IW-77-201403
IW-77	2	3/26/2014	10.09	27.62	22.6	15:30	10.09	1	100	16.12	827	4.91	1.30	91.2	1.80	NM	Clear	IW-77-201403
IW-77	2	5/14/2014	9.86	27.85	22.0	10:00	9.89	2.3	100	15.76	932	5.51	0.13	85.8	16.70	1.58	Slightly turbud	IW-77-201405
IW-77	2	7/29/2014	8.94	29.85	24.9	17:40	8.98	1.5	100	21.88	3667	6.74	0.60	264.4	19.80	0.00	Slightly yellow	IW-77-201407
IW-77	2	10/15/2014	8.81	29.85	34.4	10:55	8.80	1.1	100	18.80	3918	5.88	0.85	464.2	8.23	0.00	Clear	IW-77-201410
IW-78^	0.75	5/12/2014	10.05	28.81	22.0	17:35	13.74	1.1	100	16.02	992	5.02	0.26	362.2	0.10	0.04	Clear	NA
IW-78^	0.75	5/12/2014	10.05	28.81	22.0	17:35	13.74	1.1	100	16.02	992	5.02	0.26	362.2	0.10	0.04	Clear	NA
IW-78^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-79^	0.75	5/12/2014	10.39	29.65	18.2	11:35	10.78	1.4	100	16.38	774	5.17	0.39	325.2	2.46	0.00	Clear	NA
IW-79^	0.75	5/12/2014	10.39	29.65	18.2	11:35	10.78	1.4	100	16.38	774	5.17	0.39	325.2	2.46	0.00	Clear	NA
IW-79^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-80	2	3/8/2014	10.43	29.48	24.5	12:50	10.71	1.5	100	16.84	581	5.78	1.32	633.9	2.94	NM	Pink	IW-80-201403
IW-80	2	3/26/2014	10.54	29.48	24.5	15:40	10.57	2.5	100	14.82	639	5.99	2.42	551.3	4.14	0.43	Clear	IW-80-201403
IW-80	2	5/13/2014	10.25	29.62	24.0	12:20	10.30	1.14	100	17.01	766	5.91	1.61	581.7	6.02	0.00	Slight pink hue	IW-80-201405
IW-80	2	7/30/2014	9.34	29.62	24.6	9:35	9.41	1.75	100	19.84	4624	6.45	2.19	345.8	13.00	0.00	Slightly opaque brown/yellow	IW-80-201407
IW-80	2	10/14/2014	9.00	29.62	26.0	11:00	9.04	2	100	20.97	6832	6.55	1.50	379.2	13.40	0.01	Cloudy Brown	IW-80-201410
MW-22	4	3/5/2014	12.45	29.19	24.2	16:35	12.54	1	100	14.79	170	5.58	1.09	184.8	0.15	0.00	Clear	MW-22-201403
MW-22	4	5/12/2014	11.75	29.71	24.7	15:20	11.75	3.5	100	22.47	142	2.13	0.56	26.4	0.24	0.05	Clear	MW-22-201405
MW-22	4	7/30/2014	10.89	29.19	24.2	09:05	10.98	1.3	100	22.95	144	5.51	0.92	85.5	0.22	0.00	Clear	MW-22-201407
MW-22	4	10/15/2014	10.50	29.19	24.2	15:00	10.55	1.5	100	22.35	176	5.55	0.23	259	0.39	0.00	Clear	MW-22-201410
MW-23^	4	5/12/2014	12.52	28.06	21.8	12:35	12.89	2	100	18.93	473	6.03	2.16	475.3	0.14	0.05	Clear	NA
MW-23^	4	5/12/2014	12.52	28.06	21.8	12:35	12.89	2.0	100	18.93	473	6.03	2.16	475.3	0.14	0.05	Clear	NA
MW-23^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-24^	4	5/12/2014	12.92	33.61	30.0	10:35	13.72	0.9	100	17.11	1290	4.88	1.45	320.1	0.74	0.13	Clear	NA
MW-24^	4	5/12/2014	12.92	33.61	30.0	10:35	13.72	0.9	100	17.11	1290	4.88	1.45	320.1	0.74	0.13	Clear	NA
MW-24^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-25	4	3/8/2014	14.04	34.59	29.5	16:50	14.13	1.6	100	14.62	1343	4.83	1.36	413.2	0.33	NM	Clear	MW-25-201403
MW-25	4	3/30/2014	13.85	34.59	29.6	15:45	13.94	2	100	20.09	1278	5.03	0.99	339.6	1.63	0.00	Clear	MW-25-201403
MW-25	4	5/15/2014	13.65	35.02	30.0	10:35	13.72	0.9	100	17.11	1290	4.88	1.45	320.1	0.74	0.13	Clear	MW-25-201405
MW-25	4	7/31/2014	12.83	34.11	29.1	11:50	12.93	1.0	100	21.13	5282	5.55	6.79	379.2	3.31	0.11	Clear	MW-25-201407
MW-25	4	10/16/2014	12.44	34.11	29.1	10:55	12.54	2.5	100	21.62	2571	5.26	1.42	539.8	2.81	0.02	Clear	MW-25-201410
MW-26	4	3/5/2014	14.80	35.14	30.0	16:16	14.96	2.5	100	16.90	1025	5.23	1.42	297.4	0.00*	0.00	Clear	MW-26-201403
MW-26	4	5/12/2014	13.96	37.00	NA	15:50	14.46	2.49	200	19.96	847	5.03	11.90	225	0.93	0.00	Clear	MW-26-201405
MW-26	4	7/30/2014	13.63	37.00	29.5	10:56	13.88	1.0	100	20.83	1142	5.19	0.27	168.3	6.15	0.20	Clear	MW-26-201407
MW-26	4	10/14/2014	13.23	37.00	32.0	16:35	13.38	2.6	100	22.13	1225	5.05	0.31	174.4	0.13	0.00	Clear	MW-26-201410

ENVIRON

TABLE 5-5
SUMMARY OF FINAL WELL GROUNDWATER FIELD PARAMETERS MEASUREMENTS (2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (in)	Date Sampled	Water Level prior to Purging (ft btoc)	Total Depth of Well Casing (ft)	Set Tubing Depth (ft)	Time Sampled	Water Level after Purging (ft btoc)	Purge Volume (Gallons)	Purge Rate (ml/min)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
MW-27	2	3/7/2014	12.64	30.08	25.1	8:50	12.66	1.1	100	13.83	103	5.96	5.77	231.1	41.0	0.08	Cloudy	MW-27-210403
MW-27	2	5/13/2014	12.26	30.10	NA	11:05	12.32	0.68	100	19.89	162	5.98	3.43	189.3	27.1	0.01	Clear/light brown	MW-27-201405
MW-27	2	7/30/2014	11.35	30.10	25.1	11:55	11.42	1.0	100	23.00	287	5.11	0.17	313.9	19.4	0.00	Clear	MW-27-201407
MW-27	2	10/14/2014	11.00	30.10	25.1	15:45	11.01	1.0	100	24.56	212	5.46	0.82	135.3	12.4	0.00	Clear	MW-27-201410
MW-28	2	3/6/2014	7.98	27.48	22.5	15:54	8.31	2	100	18.27	369	6.22	0.85	478.3	2.87	0.00	Clear	MW-28-201403
MW-28	2	5/13/2014	7.50	27.43	NA	09:30	7.89	1.75	100	18.13	415	6.02	0.31	213.2	2.82	0.00	--	MW-28-201405
MW-28	2	7/30/2014	6.63	27.43	22.4	13:55	6.86	0.8	100	23.69	359	5.70	0.17	90.4	0.34	0.17	Clear	MW-28-201407
MW-28	2	10/14/2014	6.25	27.43	22.4	14:05	6.39	1.0	100	25.59	374	6.13	0.73	-1.6	1.11	1.00	Clear	MW-28-201410
MW-29	2	3/5/2014	12.25	30.30	25.3	16:00	12.27	1.75	100	15.00	675	4.91	0.69	16.9	0.58	0.06	Clear	MW-29-201403
MW-29	2	5/13/2014	11.71	30.02	NA	13:40	11.83	1	100	18.35	707	4.77	0.41	267.7	1.34	0.00	Clear	MW-29-201405
MW-29	2	7/30/2014	11.52	30.02	25.0	12:00	11.68	1.0	100	20.97	686	4.66	0.49	346.1	3.58	0.09	Clear	MW-29-201407
MW-29	2	10/15/2014	10.90	30.02	25.0	11:55	10.93	3.0	100	21.16	615	5.28	0.94	268	0.33	0.00	Clear	MW-29-201410
MW-30^	4	5/12/2014	16.08	35.49	25.1	09:25	20.23	1.1	100	14.14	1040	4.79	0.63	74.9	0.09	0.00	Clear	NA
MW-30^	4	5/12/2014	16.08	35.49	25.1	09:25	20.23	1.1	100	14.14	1040	4.79	0.63	74.9	0.09	0.00	Clear	NA
MW-30^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-31	0.75	3/6/2014	13.25	26.11	21.0	16:00	15.91	1.5	75	18.38	443	5.55	0.18	220.3	1.42	0.19	Clear	MW-31-201403
MW-31	0.75	5/13/2014	12.89	27.00	22.0	09:45	14.06	1.2	75	15.93	454	5.17	1.80	181.8	4.60	0.03	Clear	MW-31-201405
MW-31	0.75	7/30/2014	11.92	30.02	20.0	08:45	14.61	1.8	95	21.15	454	5.00	0.16	154.9	3.13	1.50	Clear	MW-31-201407
MW-31	0.75	10/14/2014	11.65	27.00	24.5	13:10	13.34	0.9	75	21.56	346	5.28	0.42	207.1	3.48	0.02	Clear	MW-31-201410
MW-32	0.75	3/8/2014	12.89	24.30	19.5	10:05	12.96	1.5	100	17.21	1323	4.76	0.42	300.1	3.44	NM	Clear	MW-32-201403
MW-32	0.75	3/28/2014	12.57	24.30	19.3	10:20	12.65	1.5	100	18.25	1209	4.54	0.34	76.3	5.60	0.02	Clear	MW-32-201403
MW-32	0.75	5/13/2014	12.52	24.10	19.5	15:35	12.61	1.46	100	19.07	1198	4.65	0.61	226.2	8.7	0.30	Clear	MW-32-201405
MW-32	0.75	7/29/2014	11.68	24.30	19.3	13:18	11.78	1.0	100	26.28	1133	4.66	0.41	593	1.29	0.01	Clear	MW-32-201407
MW-32	0.75	10/14/2014	11.30	24.30	19.3	14:30	11.36	1.1	100	22.85	1097	4.86	0.24	456.1	8.81	0.00	Clear	MW-32-201410
MW-33	0.75	3/8/2014	12.43	25.62	20.6	9:10	12.60	1.1	100	16.42	620	5.13	7.90	248.2	19.4	NM	Clear	MW-33-201403
MW-33	0.75	3/28/2014	11.79	25.62	20.6	12:05	12.57	1	100	18.63	685	4.76	0.47	84	7.36	0.00	Sl. Turbid	MW-33-201403
MW-33	0.75	5/14/2014	11.74	NA	NA	14:20	12.48	2	100	17.06	727	4.88	0.44	283.9	2.04	NA	Clear but slightly turbid at start	MW-33-201405
MW-33	0.75	7/29/2014	10.87	25.62	20.6	15:20	11.8	1.8	100	26.10	731	4.97	0.88	147.8	1.77	0.00	Clear	MW-33-201407
MW-33	0.75	10/15/2014	10.66	25.62	23.1	13:25	11.07	1.8	100	22.48	799	5.13	0.85	313.2	14.5	0.00	Light Yellow	MW-33-201410
MW-34	0.75	3/8/2014	11.46	27.97	23.0	13:30	11.49	2	100	17.07	1009	4.86	0.15	264.7	12.37	NM	Clear	MW-34-201403
MW-34	0.75	3/27/2014	10.91	27.97	23.0	11:15	11.08	2	100	16.27	838	4.73	0.29	80.3	15.7	0.51	Clear	MW-34-201403
MW-34	0.75	5/13/2014	11.05	28.32	23.0	15:35	11.14	1.5	100	17.52	840	4.86	0.20	329.6	12.8	0.00	Clear	MW-34-201405
MW-34	0.75	7/29/2014	10.21	28.58	25.0	17:15	11.01	2.0	100	26.66	1549	4.51	1.10	350.9	6.5	0.00	Light Brown	MW-34-201407
MW-34	0.75	10/15/2014	9.95	28.58	25.0	09:15	10.12	1.1	100	18.65	2029	4.67	1.10	513.5	12.1	0.00	Light Brown	MW-34-201410
MW-35R	4	3/8/2014	10.40	31.85	26.9	10:55	11.19	1	100	17.62	1202	5.63	2.64	255.2	0.37	NM	Clear	MW-35R-201403
MW-35R	4	3/26/2014	10.92	31.85	26.9	12:20	10.91	1	100	16.88	1093	5.34	0.44	90.6	6.06	0.04	Clear	MW-35R-201403
MW-35R	4	5/13/2014	10.78	32.35	27.3	17:05	10.29	0.9	100	16.88	1478	6.26	2.35	267.4	3.79	NA	Very slightly turbid	MW-35R-201405
MW-35R	4	7/30/2014	9.38	32.35	27.3	09:35	9.95	1.2	100	20.40	20232	12.11	0.30	163	2.46	0.00	Light Yellow	MW-35R-201407
MW-35R	4	10/14/2014	9.51	32.35	29.9	16:10	9.62	1.7	100	20.95	16092	11.70	0.32	138.4	4.28	0.01	Light Yellow	MW-35R-201410
MW-36	0.75	3/6/2014	10.42	35.58	30.6	15:55	10.45	1.1	100	16.13	791	5.21	0.27	313	7.21	0.24	Cloudy	MW-36-201403
MW-36	0.75	5/13/2014	10.01	25.61	20.5	12:15	10.09	1.4	100	16.91	916	5.06	1.36	197.5	5.68	0.05	Clear	MW-36-201405
MW-36	0.75	7/29/2014	9.24	25.61	20.6	15:20	9.15	1.2	100	22.40	1415	4.85	0.15	168.3	8.87	0.00	Yellow	MW-36-201407
MW-36	0.75	10/14/2014	8.72	25.61	23.1	10:05	8.80	1.6	100	19.77	1461	5.08	0.52	460.8	8.4	0.00	Clear	MW-36-201410
MW-37^	2	5/12/2014	10.20	29.16	22.4	10:15	9.09	1.25	100	15.80	900	5.80	1.44	246.1	2.06	0.04	Clear	NA
MW-37^	2	5/12/2014	10.20	29.16	22.4	10:15	9.09	1.25	100	15.80	900	5.80	1.44	246.1	2.06	0.04	Clear	NA
MW-37^	2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-38	0.75	3/8/2014	12.00	29.80	24.8	13:13	12.03	2	100	18.16	422	6.27	1.40	57.2	2.65	NM	Clear	MW-38-201403
MW-38	0.75	3/30/2014	11.84	29.80	24.8	11:55	11.96	1.5	100	20.02	372	6.24	0.60	83.1	1.50	1.66	Clear	MW-38-201403
MW-38	2	5/14/2014	11.49	29.92	NA	14:35	12.61	1.45	100	17.52	364	5.76	1.52	114.8	3.1	1.28	Clear	MW-38-201405

ENVIRON

TABLE 5-5
SUMMARY OF FINAL WELL GROUNDWATER FIELD PARAMETERS MEASUREMENTS (2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (in)	Date Sampled	Water Level prior to Purging (ft btoc)	Total Depth of Well Casing (ft)	Set Tubing Depth (ft)	Time Sampled	Water Level after Purging (ft btoc)	Purge Volume (Gallons)	Purge Rate (ml/min)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
MW-38	0.75	7/31/2014	10.53	29.94	24.9	09:15	10.62	1.8	100	22.09	348	6.03	0.22	94.5	4.95	0.04	Clear	MW-38-201407
MW-38	0.75	10/16/2014	10.18	29.74	24.8	11:27	10.29	3	100	22.27	1069	6.79	4.21	89.2	28.5	0.08	Clear	MW-38-201410
MW-39	0.75	3/6/2014	14.55	29.42	24.4	17:35	13.74	1.1	100	16.02	992	5.02	0.26	362.2	0.10	0.04	Clear	MW-39-201403
MW-39	0.75	5/13/2014	12.22	NM	NA	10:10	12.79	1.9	75	15.89	1223	4.84	0.29	439.5	1.72	0.14	Clear	MW-39-201405
MW-39	0.75	7/29/2014	11.39	NM	18.0	12:05	12.44	0.9	100	20.70	1211	5.01	0.23	119.5	1.40	0.00	Clear	MW-39-201407
MW-39	0.75	10/13/2014	11.15	NM	18.0	15:31	11.51	1.1	100	20.53	1189	4.86	0.91	251.4	0.25	0.00	Clear	MW-39-201410
MW-40	0.75	3/6/2014	10.68	23.15	18.2	11:35	10.78	1.4	100	16.38	774	5.17	0.39	325.2	2.46	0.00	Clear	MW-40-201403
MW-40	0.75	5/12/2014	9.80	27.95	23.0	16:20	9.9	1.24	100	20.86	807	4.74	1.62	200.3	4.94	0.00	Clear	MW-40-201405
MW-40	0.75	7/29/2014	9.31	28.20	26.0	09:40	9.5	1	100	22.14	806	4.62	0.34	315.2	0.00	0.00	Clear	MW-40-201407
MW-40	0.75	10/13/2014	8.50	28.12	25.7	15:55	8.63	1.5	100	21.53	850	5.19	0.32	45	0.27	0.00	Clear	MW-40-201410
MW-41	0.75	3/7/2014	9.07	28.32	23.0	18:16	9.10	0.5	100	15.58	1300	5.49	0.34	98.2	1.97	NM	Clear	MW-41-201403
MW-41	0.75	3/27/2014	8.80	28.32	23.3	12:15	8.83	1.5	100	14.87	1345	5.40	0.16	175.7	0.83	3.30	Clear	MW-41-201403
MW-41	0.75	5/14/2014	8.94	28.45	23.5	16:55	8.95	1.7	100	16.70	1385	5.33	0.73	158.3	1.87	2.65	Clear	MW-41-201405
MW-41	0.75	7/30/2014	8.07	28.45	23.0	09:00	8.08	1.5	100	19.32	1351	5.41	0.42	113.5	5.00	3.30	Clear	MW-41-201407
MW-41	0.75	10/15/2014	7.80	28.45	23.5	09:10	7.85	1.3	100	17.59	1341	5.57	0.27	48.2	2.31	3.30	Clear	MW-41-201410
MW-46R	2	3/7/2014	3.45	22.00	17.0	15:15	3.49	0.9	100	16.13	848	5.05	0.26	282.4	3.24	NM	Clear	MW-46R-201403
MW-46R	2	3/27/2014	2.88	22.00	17.0	16:05	3.35	1.5	100	16.36	826	5.04	0.13	329	0.09	0.00	Clear	MW-46R-201403
MW-46R	2	5/14/2014	2.98	21.31	19.3	13:55	3.24	2	100	16.63	863	5.17	0.51	159	1.66	0.00	Clear	MW-46R-201405
MW-46R	0.75	7/29/2014	2.10	21.53	19.0	11:35	2.45	1	100	24.02	805	4.73	0.39	220.6	0.00*	0.00	Clear	MW-46R-201407
MW-46R	2	10/16/2014	1.81	21.53	19.0	08:55	2.15	1	100	19.30	795	4.98	0.32	234.8	0.96	0.00	Clear	MW-46R-201410
MW-50	0.75	3/6/2014	7.76	18.05	18.0	10:30	8.39	1	100	15.21	1168	6.84	2.60	80.8	38.6	NM	Clear	MW-50-201403
MW-50	0.75	7/28/2014	4.01	18.10	18.0	14:50	18.01	0.8	50	26.26	1080	6.64	6.67	50.7	6.13	0.40	Clear	MW-50-201407
MW-50	0.75	10/14/2014	3.08	18.10	15.6	11:50	12.05	1	75	19.96	1260	6.44	0.88	31.3	6.86	0.00	Clear	MW-50-201410
MW-50**	0.75	5/13/2014	6.51	17.84	15.3	17:10	16.23	1	50	16.38	1230	6.42	2.10	2.1	2.54	0.46	Clear	MW-50-201405
MW-55	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-56	0.75	3/7/2014	5.46	19.48	14.5	13:54	15.00	0.1	100	15.07	652	5.27	5.63	263.6	10.58	NM	Clear	MW-56-201403
MW-56	0.75	3/27/2014	9.08	19.48	14.5	17:50	14.11	0.5	100	14.31	431	5.19	7.97	335.6	40.2	NM	Sl. Turbid	MW-56-201403
MW-56	0.75	6/11/2014	3.77	19.48	NA	13:36	19.48	0.53	100	19.61	662	4.39	1.00	347.5	0.00*	NM	Clear	MW-56-201405
MW-56	0.75	7/29/2014	2.62	17.28	16.9	14:50	16.47	0.6	50	20.55	751	5.43	1.55	148.7	28.3	0.27	Light brown	MW-56-201407
MW-56	0.75	10/15/2014	1.32	19.28	16.9	15:00	Dry	0.75	40	17.44	342	5.61	3.65	143.4	245	0.52	Clear	MW-56-201410
MW-57	0.75	3/7/2014	3.92	19.19	15.2	14:05	16.05	0.25	100	15.34	1066	5.33	2.30	4.5	26.5	NM	Sl. Haze	MW-57-201403
MW-57	0.75	3/27/2014	4.51	19.19	14.2	18:30	15.88	<0.25	50	14.09	1051	5.36	3.72	324.9	40.1	NM	Sl. Turbid	MW-57-201403
MW-57	0.75	6/11/2014	3.78	19.19	NA	12:21	19.19	1.25	100	21.63	834	5.31	2.90	369.8	0.00	NM	Clear, slight haze	MW-57-201405
MW-57	0.75	7/29/2014	2.42	18.98	16.5	15:40	Dry	0.6	50	23.29	1115	5.43	2.15	192.7	49.4	0.16	Light brown	MW-57-201407
MW-57	0.75	10/15/2014	2.00	18.98	16.5	16:00	Dry	0.5	100	19.84	983	5.44	2.83	186.7	41.3	0.41	Clear	MW-57-201410
MW-58	0.75	3/7/2014	0.54	17.67	12.7	15:15	2.34	1	75	15.17	815	5.51	0.35	-194.2	27.7	NM	White Haze	MW-58-201403
MW-58	0.75	3/27/2014	0.00	17.67	12.7	15:03	0.00	1.5	100	17.27	183	5.88	2.28	86.8	6.29	0.49	Lt. Brown	MW-58-201403
MW-58	0.75	5/12/2014	0.44	17.63	15.1	16:10	2.63	2.5	100	19.70	782	5.25	0.24	31.4	3.25	2.95	Clear	MW-58-201405
MW-58	0.75	7/29/2014	0.00	17.63	15.1	12:25	0.88	1.4	100	20.13	944	4.97	0.12	116.1	1.07	0.66	Clear	MW-58-201407
MW-58	0.75	10/15/2014	1.05	18.97	15.2	12:45	4.4	1.5	100	20.18	913	5	0.25	216.2	1.96	0.67	Clear	MW-58-201410
MW-60	0.75	3/6/2014	7.83	16.55	11.6	13:00	NM	0.25	NM	NM	NM	NM	NM	NM	NM	NM	Clear	MW-60-201403
MW-60	0.75	7/28/2014	3.95	16.47	11.5	17:00	13.68	0.5	50	26.12	1197	7.01	6.32	-5.3	12.6	1.20	Clear	MW-60-201407
MW-60	0.75	10/14/2014	3.11	16.47	14.0	15:35	Dry	1	50	19.80	1280	6.68	1.27	56.7	20.4	0.00	Clear	MW-60-201410
MW-60**	0.75	5/13/2014	6.53	16.47	14.0	16:20	15.32	0.25	100	15.81	1259	6.65	3.64	28.2	8.51	NA	--	MW-60-201405
MW-61	0.75	3/6/2014	8.89	15.54	15.0	14:00	14.12	0.25	100	14.51	596	6.57	2.60	102.4	102	NM	Sl. Cloudy	MW-61-201403
MW-61	0.75	7/28/2014	6.29	15.36	12.9	17:10	Dry	1	75	22.50	637	6.39	1.04	135.5	184	0.18	Light brown	MW-61-201407
MW-61	0.75	10/14/2014	6.34	15.36	12.9	14:15	Dry	1	60	18.77	692	6.32	2.28	141.1	141.1	0.00	Clear	MW-61-201410
MW-61**	0.75	5/13/2014	7.67	15.36	12.9	15:40	12.01	1	100	15.10	639	5.69	4.90	145.1	35.10	0.18	Clear, slightly turbid when filling last bottle	MW-61-201405
MW-62	0.75	3/7/2014	6.34	20.80	15.0	11:15	10.84	2.5	50	15.34	609	5.48	1.81	217	47.8	0.23	Sl. Cloudy	MW-62-201403

ENVIRON

TABLE 5-5
SUMMARY OF FINAL WELL GROUNDWATER FIELD PARAMETERS MEASUREMENTS (2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (in)	Date Sampled	Water Level prior to Purging (ft btoc)	Total Depth of Well Casing (ft)	Set Tubing Depth (ft)	Time Sampled	Water Level after Purging (ft btoc)	Purge Volume (Gallons)	Purge Rate (ml/min)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
MW-62	0.75	5/14/2014	5.39	20.61	18.6	11:50	7.28	1	50	14.68	639	5.54	2.02	163.2	1.5	0.42	Clear	MW-62-201405
MW-62	0.75	7/29/2014	3.99	20.61	15.6	10:05	7.78	1.5	100	19.71	648	5.55	1.40	119.1	11.0	0.00	Clear	MW-62-201407
MW-62	0.75	10/14/2014	4.01	20.61	15.6	11:30	6.86	1.25	75	19.73	635	5.62	1.45	267	6.6	0.00	Clear	MW-62-201410
MW-63	0.75	3/7/2014	5.51	21.23	15.0	13:00	19.84	1.5	50	12.53	594	5.58	0.98	160.8	661	0.14	Clear	MW-63-201403
MW-63	0.75	5/14/2014	4.72	21.04	18.5	9:20	7.90	1	50	13.21	608	5.38	0.54	164	18.70	0.03	Clear	MW-63-201405
MW-63	0.75	7/28/2014	3.19	21.04	16.0	16:45	16.88	1.3	75	22.72	569	5.87	3.34	135.7	131.00	0.00	Light yellow	MW-63-201407
MW-63	0.75	10/14/2014	2.67	21.04	19.0	14:45	19.51	1.25	50	19.51	607	5.63	0.26	292.8	51.00	0.07	Clear	MW-63-201410
MW-65	2	3/8/2014	11.12	32.00	27.0	11:35	11.17	1.5	100	16.89	1489	5.08	0.60	278.9	7.27	NM	Clear	MW-65-201403
MW-65	2	3/26/2014	11.04	32.00	27.0	12:20	11.03	2.5	100	15.98	1399	5.33	0.79	423.5	6.06	0.03	Clear	MW-65-201403
MW-65	2	5/14/2014	10.77	36.71	26.7	9:15	10.79	1.2	100	15.36	1918	4.91	3.47	345.4	6.05	0.02	Clear	MW-65-201405
MW-65	2	7/30/2014	10.09	32.00	29.0	9:30	10.05	1.1	100	20.42	28015	12.63	9.83	302.1	3.70	0.00	Clear	MW-65-201407
MW-65	2	10/14/2014	9.56	32.00	29.5	16:08	9.65	1.6	100	20.18	13176	11.98	6.02	121.9	3.16	0.00	Light Yellow	MW-65-201410
MW-66	2	3/7/2014	5.45	17.64	14.6	11:35	6.36	0.75	80	15.12	799	6.07	2.15	-0.5	1.82	0.03	Clear	MW-66-201403
MW-66	2	5/13/2014	5.31	17.30	15.3	14:50	5.70	2.5	100	17.00	791	5.77	0.98	121.8	24.60	0.00	Clear	MW-66-201405
MW-66	2	7/28/2014	3.70	17.30	14.8	16:40	3.85	0.8	100	24.18	743	5.72	1.11	78.6	10.90	0.00	Clear	MW-66-201407
MW-66	2	10/13/2014	2.73	17.30	14.8	14:55	3.34	2.5	100	22.95	836	6.07	0.68	131.3	6.57	0.00	Clear	MW-66-201410
MW-67	2	3/7/2014	4.62	13.56	11.6	9:25	9.96	1	40	11.85	904	6.69	3.71	28.1	19.3	NM	Sl. Haze	MW-67-201403
MW-67	2	5/13/2014	9.66	13.40	11.4	13:02	11.15	3	100	17.69	910	6.61	3.47	73.3	10.43	0.04	Clear	MW-67-201405
MW-67	2	7/28/2014	1.40	13.40	10.9	14:40	6.92	0.9	100	24.93	832	6.38	3.67	59.8	5.24	0.00	Clear	MW-67-201407
MW-67	2	10/13/2014	8.62	13.40	10.9	15:45	10.70	1.2	40	22.79	852	6.70	3.46	286.6	76.10	1.16	Clear	MW-67-201410
MW-68	2	3/6/2014	7.10	20.55	15.6	8:40	7.29	1	100	12.52	1007	4.96	2.41	284.6	0.43	0.00	Clear	MW-68-201403
MW-68	2	5/14/2014	6.65	20.34	NA	15:35	6.72	1.5	100	14.74	1113	4.81	1.52	196.5	1.85	0.11	Clear	MW-68-201405
MW-68	2	7/29/2014	5.83	20.34	15.3	14:32	5.97	0.95	100	23.14	1164	4.80	0.25	99.7	3.53	0.30	Clear	MW-68-201407
MW-68	2	10/14/2014	5.38	20.34	15.0	14:05	5.46	2.85	100	22.32	1202	5.15	0.24	228	0.23	0.00	Clear	MW-68-201410
MW-70^	0.75	5/12/2014	8.10	27.20	20.6	9:10	12.60	1.1	100	16.42	620	5.13	7.90	248.2	19.4	NM	Clear	NA
MW-70^	0.75	5/12/2014	8.10	27.20	20.6	9:10	12.60	1.1	100	16.42	620	5.13	7.90	248.2	19.4	NM	Clear	NA
MW-70^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-71	2	3/7/2014	8.34	27.18	22.0	16:00	8.36	2	100	16.31	907	5.11	0.88	196.7	5.23	NM	Clear	MW-71-201403
MW-71	2	3/28/2014	8.22	27.18	22.2	12:30	8.26	3	100	14.93	916	5.03	0.81	246.6	1.92	0.39	Clear	MW-71-201403
MW-71	2	5/13/2014	8.19	26.99	22.0	13:30	8.19	2.38	100	16.18	932	4.71	0.82	-116.2	16.90	0.00	Light yellow	MW-71-201405
MW-71	2	7/29/2014	7.38	26.99	21.9	12:40	7.41	1.25	100	20.18	982	5.10	0.44	173.5	15.20	0.32	Clear	MW-71-201407
MW-71	2	10/14/2014	6.88	26.99	22.6	9:50	6.92	1.1	100	19.36	1001	5.28	0.45	107.3	7.82	0.79	Clear	MW-71-201410
RW-69	4	3/7/2014	8.24	28.10	23.0	17:00	8.32	0.5	100	16.72	972	5.32	0.83	207.1	2.13	NM	Clear	RW-69-201403
RW-69	4	3/27/2014	8.04	29.10	24.1	9:20	8.10	1.25	100	15.08	978	5.17	0.60	78.3	0.86	0.13	Clear	RW-69-201403
RW-69	4	5/13/2014	8.15	27.93	22.9	15:35	8.15	0.845	100	16.36	1003	4.89	0.59	-124.5	3.19	0.00	Clear	RW-69-201405
RW-69	4	7/29/2014	7.26	27.93	22.9	15:00	7.31	1.0	100	19.53	1035	5.09	0.36	159.4	7.20	0.98	Clear	RW-69-201407
RW-69	4	10/14/2014	6.83	27.93	23.0	11:35	6.90	2.2	100	20.04	1062	5.20	0.27	102.5	3.16	0.95	Clear	RW-69-201410

Notes:

ft btoc: feet below top of casing
in: inches
ORP: oxidation reduction potential
DO: dissolved oxygen
(°C): degrees Celcius
mV: millivolts
^: Well not sampled
mL/min: milliliters per minute
mg/L: milligrams per liter
NTUs: nephelometric turbidity units
NM: not measured
(µS/cm): microsiemens per centimeter
--: color not noted
*: Turbidity reading initially as negative value in the field. Negative readings are recorded on sample collection field sheets but presented here as 0.00.

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

ENVIRON

TABLE 5-6
NATURAL ATTENUATION WATER QUALITY RESULTS (MW-38)
Whirlpool Facility - Fort Smith, Arkansas

Sample Date	Analyte	Result	Units
3/8/2014	Trichloroethene	1790	µg/L
5/14/2014	Trichloroethene	2040	µg/L
7/31/2014	Trichloroethene	1720	µg/L
10/16/2014	Trichloroethene	6970	µg/L
10/16/2014	Trichloroethene	6750	µg/L
3/8/2014	cis-1,2-Dichloroethene	535	µg/L
5/14/2014	cis-1,2-Dichloroethene	426	µg/L
5/14/2014	cis-1,2-Dichloroethene	428	µg/L
7/31/2014	cis-1,2-Dichloroethene	637	µg/L
10/16/2014	cis-1,2-Dichloroethene	869	µg/L
10/16/2014	cis-1,2-Dichloroethene	781	µg/L
3/8/2014	Vinyl Chloride	68.4	µg/L
5/14/2014	Vinyl Chloride	98.2	µg/L
5/14/2014	Vinyl Chloride	97.9	µg/L
7/31/2014	Vinyl Chloride	197	µg/L
10/16/2014	Vinyl Chloride	370	µg/L
10/16/2014	Vinyl Chloride	321	µg/L
3/30/2014	Dehalocaccoides (DHC)	51200	cells/mL
5/14/2014	Dehalocaccoides (DHC)	50000	cells/mL
7/31/2014	Dehalocaccoides (DHC)	256000	cells/mL
9/10/2014	Dehalocaccoides (DHC)	42600	cells/bead
10/16/2014	Dehalocaccoides (DHC)	26600	cells/mL
3/30/2014	BAV1 Vinyl Chloride Reductase	36900	cells/mL
5/14/2014	BAV1 Vinyl Chloride Reductase	18800	cells/mL
7/31/2014	BAV1 Vinyl Chloride Reductase	117000	cells/mL
9/10/2014	BAV1 Vinyl Chloride Reductase	25000	cells/bead
10/16/2014	BAV1 Vinyl Chloride Reductase	18000	cells/mL
3/30/2014	Organic Carbon (total)	1.3	mg/L
5/14/2014	Organic Carbon (total)	1.3	mg/L
7/31/2014	Organic Carbon (total)	2.0	mg/L
10/16/2014	Organic Carbon (total)	2.4	mg/L
3/30/2014	Methane	8.6	µg/L
5/14/2014	Methane	8.1	µg/L
7/31/2014	Methane	24	µg/L
10/16/2014	Methane	24	µg/L
3/30/2014	Ethene	6.8	µg/L
5/14/2014	Ethene	7.1	µg/L
7/31/2014	Ethene	46	µg/L
10/16/2014	Ethene	42	µg/L
3/8/2014	pH	6.27	SU
3/30/2014	pH	6.2	SU
5/14/2014	pH	5.8	SU
5/14/2014	pH	5.76	SU
3/8/2014	Dissolved oxygen (total)	1.4	mg/L
5/14/2014	Dissolved oxygen (total)	1.52	mg/L
7/31/2014	Dissolved oxygen (total)	0.22	mg/L
3/8/2014	Oxidation reduction potential	57.2	mV
5/14/2014	Oxidation reduction potential	114.8	mV
7/31/2014	Oxidation reduction potential	94.5	mV
3/30/2014	Sulfate	21.7	mg/L
5/14/2014	Sulfate	21.0	mg/L
7/31/2014	Sulfate	21.3	mg/L
10/16/2014	Sulfate	135	mg/L

TABLE 6-1A
SUMMARY OF CERTAIN RADD MONITORING WELL WATER ANALYTICAL RESULTS (OCTOBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	ITMW-11	ITMW-12	ITMW-15	ITMW-17	ITMW-18	ITMW-19	MW-38
ENVIRON Sample ID		ITMW-11-201410	ITMW-12-201410	ITMW-15-201410	ITMW-17-201410	ITMW-18-201410	ITMW-19-201410	MW-38-201410
Lab Sample ID(s)		137010022, 041LJ046, 137090023, 60180441023	137010018, 041LJ029, 137090015, 60180441015	137010019, 041LJ048, 137090025, 60180635001	137010021, 041LJ052, 137090029, 60180635005	137010017, 041LJ031, 137090017, 60180441017	137010020, 041LJ051, 137090028, 60180635004	137010023, 041LJ053, 137090030, 60180635006
Sample Date		10/15/2014	10/15/2014	10/16/2014	10/16/2014	10/15/2014	10/16/2014	10/16/2014
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Volatile Organic Compounds								
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	11.8 (5.0)	U (5.0)	U (5.0)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.51 J (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7.0	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	0.52 J (0.50)	0.54 J (0.50)	U (0.50)	0.81 J (0.50)	2.2 J (0.50)	3.7 J (0.50)	2.3 J (0.50)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	5.0 J (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 J (0.50)	U (0.50)	2.6 J (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 J (0.50)	U (0.50)	0.98 J (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	0.71 J (0.50)	2.0 J (0.50)	3.4 J (0.50)	5.8 (0.50)	U (0.50)	19.9 (0.50)	10.2 (0.50)
cis-1,2-Dichloroethene	70	70.4 (0.50)	188 (12.5)	63.0 (0.50)	70.5 (0.50)	68.5 (0.50)	76.7 (0.50)	781 (50.0)
trans-1,2-Dichloroethene	100	0.54 J (0.50)	1.0 J (0.50)	U (0.50)	U (0.50)	13.9 (0.50)	1.1 J (0.50)	4.1 J (0.50)
Methylene Chloride	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.59 J (0.50)	U (0.50)	21.8 (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.76 J (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	0.94 J (0.50)	1.3 J (0.50)	U (0.50)	0.82 J (0.50)	1.5 J (0.50)	2.7 J (0.50)	2.5 J (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.0 J (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.58 J (0.50)	0.92 J (0.50)	0.60 J (0.50)
Trichloroethene	5.0	2050 (50.0)	2570 (12.5)	1490 (5.0)	3510 (25.0)	3540 (50.0)	12800 (50.0)	6750 (50.0)
Vinyl Chloride	2.0	3.5 (0.50)	3.5 (0.50)	2.0 (0.50)	3.2 (0.50)	U (0.50)	1.9 J (0.50)	321 (50.0)

Notes:

1 All concentrations are presented in ug/L.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.

Abbreviations:

U Not Detected.
J Estimated Concentration.
( ) Method Detection Limit.
RADD: Remedial Action Decision Document
ADEQ: Arkansas Department of Environmental Quality
µg/L: Micrograms per Liter

ENVIRON

TABLE 6-1B
SUMMARY OF ISCO MONITORING WELL WATER ANALYTICAL RESULTS (OCTOBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	IW-132	IW-135	IW-141	IW-143	IW-147	IW-152	IW-153	IW-155
ENVIRON Sample ID		IW-132-20141023	IW-135-20141023	IW-141-20141023	IW-143-20141023	IW-147-20141023	IW-152-20141022	IW-153-20141023	IW-155-20141023
Lab Sample ID		60181134004	60181134008	60181119001	60181134002	60181134001	60181035002	60181134006	60181134005
Sample Date		10/23/2014	10/23/2014	10/23/2014	10/23/2014	10/23/2014	10/22/2014	10/23/2014	10/23/2014
Volatile Organic Compounds									
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	51.3 (5.0)	U (5.0)	U (5.0)	U (5.0)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	0.73 J (0.50)	0.65 J (0.50)	U (0.50)	U (0.50)	U (0.50)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	10.2 (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	3.4 J (0.50)	U (0.50)	2.3 J (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	1.3 J (0.50)	1.8 J (0.50)	11.3 (0.50)	1.8 J (0.50)	26.8 (0.50)	5.1 (0.50)	U (0.50)	3.5 J (0.50)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	55.0 (0.50)	2.6 J (0.50)	57.3 (0.50)	5.5 (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	2.4 J (0.50)	U (0.50)	4.5 (0.50)	3.8 (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	0.60 J (0.50)	4.8 J (0.50)	143 (0.50)	10.3 (0.50)	U (1000)	169 J (100)	1.0 J (0.50)	22.3 (0.50)
cis-1,2-Dichloroethene	70	3.5 J (0.50)	43.3 (0.50)	U (1000)	44.8 (0.50)	1640 J (1000)	224 J (100)	85.3 (0.50)	36.4 (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	1.6 J (0.50)	0.71 J (0.50)	U (1000)	1.9 J (0.50)	0.66 J (0.50)	1.8 J (0.50)
Ethyl Benzene	700	U (0.50)	U (0.50)	0.84 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5.0	U (0.50)	0.58 J (0.50)	4.0 J (0.50)	1.4 J (0.50)	8.7 (0.50)	12.2 (0.50)	U (0.50)	0.80 J (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	0.57 J (0.50)	U (0.50)	37.3 (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	U (0.50)	0.71 J (0.50)	55.7 (0.50)	2.5 J (0.50)	57.8 (0.50)	6.1 (0.50)	U (0.50)	4.0 J (0.50)
Toluene	1000	U (0.50)	U (0.50)	12.4 (0.50)	U (0.50)	6.9 (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	139 (0.50)	U (0.50)	U (1000)	U (0.50)	U (0.50)	18.8 (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	5.5 (0.50)	0.57 J (0.50)	5.8 (0.50)	1.4 J (0.50)	U (0.50)	0.57 J (0.50)
Trichloroethene	5.0	714 (10.0)	3840 (50.0)	368000 (1000)	13100 (100)	199000 (1000)	17600 (100)	293 (2.5)	14600 (100)
Vinyl Chloride	2.0	U (0.50)	2.0 (0.50)	82.6 (0.50)	2.5 (0.50)	U (1000)	8.2 (0.50)	12.3 (0.50)	5.8 (0.50)
Xylenes (total)	10000	U (1.5)	U (1.5)	3.9 J (1.5)	U (1.5)	U (1.5)	U (1.5)	U (1.5)	U (1.5)

Notes:

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

2 Only compounds with at least one detection are shown.

3 Concentrations that exceed the RALs per ADEQ RADD Issued 2013 are double underlined.

U Not Detected.

J Estimated Concentration.

( ) Method Detection Limit.

RADD: Remedial Action Decision Document

ADEQ: Arkansas Department of Environmental Quality

ENVIRON

TABLE 6-1B
SUMMARY OF ISCO MONITORING WELL WATER ANALYTICAL RESULTS (OCTOBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	IW-157	IW-169	MW-25	MW-92	MW-93	MW-94	MW-95	MW-172
ENVIRON Sample ID		IW-157-20141023	IW-169-20141022	MW-25-20141024	MW-92-20141022	MW-93-20141022	MW-94-20141022	MW-95-20141022	MW-172-20141022
Lab Sample ID		60181134003	60181035001	60181245001	60181032004	60181032003	60181032005	60181032002	60181032001
Sample Date		10/23/2014	10/22/2014	10/24/2014	10/22/2014	10/22/2014	10/22/2014	10/22/2014	10/22/2014
Volatile Organic Compounds									
Acetone	12000	U (5.0)	U (5.0)	18.0 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Bromodichloromethane	80	0.55 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	0.77 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.52 J (0.50)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Tetrachloride	5	1.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	9.2 (0.50)	U (0.50)	3.3 J (0.50)	U (0.50)	5.1 (0.50)	4.2 J (0.50)	8.2 (0.50)	1.7 J (0.50)
Chloromethane	190	U (0.50)	U (0.50)	1.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.52 J (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	13.7 (0.50)	U (0.50)	6.4 (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	1.1 J (0.50)	U (0.50)	2.5 (0.50)	U (0.50)	U (0.50)	2.8 (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	87.7 (0.50)	1.1 J (0.50)	U (0.50)	4.6 J (0.50)	32.6 (0.50)	131 (0.50)	38.6 (0.50)	3.5 J (0.50)
cis-1,2-Dichloroethene	70	712 J (500)	1.7 J (0.50)	2650 J (500)	16.0 (0.50)	145 (0.50)	309 J (250)	151 (0.50)	21.4 (0.50)
trans-1,2-Dichloroethene	100	19.3 (0.50)	U (0.50)	704 J (500)	U (0.50)	1.4 J (0.50)	1.8 J (0.50)	1.0 J (0.50)	U (0.50)
Ethyl Benzene	700	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5.0	3.4 J (0.50)	U (0.50)	1.8 J (0.50)	U (0.50)	3.3 J (0.50)	0.59 J (0.50)	3.5 J (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	1.7 (0.50)	U (0.50)	48.4 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	35.3 (0.50)	U (0.50)	13.5 (0.50)	U (0.50)	6.6 (0.50)	1.6 J (0.50)	6.9 (0.50)	0.59 J (0.50)
Toluene	1000	0.70 J (0.50)	U (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	60.8 (0.50)	U (0.50)	12.9 (0.50)	0.83 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	2.9 J (0.50)	U (0.50)	1.1 J (0.50)	U (0.50)	1.5 J (0.50)	0.60 J (0.50)	2.0 J (0.50)	U (0.50)
Trichloroethene	5.0	74200 (500)	163 (2.5)	59800 (500)	2160 (12.5)	18200 (100)	11100 (250)	22300 (100)	3010 (12.5)
Vinyl Chloride	2.0	195 (0.50)	U (0.50)	0.66 J (0.50)	7.2 (0.50)	5.0 (0.50)	2.5 (0.50)	25.7 (0.50)	2.4 (0.50)
Xylenes (total)	10000	U (1.5)	U (1.5)	U (1.5)	U (1.5)	U (1.5)	U (1.5)	U (1.5)	U (1.5)

Notes:

1 All concentrations are presented in µg/L (ppb).
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs per ADEQ RADD Issued 2013 are double underlined.

U Not Detected.
J Estimated Concentration.
( ) Method Detection Limit.
RADD: Remedial Action Decision Document
ADEQ: Arkansas Department of Environmental Quality

ENVIRON

TABLE 6-1C
SUMMARY OF ISCO MONITORING WELL WATER ANALYTICAL RESULTS (DECEMBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	ITMW-11	ITMW-12	ITMW-15	ITMW-17	ITMW-18	ITMW-19	IW-127
ENVIRON Sample ID		ITMW-11-20141204	ITMW-12-20141204	ITMW-15-20141205	ITMW-17-20141205	ITMW-18-20141204	ITMW-19-20141205	IW-127-20141204
Lab Sample ID		60183996007	60183996015	60183996008	60183996010	60183996004	60183996016	60183996005
Sample Method								
Sample Date		12/04/2014	12/04/2014	12/05/2014	12/05/2014	12/04/2014	12/05/2014	12/04/2014
Volatile Organic Compounds								
Acetone	12000	U (5.0)	8.4 J (5.0)	81.3 (5.0)	6.1 J (5.0)	17.9 (5.0)	U (5.0)	22.2 (5.0)
Benzene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7.0	U (2.5)	6.5 J (2.5)	14.2 (2.5)	U (2.5)	4.5 J (2.5)	U (2.5)	11.8 (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	0.65 J (0.50)	0.72 J (0.50)	U (0.50)	1.4 J (0.50)	2.7 J (0.50)	U (0.50)	0.67 J (0.50)
Chloromethane	190	U (0.50)	2.2 J (0.50)	15.8 (0.50)	U (0.50)	3.1 J (0.50)	U (0.50)	2.4 J (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.2 J (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	U (0.50)	U (0.50)	U (0.50)	7.3 (0.50)	1.2 J (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	55.0 (0.50)	51.1 (0.50)	U (0.50)	210 J (25.0)	74.3 (0.50)	U (0.50)	7.2 (0.50)
trans-1,2-Dichloroethene	100	1.5 J (0.50)	6.8 (0.50)	U (0.50)	25.9 (0.50)	13.3 (0.50)	U (0.50)	1.1 J (0.50)
Methylene Chloride	5.0	1.2 J (0.50)	0.95 J (0.50)	U (0.50)	0.70 J (0.50)	0.52 J (0.50)	U (0.50)	0.91 J (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.96 J (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	0.85 J (0.50)	0.60 J (0.50)	U (0.50)	1.5 J (0.50)	1.8 J (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	0.73 J (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.70 J (0.50)	U (0.50)	U (0.50)
Trichloroethene	5.0	1530 (25.0)	468 (12.5)	63.0 (0.50)	4630 (25.0)	3690 (50.0)	33.5 (0.50)	182 (0.50)
Vinyl Chloride	2.0	6.4 (0.50)	0.88 J (0.50)	U (0.50)	7.7 (0.50)	U (0.50)	U (0.50)	U (0.50)

Notes:

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

2 Only compounds with at least one detection are shown.

3 Concentrations that exceed the RALs per ADEQ RADD Issued 2013 are double underlined.

Abbreviations:

U Not Detected.

J Estimated Concentration.

E Exceeds Calibration Range.

( ) Method Detection Limit.

RADD: Remedial Action Decision Document

ADEQ: Arkansas Department of Environmental Quality

ENVIRON

TABLE 6-1C
SUMMARY OF ISCO MONITORING WELL WATER ANALYTICAL RESULTS (DECEMBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	IW-141	IW-147	IW-152	IW-153	IW-157	MW-25	MW-38
ENVIRON Sample ID		IW-141-20141205	IW-147-20141205	IW-152-20141204	IW-153-20141204	IW-157-20141205	MW-25-20141205	MW-38-20141204
Lab Sample ID		60183996021	60183996011	60183996022	60183996002	60183996017	60183996018	60183996006
Sample Method								
Sample Date		12/05/2014	12/05/2014	12/04/2014	12/04/2014	12/05/2014	12/05/2014	12/04/2014
Volatile Organic Compounds								
Acetone	12000	83.3 (5.0)	141 (5.0)	U (5.0)	28.8 (5.0)	53.4 (5.0)	170 (5.0)	U (5.0)
Benzene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.0 J (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7.0	U (2.5)	2.6 J (2.5)	U (2.5)	3.1 J (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	11.9 (5.0)	19.0 (5.0)	U (5.0)	U (5.0)	183 (5.0)	25.6 (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	18.8 (0.50)	71.5 (0.50)	U (0.50)	U (0.50)	10.3 (0.50)	4.0 J (0.50)	0.58 J (0.50)
Chloromethane	190	6.7 J (0.50)	4.1 J (0.50)	U (0.50)	6.7 J (0.50)	0.62 J (0.50)	0.95 J (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	64.3 (0.50)	U (0.50)	U (0.50)	U (0.50)	2.6 J (0.50)	1.2 J (0.50)
1,1-Dichloroethane	2.4	1.7 J (0.50)	4.4 (0.50)	U (0.50)	U (0.50)	1.1 J (0.50)	1.5 J (0.50)	U (0.50)
1,1-Dichloroethene	7.0	6.1 (0.50)	62.8 (0.50)	U (0.50)	U (0.50)	27.4 (0.50)	U (0.50)	14.7 (0.50)
cis-1,2-Dichloroethene	70	232 E (0.50)	1420 J (1000)	U (0.50)	U (0.50)	391 E (0.50)	31.5 (0.50)	697 (50.0)
trans-1,2-Dichloroethene	100	8.1 (0.50)	80.1 (0.50)	U (0.50)	U (0.50)	17.1 (0.50)	5.3 (0.50)	9.7 (0.50)
Methylene Chloride	5.0	51.5 (0.50)	39.8 (0.50)	U (0.50)	U (0.50)	8.0 (0.50)	2.7 J (0.50)	1.1 J (0.50)
1,1,2,2-Tetrachloroethane	0.066	8.2 (0.50)	26.8 (0.50)	U (0.50)	U (0.50)	3.1 (0.50)	50.2 (0.50)	U (0.50)
Tetrachloroethene	5.0	22.7 (0.50)	62.7 (0.50)	U (0.50)	U (0.50)	10.6 (0.50)	2.6 J (0.50)	1.1 J (0.50)
Toluene	1000	0.61 J (0.50)	2.1 J (0.50)	U (0.50)	U (0.50)	0.58 J (0.50)	U (0.50)	0.84 J (0.50)
1,1,1-Trichloroethane	200	101 (0.50)	359 E (0.50)	U (0.50)	U (0.50)	48.5 (0.50)	4.7 J (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	0.60 J (0.50)	0.55 J (0.50)	U (0.50)	U (0.50)	U (0.50)	0.87 J (0.50)	U (0.50)
Trichloroethene	5.0	46300 (1000)	91600 (1000)	U (0.50)	1.6 J (0.50)	31700 (500)	2620 J (500)	3190 (50.0)
Vinyl Chloride	2.0	31.0 (0.50)	176 (0.50)	U (0.50)	U (0.50)	66.8 (0.50)	2.1 (0.50)	193 (0.50)

Notes:

1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs per ADEQ RADD Issued 2013 are double underlined.

Abbreviations:

U Not Detected.
J Estimated Concentration.
E Exceeds Calibration Range.
( ) Method Detection Limit.
RADD: Remedial Action Decision Document
ADEQ: Arkansas Department of Environmental Quality

ENVIRON

TABLE 6-1C
SUMMARY OF ISCO MONITORING WELL WATER ANALYTICAL RESULTS (DECEMBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	MW-85	MW-86	MW-92	MW-93	MW-94	MW-95	MW-172
ENVIRON Sample ID		MW-85-20141205	MW-86-20141205	MW-92-20141204	MW-93-20141204	MW-94-20141204	MW-95-20141204	MW-172-20141205
Lab Sample ID		60183996019	60183996012	60183996001	60183996003	60183996013	60183996014	60183996009
Sample Method								
Sample Date		12/05/2014	12/05/2014	12/04/2014	12/04/2014	12/04/2014	12/04/2014	12/05/2014
Volatile Organic Compounds								
Acetone	12000	55.5 (5.0)	399 (5.0)	6.0 J (5.0)	U (5.0)	U (5.0)	U (5.0)	22.2 (5.0)
Benzene	5.0	0.62 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	0.70 J (0.50)	0.63 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7.0	18.3 (2.5)	4.8 J (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	12.7 (2.5)
2-Butanone	4900	10.8 (5.0)	143 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	14.4 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	1.2 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	31.8 (0.50)	4060 J (1000)	0.62 J (0.50)	7.7 (0.50)	3.3 J (0.50)	7.5 (0.50)	4.0 J (0.50)
Chloromethane	190	11.2 (0.50)	17.2 (0.50)	0.68 J (0.50)	U (0.50)	U (0.50)	U (0.50)	1.8 J (0.50)
Dibromochloromethane	80	22.5 (0.50)	45.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.9 J (0.50)
1,1-Dichloroethane	2.4	2.0 J (0.50)	44.2 (0.50)	U (0.50)	U (0.50)	2.9 (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	6.5 (0.50)	295 E (0.50)	3.1 J (0.50)	22.6 (0.50)	130 (0.50)	38.7 (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	280 (25.0)	290 E (0.50)	23.4 (0.50)	85.7 (0.50)	250 J (125)	159 (0.50)	15.6 (0.50)
trans-1,2-Dichloroethene	100	51.6 (0.50)	47.7 (0.50)	1.8 J (0.50)	1.2 J (0.50)	2.3 J (0.50)	1.5 J (0.50)	2.6 J (0.50)
Methylene Chloride	5.0	146 (0.50)	50.5 (0.50)	U (0.50)	3.2 J (0.50)	0.63 J (0.50)	3.8 J (0.50)	1.7 J (0.50)
1,1,2,2-Tetrachloroethane	0.066	109 (0.50)	1710 J (1000)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.3 (0.50)
Tetrachloroethene	5.0	22.0 (0.50)	44.0 (0.50)	0.80 J (0.50)	3.5 J (0.50)	2.7 J (0.50)	6.3 (0.50)	1.7 J (0.50)
Toluene	1000	U (0.50)	10.4 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	250 J (25.0)	1310 J (1000)	3.6 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	2.3 J (0.50)	10.7 (0.50)	U (0.50)	1.2 J (0.50)	0.67 J (0.50)	2.0 J (0.50)	0.69 J (0.50)
Trichloroethene	5.0	27700 (250)	169000 (1000)	2200 (12.5)	14600 (100)	9570 (125)	20900 (100)	1810 (12.5)
Vinyl Chloride	2.0	7.7 (0.50)	24.7 (0.50)	10.3 (0.50)	2.5 (0.50)	3.0 (0.50)	29.9 (0.50)	1.3 J (0.50)

Notes:

1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs per ADEQ RADD Issued 2013 are double underlined.

Abbreviations:

U Not Detected.
J Estimated Concentration.
E Exceeds Calibration Range.
( ) Method Detection Limit.
RADD: Remedial Action Decision Document
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ENVIRON

TABLE 6-2
SUMMARY OF WATER QUALITY PARAMETERS AND PERSULFATE CONCENTRATIONS (AREA 1)
MAY - NOVEMBER 2014 (THIRD 2014 INJECTION EVENT)
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Groundwater Elevation (feet)	Temperature (°C)	Conductivity (uS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)	H2O2 (µg/L)	
MW-24	10/23/2014 10:25	12.19	464.09	22.27	2986	0.18	4.1	441.6	1400	--	
MW-24	11/3/2014 13:59	11.4	464.88	22.03	1383	2.39	5.46	336.5	70	--	
MW-24	11/4/2014 12:51	11.4	464.88	20.58	3147	2.27	3.7	485.6	2800	--	*
MW-24	12/3/2014 0:00	12.31	463.97								
MW-25	5/15/2014 10:30	13.65	463.11	17.11	1290	1.45	4.88	320.1		--	
MW-25	6/6/2014 8:18	12.57	464.19	19.67	31946	26.7	12.06	267.9	35000	--	
MW-25	6/11/2014 7:01	12.58	464.18	18.64	17429	20.47	6.73	298.6	14000	--	
MW-25	7/9/2014 8:00	12.75	464.01	20.69	7014	8.04	5.87	188.7	14700	--	
MW-25	9/11/2014 19:49	12.89	463.87	21.96	3302	4.71	5.53	339	1680	--	
MW-25	10/16/2014 10:08	12.44	464.32	21.62	2571	1.42	5.26	539.8	2100	--	
MW-25	10/24/2014 10:45	12.56	464.2	21.48	1759	1.04	5.09	262.3		--	
MW-25	10/30/2014 16:49	11.71	465.05	22.49	2370	27.25	2.93	495.1		1000	
MW-25	11/2/2014 8:17	12.01	464.75	18.45	3145	29.29	2.51	538.9	1900	1000	
MW-25	11/3/2014 14:43	9.64	467.12	20.91	5157	21.32	6.33	272.6	2100	1000	
MW-25	11/4/2014 13:30	11.85	464.91	19.91	5311	19.49	5.96	296.9	5600	1000	*
MW-25	12/5/2014 10:13	12.75	464.01	16.24	3999	83.89	2.34	529.3	210	---	
MW-37	11/4/2014 14:13	8.57	464.86	21.32	762	1	7	176.2	0	--	*
MW-38	10/16/2014 11:25	10.18	464.26	22.27	1069	4.21	6.79	89.2		--	
MW-38	11/1/2014 16:20	8.27	466.17	22.58	416	1.14	7.51	5.7	3.5	--	
MW-38	11/3/2014 13:40	8.59	465.85	22.83	460	1.07	7.18	75.3	0	--	
MW-38	11/4/2014 12:32	8.61	465.83	21.77	493	1.09	7.19	261.2	49	--	*
MW-38	12/4/2014 16:03	10.38	464.06	18.86	872	0.32	6.6	210.1	140	--	
MW-85	5/29/2014 16:38	10.35	464.06	20.1	1074	0.11	5.05	-147.3		--	
MW-85	6/6/2014 8:25	9.97	464.44	19.73	1979	15.71	4.64	296.7	1400	--	
MW-85	6/11/2014 7:10	10.11	464.3	18.85	1727	13.78	4.76	304.1	1260	--	
MW-85	7/8/2014 17:40	10.25	464.16	22.79	1378	4.38	4.71	-49	630	--	
MW-85	9/11/2014 18:50	10.58	463.83	21.64	1432	3.1	11.81	78	420	--	
MW-85	10/30/2014 16:52	9.39	465.02	20.95	1327	17.87	4.89	424		0	
MW-85	11/1/2014 8:46	9.89	464.52	19.28	1380	20.55	4.99	275.5		0.2	
MW-85	11/2/2014 7:59	9.67	464.74	17.8	1584	10.75	5.1	303.6	140	0.8	
MW-85	11/3/2014 14:52	8.82	465.59	21.27	1391	14.7	5.37	320	210	3	
MW-85	11/4/2014 13:32	9.58	464.83	20.01	1550	14.26	5.06	316.2	560	1	*
MW-85	12/5/2014 11:21	10.39	464.02	19.11	12651	10.21	5.84	300.4	14000	--	
MW-86	5/29/2014 17:33	9.17	464.02	21.81	1578	0.28	5.55	-182.7		--	
MW-86	6/6/2014 8:12	4.93	468.26	20.18	43076	24.27	2.52	605.2	35000	--	
MW-86	6/11/2014 6:53	8.29	464.9	19.15	14758	22.36	2.41	524	4200	--	
MW-86	7/8/2014 17:25	9.24	463.95	26.75	29373	0.52	2.42	654	28000	--	
MW-86	9/11/2014 20:15	11.5	461.69	22.19	12862	5.79	11.07	594.6	2800	--	
MW-86	10/30/2014 16:45	8.24	464.95	22.04	4223	30.51	5.24	291.6		0	
MW-86	11/1/2014 8:56	8.44	464.75	20.06	5177	30.67	4.44	365		2	
MW-86	11/2/2014 8:11	8.49	464.7	17.56	5746	25.96	3.99	445.7	1900	3	
MW-86	11/3/2014 14:48	7.26	465.93	21.75	6160	23.37	6.03	276.9	4200	1	
MW-86	11/4/2014 13:37	8.47	464.72	20.9	7157	20.54	7.73	268.8	6300	9	
MW-86	12/5/2014 11:56	9.22	463.97	18.93	13462	10.43	5.92	289.1	7000	--	
MW-92	10/30/2014 16:27	8.61	465.13	21.04	1455	22.53	6.33	212.5		0	
MW-92	11/1/2014 8:40	9.08	464.66	19.38	1358	15.21	5.41	273.7		0	
MW-92	11/3/2014 14:08	8.51	465.23	20.65	3375	12.53	11.2	175.4	2100	0	
MW-92	11/4/2014 12:58	8.81	464.93	20.23	3347	8.99	11.08	239.6	4200	--	*
MW-92	12/4/2014 8:57	9.71	464.03	14.68	1896	1.33	6.17	215.5	420	--	
MW-93	10/22/2014 2:53	13.78	464.03	21.3	1099	1.16	5.21	254.5		--	
MW-93	11/3/2014 14:14	12.85	464.96	20.77	935	1.89	6.96	252.5	0	--	
MW-93	11/4/2014 13:07	13.02	464.79	20.11	933	1.62	6.17	291.6	2.1	--	*
MW-93	12/4/2014 11:57	13.86	463.95	19.04	831	0.45	5.65	257.1	420	--	
MW-94	10/22/2014 14:15	14.03	463.83	21.23	583	0.75	5.8	133.9	0	--	
MW-94	11/3/2014 14:14	13.19	464.67	21.14	495	0.88	7.29	212.7	0	--	
MW-94	11/4/2014 13:14	13.27	464.59	20.01	498	1.1	6.22	270.3	0	--	*
MW-94	12/4/2014 11:31	14.14	463.72	18.85	578	6.65	5.83	83.5	0	--	
MW-95	10/22/2014 15:17	13.73	463.9	22.09	1081	1.84	5.78	156.5	0	--	
MW-95	11/3/2014 14:35	12.82	464.81	21.32	950	1.4	6.34	244.8	0	--	
MW-95	11/4/2014 13:20	12.97	464.66	20.81	946	1.36	5.82	272.5	0	--	*
MW-95	12/4/2014 13:45	13.77	463.86	20.53	1098	3.83	5.71	102.7	0	--	

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TABLE 6-2
SUMMARY OF WATER QUALITY PARAMETERS AND PERSULFATE CONCENTRATIONS (AREA 1)
MAY - NOVEMBER 2014 (THIRD 2014 INJECTION EVENT)
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Groundwater Elevation (feet)	Temperature (°C)	Conductivity (uS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)	H2O2 (µg/L)	
MW-172	10/22/2014 16:26	8.75	464.19	23.7	1189	0.21	5.28	274.7	0	--	
MW-172	10/30/2014 15:03	7.82	465.12	22.46	963	15.7	5.6	341.6		0	
MW-172	11/1/2014 9:02	8.34	464.6	20.33	1012	16.61	5.31	366.8		0.4	
MW-172	11/1/2014 15:55	7.44	465.5	22.4	1018	12.07	7.28	239.4	7	--	
MW-172	11/3/2014 13:28	8.04	464.9	17.5	600	9.02	11.15	147	420	4	
MW-172	11/4/2014 12:15	8.07	464.87	21.63	3237	6.27	5.95	423.3	6300	11	*
MW-172	12/5/2014 8:24	8.75	464.19	17.85	2968	1.76	5.39	337.5	6300	--	
ITMW-11	10/15/2014 15:11	9.69	464.25	24.52	236	0.27	5.83	121		--	
ITMW-11	11/1/2014 16:25	8.8	465.14	21.97	521	1.84	7.38	121.8	630	--	
ITMW-11	11/3/2014 13:48	9.09	464.85	21.72	3766	1.07	6.45	311.3	12600	--	
ITMW-11	11/4/2014 12:37	9.07	464.87	20.71	5175	5.33	6.2	374.5	16800	--	*
ITMW-11	12/4/2014 16:44	9.86	464.08	17.54	358	0.31	6.17	262	560	--	
ITMW-12	10/15/2014 16:36	12.56	464.3	23.01	247	0.83	5.99	116.3	0	--	
ITMW-12	11/1/2014 15:37	11.68	465.18	23.05	737	2.85	6.74	199.7	210	--	
ITMW-12	11/3/2014 1:07	11.95	464.91	21.25	890	3.98	6.54	252		560	
ITMW-12	11/4/2014 11:54	11.93	464.93	22.01	582	72.2	6.15	258	280	--	*
ITMW-12	12/4/2014 14:50	12.76	464.1	19.17	2776	3.09	8.63	148.3	1400	--	
ITMW-15	10/16/2014 8:25	10.09	464.22	18.23	840	2.99	7.04	138.2		--	
ITMW-15	11/1/2014 16:15	9.14	465.17	22.13	1301	4.74	7.24	231.2	1680	--	
ITMW-15	11/3/2014 13:37	9.52	464.79	22.51	7468	2.73	6.68	355.8	14700	--	
ITMW-15	11/4/2014 12:29	9.51	464.8	23.15	3617	6.48	6.8	343.3	10500	--	*
ITMW-15	12/5/2014 7:35	10.17	464.14	19.29	18628	7.97	6.37	400	3200	--	
ITMW-16	10/15/2014 8:50	14.45	464.31	19.76	216	6.6	7.03	92.7		--	
ITMW-16	11/1/2014 16:34	13.62	465.14	21.44	168	3.74	8.18	128.1	0	--	
ITMW-16	11/3/2014 13:55	13.84	464.92	21.76	186	2.98	8.18	178.8	0	--	
ITMW-16	11/4/2014 12:43	13.84	464.92	21.2	180	2.34	7.43	287.3	1.4	--	*
ITMW-16	12/3/2014 0:00	14.72	464.04								
ITMW-17	10/16/2014 8:51	13.7	464.26	18.31	908	0.28	5.03	307.4		--	
ITMW-17	10/30/2014 15:02	12.83	465.13	22.74	955	24.37	5.82	333.1		0	
ITMW-17	11/1/2014 16:03	12.58	465.38	21.72	967	20.73	6.39	266.2	0	--	
ITMW-17	11/3/2014 13:32	13.1	464.86	22.46	965	23.31	6.32	273.4	70	0	
ITMW-17	11/4/2014 12:22	13.09	464.87	20.6	1287	8.95	5.84	330	280	0.8	*
ITMW-17	12/5/2014 9:43	13.83	464.13	19.58	1392	10.68	5.46	282.3	280	--	
ITMW-18	10/15/2014 16:10	9.52	464.38	21.53	1989	2.15	5.71	237.6		--	
ITMW-18	11/1/2014 15:52	8.42	465.48	20.65	932	4	6.33	379.7	560	--	
ITMW-18	11/3/2014 13:14	8.82	465.08	21.53	315	4.42	6.35	244.5	70	--	
ITMW-18	11/4/2014 12:01	8.85	465.05	20.19	894	2.68	6.05	271.8	560	--	*
ITMW-18	12/4/2014 13:19	9.69	464.21	17.86	2052	0.31	6.03	254.7	1400	--	
ITMW-19	10/16/2014 8:35	12.06	464.27	18.64	1029	0.31	6.32	184.2		--	
ITMW-19	10/30/2014 15:11	10.73	465.6	20.89	1074	18.35	6.05	338.3		0	
ITMW-19	11/1/2014 15:58	10.85	465.48	20.42	24060	13.11	12.75	140.8	14000	--	
ITMW-19	11/3/2014 13:24	11.44	464.89	20.22	51788	3.27	13.02	210.6	>35000	--	
ITMW-19	11/4/2014 12:08	11.47	464.86	19.73	52405	3.29	13.03	228.9	>35000	INT	*
ITMW-19	12/5/2014 8:00	12.26	464.07	16.96	38653	52.29	15.58	357.7	21000	--	
IW-127	12/4/2014 14:29	9.62	463.99	18.58	8945	0.22	10.38	216.3	12600	--	
IW-132	10/23/2014 14:03	11.36	464.13	21.95	1261	0.57	5.41	261.7	0	--	
IW-132	11/1/2014 9:39	10.98	464.51	19.9	1142	3.57	5.35	298.9		0.4	
IW-140	10/31/2014 14:37	9.17	465.01	20.33	929	5.31	5.45	247		1	
IW-141	10/23/2014 16:57	9.21	464.15	22.73	1465	0.32	5.91	36.6		--	
IW-141	10/30/2014 16:58	8.36	465	21.77	11.63	2.02	5.53	348.3		0	
IW-141	10/31/2014 16:07	7.56	465.8	21.35	1222	5.31	5.81	237		0.8	
IW-141	11/1/2014 9:25	8.86	464.5	20.45	1212	5.34	5.66	322.2		0.6	
IW-141	11/4/2014 13:40	8.67	464.69	21.52	25569	3.33	12.82	143.2	17500	INT	*
IW-141	12/5/2014 12:56	9.45	463.91	19.27	14082	1.63	12.55	164.2	22400	--	
IW-142	10/31/2014 16:21	6.82	466.13	22.57	1181	25.45	6.12	233		0.2	
IW-147	10/23/2014 15:15	8.96	464.17	22.52	1958	2.74	5.36	140.3		--	
IW-147	11/4/2014 13:53	8.42	464.71	20.63	34955	13.38	12.92	172.3	21000	INT	*
IW-147	12/5/2014 11:02	9.06	464.07	19.2	12754	4.92	12	90.2	2800	--	
IW-148	11/1/2014 9:47	8.77	464.37	20.28	1270	28.45	5.5	312.4		0	
IW-150	10/31/2014 16:50	7.14	465.98	21.01	1007	12.7	5.35	275.9		0.8	
IW-150	11/1/2014 9:07	8.69	464.43	21.06	1012	17.08	5.37	340.4		0.4	
IW-152	10/22/2014 16:43	9.12	464.12	23.31	829	1	5.63	143.7	0	--	
IW-152	11/4/2014 13:59	8.8	464.44	21.39	61899	9.17	13.05	267.2	35000	INT	*
IW-152	12/4/2014 16:18	9.55	463.69	19.96	50174	90.95	13.12	264.3	21000	--	

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TABLE 6-2
SUMMARY OF WATER QUALITY PARAMETERS AND PERSULFATE CONCENTRATIONS (AREA 1)
MAY - NOVEMBER 2014 (THIRD 2014 INJECTION EVENT)
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Groundwater Elevation (feet)	Temperature (°C)	Conductivity (uS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)	H2O2 (µg/L)	
IW-153	12/4/2014 9:09	9.09	463.91	17.21	22999	1.78	12.65	133.3.	24500	--	
IW-155	10/23/2014 13:02	9.39	463.89	22.42	1391	0.83	5.22	272.1	0	--	
IW-155	10/31/2014 15:18	8	465.28	21.28	1533	27.75	5.22	274.6		2	
IW-157	10/23/2014 11:49	9.37	464.01	21.31	1262	0.54	5.19	334.6	0	--	
IW-157	11/1/2014 9:20	8.95	464.43	19.93	1023	10.22	5.26	338.7		0	
IW-157	11/4/2014 14:05	8.73	464.65	20.68	15940	6.26	12.71	121.6	14000	INT	*
IW-157	12/5/2014 9:00	9.44	463.94	17.81	7729	65.43	12.28	311.3	4200	--	
IW-159	10/31/2014 16:40	7.38	465.71	20.65	938	11.36	5.4	257.2		0.6	
IW-163	11/1/2014 8:35	9.3	464.48	19.36	1504	11.47	5.11	266.7		0	
IW-165	10/30/2014 15:17	8.3	464.93	20.5	1094	11.59	5.38	347.9		0	
IW-165	11/1/2014 9:13	8.81	464.42	19.04	1101	10.57	5.17	333.8		0	
IW-168	10/31/2014 3:42	8.11	465.29	21.02	1066	14.17	5.47	272.7		0	

Notes:

*DTW measured earlier in the day prior to measurement of geochemical parameters.

INT - Matrix interference prevented accurate peroxide measurements

Baseline Monitoring 10-22 through 10-24-14

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

ENVIRON

TABLE 6-3A
SUMMARY OF TCE CONCENTRATIONS (SUPPLEMENTAL NECK AREA)
MAY - OCTOBER 2014
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)					
Date(s)	**IW-101**	**MW-23**	**MW-24**	**MW-83**	**MW-84**	**Total TCE Reduction (All Wells)**
5/22/2014	nm	22.8	79.7	470	214	1296
5/23/2014	509	nm	nm	nm	nm	
7/8/2014	150	27.8	102	nm	nm	
9/12/2014	139	62.1	55.7	213	0.93	572
10/23/2014	nm	189	33.1	210	0.68	
Percent Reduction	72.7%	-728.9%	58.5%	55.3%	99.7%	55.9%

Notes:

nm = not measured

µg/L = micrograms per liter

TABLE 6-3B
SUMMARY OF TCE CONCENTRATIONS (AREAS 2 AND 3)
MAY - OCTOBER 2014
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)											
Date(s)	**IW-115**	**MW-81**	**MW-82**	**IW-77**	**IW-78**	**IW-79**	**MW-34**	**MW-35R**	**MW-36**	**MW-65**	**IW-80**	**Total TCE Reduction (All Wells)**
5/13-14/2014	nm	nm	nm	1460	nm	nm	19.9	183	0.5U	195	24.2	3864
5/28-30/2014	504	512	285	nm	255	426	nm	nm	nm	nm	nm	
7/8-7/9/2014	352	518	48.2	1200	nm	nm	nm	nm	nm	nm	nm	
7/29-30/2014	nm	nm	nm	1540	nm	nm	78.2	64.7	0.61	17.1	25.6	
9/11/2014	355	463	50	nm	39.6	105	nm	nm	nm	nm	nm	1736
10/14-15/2014	nm	nm	nm	741	nm	nm	47.7	79.2	0.5U	30.8	11.8	
10/23/2014	nm	nm	nm	554	nm	nm	nm	nm	nm	nm	nm	
Percent Reduction	29.6%	9.6%	82.5%	62.1%	84.5%	75.4%	-139.7%	56.7%	-	84.2%	51.2%	55.1%

Notes:
nm = not measured

ENVIRON

TABLE 6-3C
SUMMARY OF TCE CONCENTRATIONS (AREA 1)
SEPTEMBER - DECEMBER 2014
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)											
Date(s)	**IW-127**	**IW-141**	**IW-147**	**IW-152**	**IW-153**	**IW-157**	**MW-25**	**MW-38**	**MW-85**	**MW-86**	**MW-92**	**MW-93**
9/11/2014	1020	nm	nm	nm	nm	nm	nm	nm	5820	129000	nm	nm
10/15/2014	nm	nm	nm	nm	nm	nm	nm	6750	nm	nm	nm	nm
10/23/2014	nm	368000	199000	17600	293	74200	59800	nm	nm	nm	2160	18200
12/4/2014	182	46300	91600	5	1.6	31700	2620	3190	27700	169000	2200	14600
Percent Reduction	82.2%	87%	54%	100%	99%	57%	96%	52.7%	-375.9%	-31.0%	-2%	20%

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

ENVIRON

TABLE 6-3C
SUMMARY OF TCE CONCENTRATIONS (AREA 1)
SEPTEMBER - DECEMBER 2014
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)									
Date(s)	**MW-94**	**MW-95**	**MW-172**	**ITMW-11**	**ITMW-12**	**ITMW-15**	**ITMW-17**	**ITMW-18**	**ITMW-19**	**Total TCE Reduction (All Wells)**
9/11/2014	nm	nm	nm	nm	nm	nm	nm	nm	nm	944213
10/15/2014	nm	nm	nm	2050	2570	1490	3510	3540	12800	
10/23/2014	11100	22300	3010	nm	nm	nm	nm	nm	nm	
12/4/2014	9570	20900	1810	1530	468	63	4630	3690	33.5	431793
Percent Reduction	14%	6%	40%	25.4%	81.8%	95.8%	-31.9%	-4.2%	99.7%	54.3%

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

ENVIRON

TABLE 6-3D
SUMMARY OF TCE CONCENTRATIONS (AREA1/MW-25)
MAY - DECEMBER 2014
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)			
Date(s)	**MW-25**	**MW-85**	**MW-86**	**Total TCE Reduction (All Wells)**
5/15/2014	18500	nm	nm	553470
5/29/2014	nm	1970	533000	
7/8/2014	49900	3780	nm	
7/31/2014	71700	nm	nm	
9/11/2014	nm	5820	129000	
10/24/2014	59800	nm	nm	
12/5/2014	2620	27700	169000	199320
Percent Reduction	85.8%	-1306.1%	68.3%	64.0%

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

ENVIRON

TABLE 6-4
SUMMARY OF LARGE DIAMETER BORING ROLL-OFF BOX INFORMATION
Whirlpool Facility - Fort Smith, Arkansas

Tec-An, Inc. Roll-Off Box ID	ENVIRON Identified Container Label	Source Large Diameter Boring Excavation	Source Large Diameter Boring Borehole	Date Material Placed in Roll Off Box	Date Roll Off Box Sampled	Sample ID	Analytical Results	Disposal Classification	Receiving Facility
1	25480	LDB-2, LDB-3 and LDB-5 (1/2)	-	10/2/2014	10/2/2014	1A and 1B	TCE = <0.125 mg/kg	Non-hazardous	City of Fort Smith LF
2	RB37763	LDB-3 and LDB-4	-	10/2/2014	10/2/2014	2A and 2B	TCE = 0.269 mg/kg	Non-hazardous	City of Fort Smith LF
3	25475	LDB-1	LDB-2	10/2/2014	10/2/2014	3A and 3B	TCE = 0.165 mg/kg	Non-hazardous	City of Fort Smith LF
4	25477	-	LDB-3	10/2/2014	10/2/2014	4A and 4B	TCE = 0.589 mg/kg	Non-hazardous	City of Fort Smith LF
5	25472	-	LDB-1 and LDB-4 (top 1/2)	10/3/2014	10/3/2014	5A and 5B	TCE = 7.51 mg/kg	Non-hazardous	City of Fort Smith LF
6	25473	LDB-5 and LDB-6	LBD-6	10/3/2014	10/3/2014	6A and 6B	TCE = 1.07 mg/kg	Non-hazardous	City of Fort Smith LF
7	25479		LDB-4 (bottom 1/2) and LDB-5	10/3/2014	10/3/2014	7A and 7B	**TCE = 2.25 mg/L**	Characteristically Hazardous	Clean Harbors Lone Mountain LF
8	25484	LDB-7	LDB-7	10/4/2014	10/4/2014	8A and 8B	**TCE = 9.99 mg/L**	Characteristically Hazardous	Clean Harbors Lone Mountain LF
9	25474	LDB-8 and LDB-9 (1/2)	LDB-8	10/4/2014	10/4/2014	9A and 9B	TCE = 4.24 mg/kg	Non-hazardous	City of Fort Smith LF
10	25540	LDB-9 (1/2) and LDB-10	-	10/4/2014	10/4/2014	10A and 10B	TCE = 0.215 mg/kg	Non-hazardous	City of Fort Smith LF
11	25449	-	LDB-9	10/4/2014	10/4/2014	11A and 11B	TCE = 0.166 mg/kg	Non-hazardous	City of Fort Smith LF
12	25406	LDB-11 (1/2)	LDB-10	10/4/2014	10/4/2014	12A and 12B	TCE = 2.82 mg/kg	Non-hazardous	City of Fort Smith LF
13	300525	LDB-1 (1/2) and LDB-12	-	10/4/2014	10/4/2014	13A and 13B	TCE = 2.76 mg/kg (13A) **TCE = 0.540 mg/L (13B)**	Characteristically Hazardous	Clean Harbors Lone Mountain LF
14	25536	LDB-12 (1 cyd), LDB-13	LDB-11	10/6/2014	10/6/2014	14A and 14B	**TCE = 0.475 mg/L**	Non-hazardous	City of Fort Smith LF
15	25469	-	LDB-11 (3 cyds) and LDB-12	10/6/2014	10/6/2014	15A and 15B	**TCE = 0.407 mg/L**	Non-hazardous	City of Fort Smith LF
16	25498	LDB-14	LDB-13	10/6/2014	10/6/2014	16A and 16B	**TCE = 0.997 mg/L**	Characteristically Hazardous	Clean Harbors Lone Mountain LF
17	25409	-	LDB-14	10/6/2014	10/6/2014	17A and 17B	**TCE = 0.517 mg/L**	Characteristically Hazardous	Clean Harbors Lone Mountain LF
18	25582	LDB-17	LDB-14 (2 cyds) and LDB-17 (top 1/2)	10/6/2014	10/6/2014	18A and 18B	TCE = 3.76 mg/kg	Non-hazardous	City of Fort Smith LF
19	25606	LDB-15 (1/2) and LDB-16	LDB-17 (bottom 1/2)	10/6/2014	10/6/2014	19A and 19B	TCE = 0.830 mg/kg	Non-hazardous	City of Fort Smith LF
20	25404	LDB-15 (1/2)	LDB-15 (top 1/2)	10/7/2014	10/7/2014	20A and 20B	**TCE = 0.380 mg/L**	Non-hazardous	City of Fort Smith LF
21	25583	LDB-18	LDB-18	10/8/2014	10/8/2014	21A and 21B	TCE = 2.28 mg/kg	Non-hazardous	City of Fort Smith LF

ENVIRON

TABLE 6-4
SUMMARY OF LARGE DIAMETER BORING ROLL-OFF BOX INFORMATION
Whirlpool Facility - Fort Smith, Arkansas

Tec-An, Inc. Roll-Off Box ID	ENVIRON Identified Container Label	Source Large Diameter Boring Excavation	Source Large Diameter Boring Borehole	Date Material Placed in Roll Off Box	Date Roll Off Box Sampled	Sample ID	Analytical Results	Disposal Classification	Receiving Facility
22	25551	LDB-19	LDB-18 (3 cyds)	10/8/2014	10/8/2014	22A and 22B	**TCE = 4.65 mg/L**	Characteristically Hazardous	Clean Harbors Lone Mountain LF
23	25450	-	LDB-19	10/8/2014	10/8/2014	23A and 23B	TCE = 0.548 mg/kg	Non-hazardous	City of Fort Smith LF
24	25186	-	LDB-15 (bottom 1/2) and LDB-16	10/8/2014	10/9/2014	24A and 24B	**TCE = <0.05 mg/L (24A)** **TCE = <0.05 mg/L (24B)**	Non-hazardous	City of Fort Smith LF
25	25545	LDB-15 (bottom 1/2) and LDB-16 (2 cyds); Box 22 (25551) (2 bkts); Box 23 (25450) (4 bkts); Box 18 (25582) (4 bkts); Box 21 (25583) (4 bkts)		10/8/2014	10/9/2014	25A and 25B	**TCE = <0.05 mg/L (25A)** **TCE = <0.05 mg/L (25B)**	Non-hazardous	City of Fort Smith LF
26	25160	Box 20 (25404) (5 bkts); Box 17 (25409) (4 bkts)		10/9/2014	10/9/2014	26A and 26B	**TCE = <0.05 mg/L (26A)** **TCE = 0.158 mg/L (26B)**	Non-hazardous	City of Fort Smith LF
27	25209	Box 15 (25469) (7 bkts); Box 10 (25540) (2 bkts); Box 9 (25474) (2 bkts); Box 12 (25406) (2 bkts)		10/9/2014	10/9/2014	27A and 27B	**TCE = <0.05 mg/L (27A)** **TCE = <0.05 mg/L (27B)**	Non-hazardous	City of Fort Smith LF
28	25187	Box 19 (25606) (3 bkts); Box 16 (25498) (4 bkts); Box 5 (25472) (4 bkts)		10/9/2014	10/10/2014	28A and 28B	**TCE = <0.05 mg/L (28A)** **TCE = 0.114 mg/L (28B)**	Non-hazardous	City of Fort Smith LF
29	25132	Box 5 (25472) (3 bkts); Box 14 (25536) (3 bkts); Box 7 (25479) (7 bkts); Box 4 (25477) (2 bkts)		10/10/2014	10/10/2014	29A and 29B	**TCE = <0.05 mg/L (29A)** **TCE = 0.0503 mg/L (29B)**	Non-hazardous	City of Fort Smith LF
30	25A-216RT	Box 7 (25479) (2 bkts); Box 9 (25474) (3 bkts); Box 8 (25484) (1 bkts)		10/10/2014	10/10/2014	30A and 30B	**TCE = <0.05 mg/L (30A)** **TCE = <0.05 mg/L (30B)**	Non-hazardous	City of Fort Smith LF
31	25529	Box 8 (25484) (1 bkts); Box 6 (25473) (11 bkts)		10/10/2014	10/10/2014	31A and 31B	**TCE = <0.05 mg/L (31A)** **TCE = 0.201 mg/L (31B)**	Non-hazardous	City of Fort Smith LF

TABLE 6-5
ESTIMATION OF SOIL VOLUMES EXCAVATED
Whirlpool Facility - Fort Smith, Arkansas

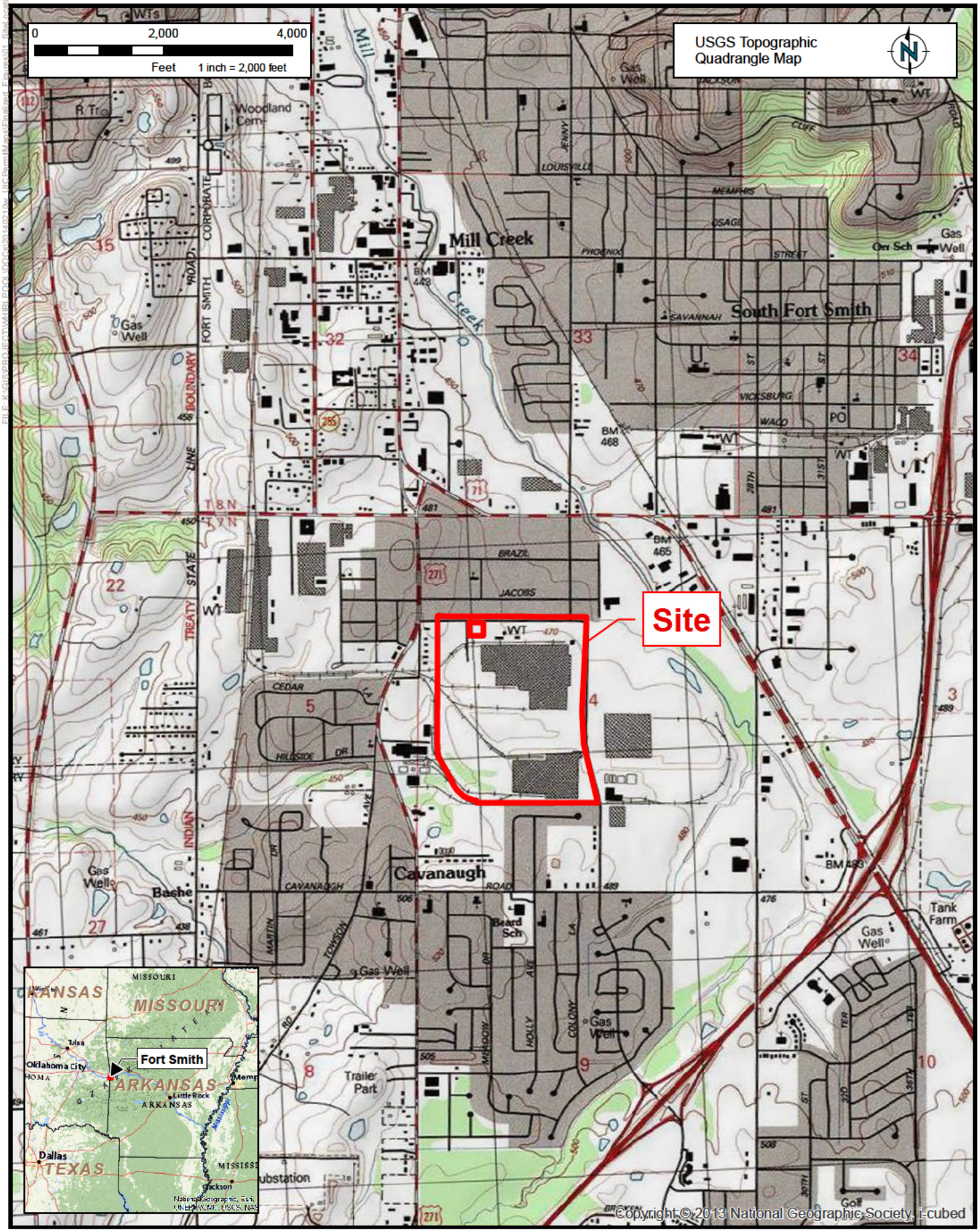
Boring ID	Excavation Depth (feet)	Borehole Depth (feet)	Depth to Gravel Backfill (feet)	Depth to Lean Cement* (feet)	Surface Gravel Thickness* (feet)	Concrete Thickness* (feet)	Actual Borehole Length (feet)	Gravel Thickness (feet)
1	6	28.0	14.0	2.0	1.6	0.4	22.0	14.0
2	6	28.6	13.8	2.0	1.6	0.4	22.6	14.8
3	6	29.0	14.8	2.0	1.6	0.4	23.0	14.2
4	6	28.0	14.9	2.0	1.6	0.4	22.0	13.1
5	6	27.0	15.0	2.0	1.6	0.4	21.0	12.0
6	6	27.0	14.9	2.0	1.6	0.4	21.0	12.1
7	6	28.7	15.0	2.0	1.6	0.4	22.7	13.7
8	6	28.6	14.6	2.0	1.6	0.4	22.6	14.0
9	6	27.6	10.0	2.0	1.6	0.4	21.6	17.6
10	6	28.6	13.0	2.0	1.6	0.4	22.6	15.6
11	6	28.6	14.0	2.0	2.0	NA	22.6	14.6
12	6	28.3	15.0	2.0	2.0	NA	22.3	13.3
13	6	28.6	11.0	2.0	2.0	NA	22.6	17.6
14	6	29.3	14.0	2.0	2.0	NA	23.3	15.3
15	6	29.6	14.6	2.0	2.0	NA	23.6	15.0
16	6	30	15.0	2.0	2.0	NA	24.0	15.0
17	6	30	15.0	2.0	2.0	NA	24.0	15.0
18	6	30.3	15.0	2.0	2.0	NA	24.3	15.3
19	6	29.3	15.0	2.0	2.0	NA	23.3	14.3
TOTALS	**114**	**545.1**	**268.6**	**38.0**	**34.0**	**4.0**	431.1	-

	Utility Clearance Excavations	Large Diameter Borings	Total
Volume Estimates (cyds)	152	201	**353**

Notes:
* - depths are approximate

ENVIRON

FIGURES



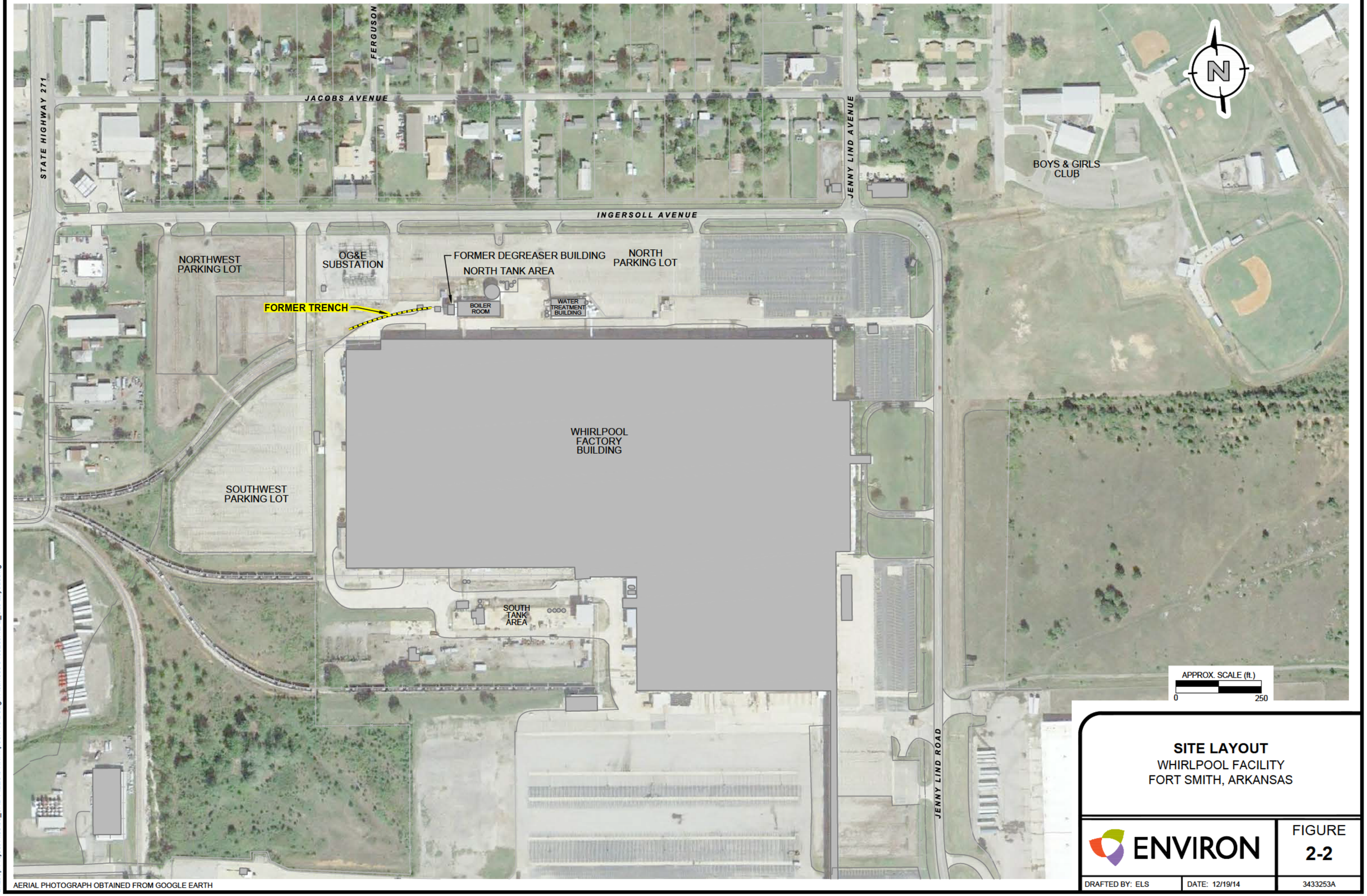
ENVIRON

SITE LOCATION

Whirlpool Facility - Fort Smith, Arkansas

Figure 2-1

DRAFTED BY: KTS | DATE: 02/14/2014 | PROJECT: 3433253A



AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH

SITE LAYOUT
WHIRLPOOL FACILITY
FORT SMITH, ARKANSAS

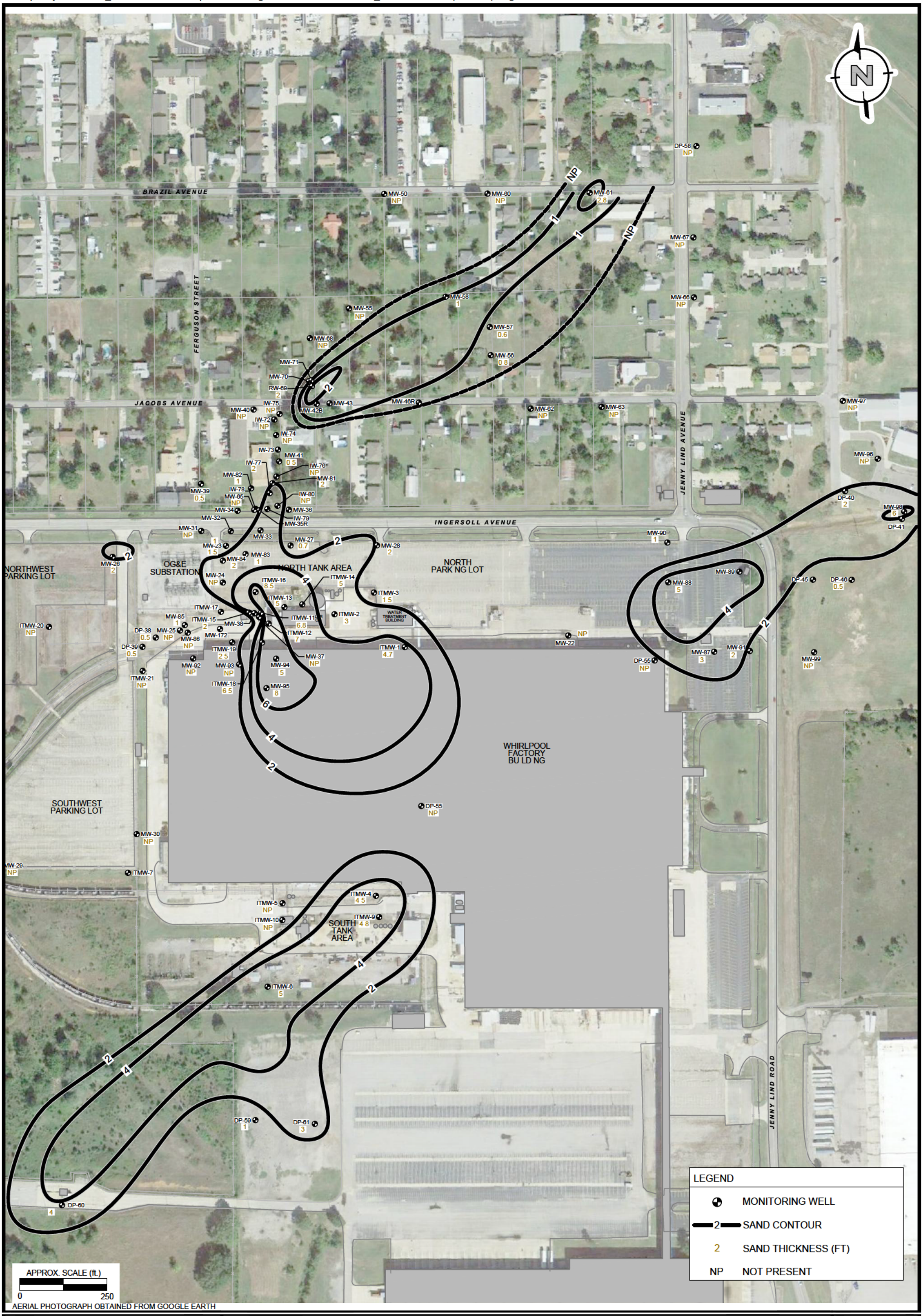
ENVIRON

FIGURE
2-2

DRAFTED BY: ELS	DATE: 12/19/14	3433253A

L:\Loop Project Files\00_CAD FILES\34\Whirlpool Pre-Design Activities 3433253A\2-2_Site Layout.dwg

L:\Loop Project Files\00_CAD FILES\34\Whirlpool Pre-Design Activities 3433253A\2-3_Sand Thickness (2014-12).dwg



ENVIRON

SAND THICKNESS
WHIRLPOOL FACILITY
FORT SMITH, ARKANSAS

FIGURE
2-3

DRAFTED BY: ELS | DATE: 12/16/14

3433253A

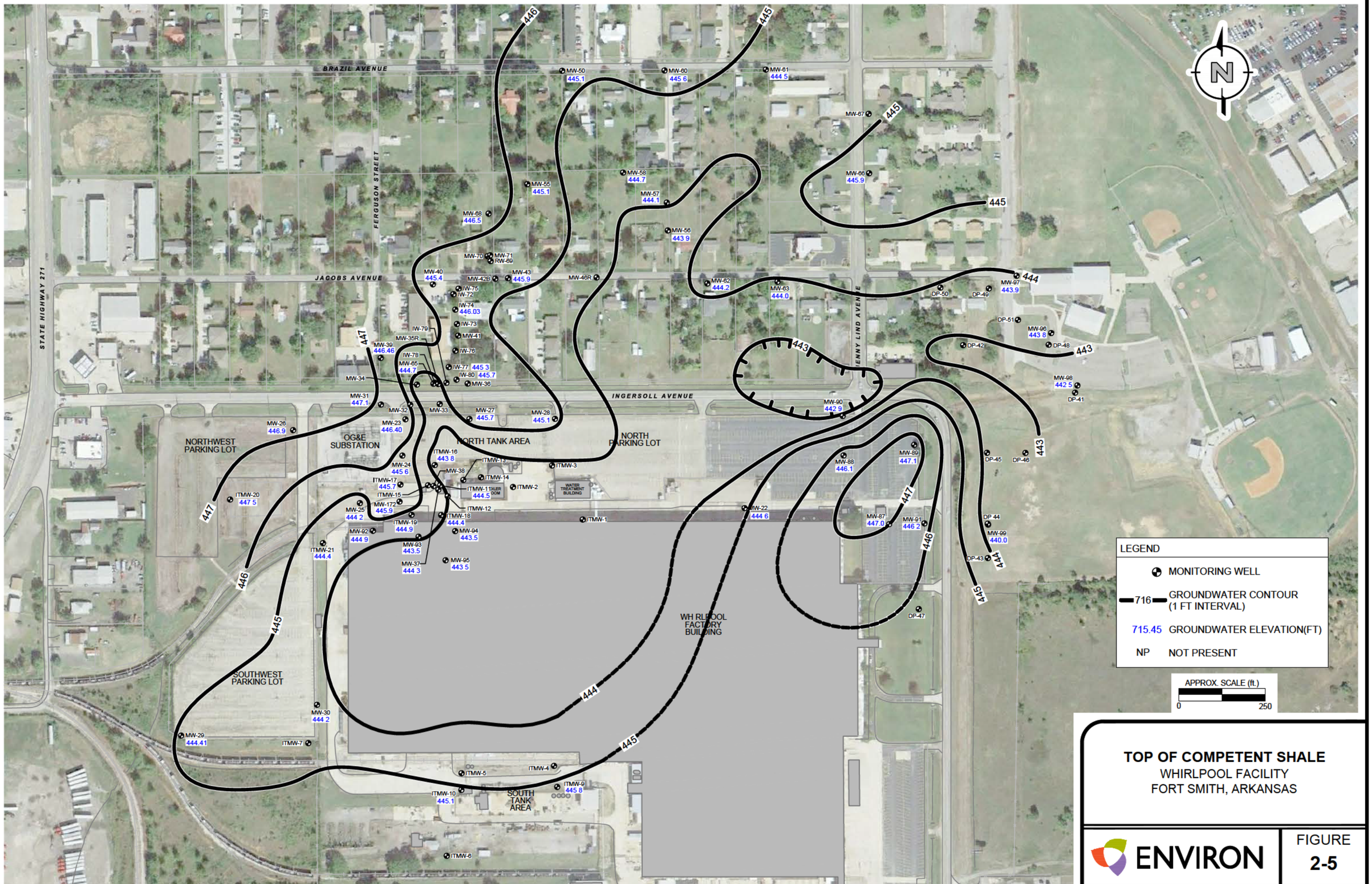
L:\Loop Project Files\00_CAD FILES\34\Whirlpool Pre-Design Activities 3433253A\2-4_Gravel Thickness (2014-12).dwg

ENVIRON

GRAVEL THICKNESS
WHIRLPOOL FACILITY
FORT SMITH, ARKANSAS

FIGURE
2-4

DRAFTED BY: ELS | DATE: 12/16/14 | 3433253A



LEGEND

- MONITORING WELL
- 716 GROUNDWATER CONTOUR (1 FT INTERVAL)
- 715.45 GROUNDWATER ELEVATION(FT)
- NP NOT PRESENT

APPROX. SCALE (ft.)
0 250

AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH

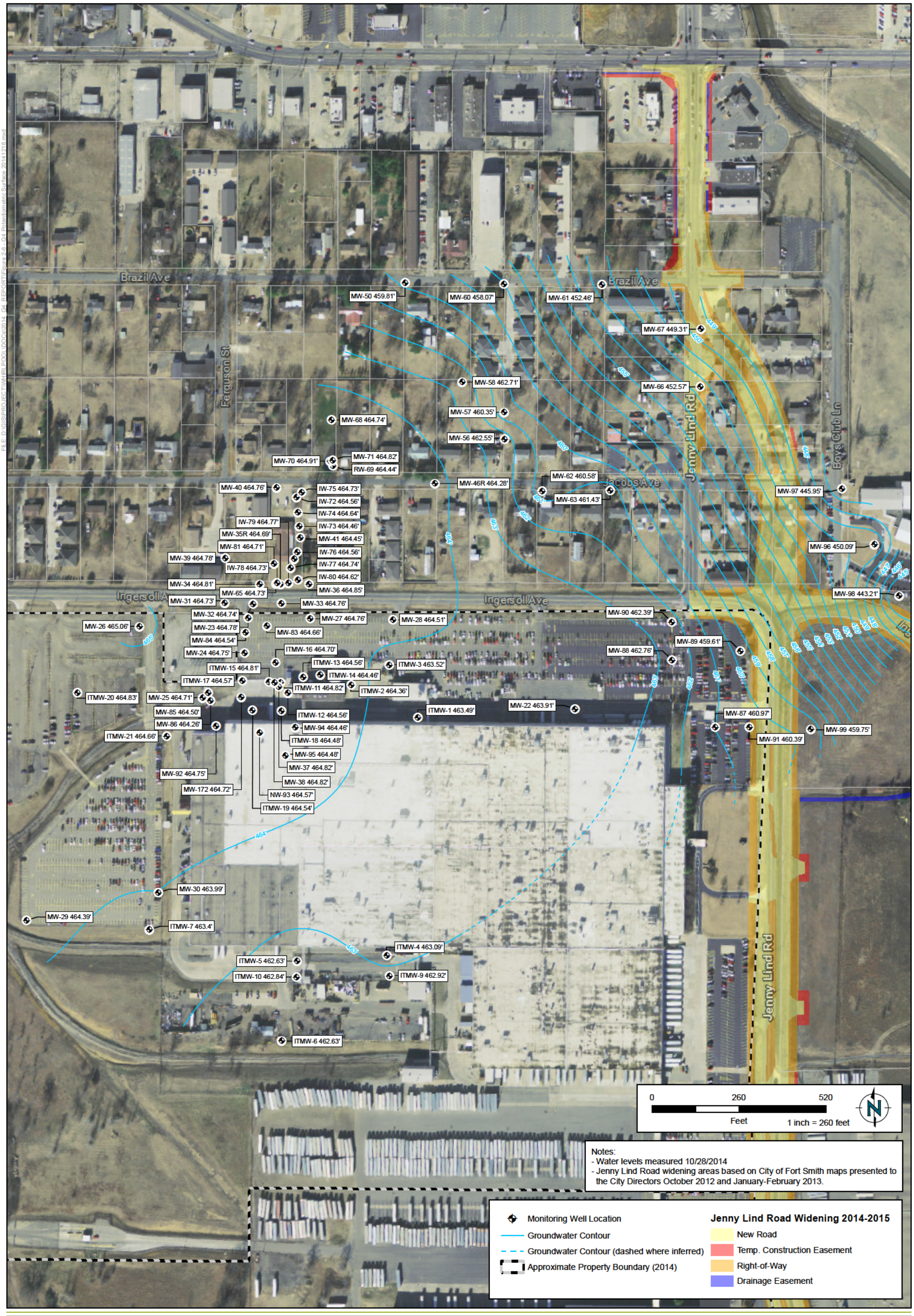
TOP OF COMPETENT SHALE
WHIRLPOOL FACILITY
FORT SMITH, ARKANSAS

ENVIRON

FIGURE 2-5

DRAFTED BY: ELS | DATE: 12/16/14 | 3433253A

L:\Loop Project Files\00_CAD FILES\34\Whirlpool Pre-Design Activities 3433253A\2-5_Top of Competent Shale (2014-12).dwg



ENVIRON

FOURTH QUARTER 2014 POTENTIOMETRIC SURFACE

Whirlpool Facility - Fort Smith, Arkansas

Figure 2-6

DRAFTED BY: KTS | DATE: 12/16/2014 | PROJECT: 3434446A

FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCs\20140508_CompSiteRot\Figure 3-1 - Direct Push Soil Borings and Temporary Well Locations - June 2013.mxd

ENVIRON

DRAFTED BY: KTS | DATE: 05/14/2014

DIRECT PUSH SOIL BORING AND TEMPORARY WELL LOCATIONS
JUNE 2013 LIMITED PHASE II INVESTIGATION

Whirlpool Facility - Fort Smith, Arkansas

Figure
3-1

PROJECT: 3433253A

0 150 300

Feet

1 inch = 150 feet 1:1,800

N

Membrane Interface Probe (MIP)

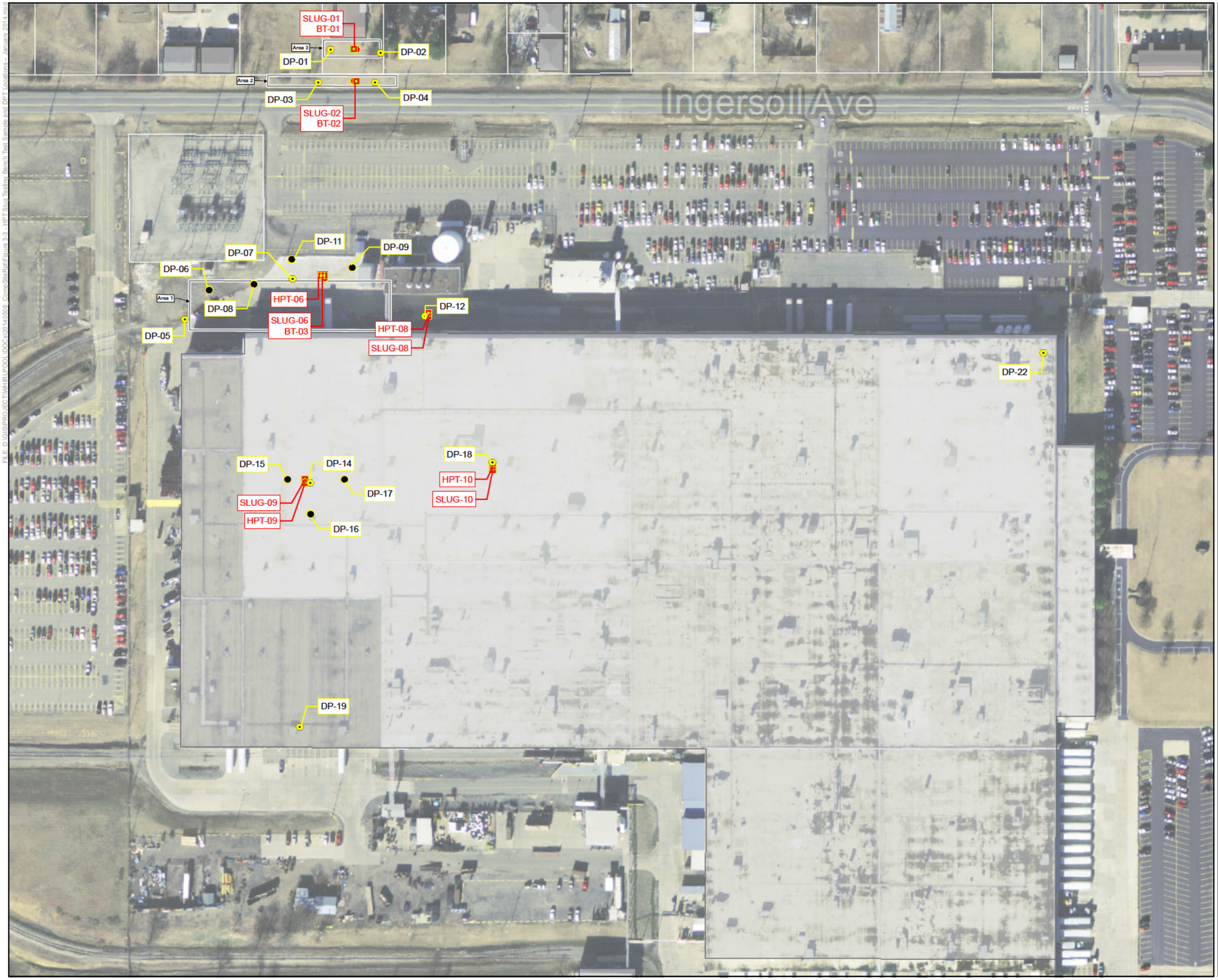
MIP SCREENING LOCATIONS
SEPTEMBER 2013 to JANUARY 2014
(2006 Orthophoto)

Whirlpool Facility - Fort Smith, Arkansas

ENVIRON

Figure
3-2

DRAFTED BY: KTS	DATE: 05/14/2014	PROJECT: 3433253A



0 150 300

Feet

1 inch = 150 feet 1:1,800

- Bench Test Soil/GW
- HPT
- Slug Test
- Soil
- Soil and GW

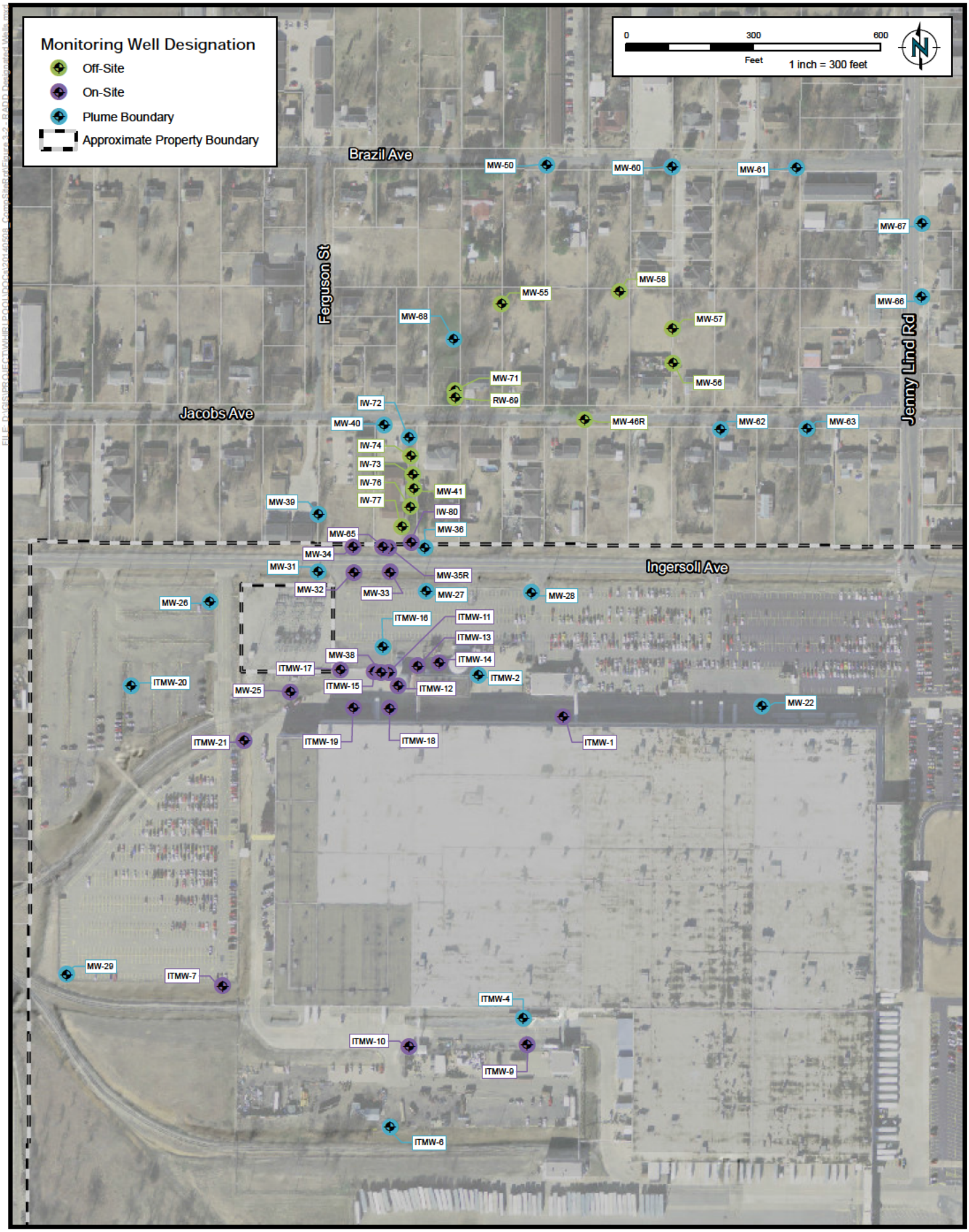
HPT, SLUG TESTING, BENCH TEST SAMPLE AND DPT LOCATIONS
SEPTEMBER 2013 to JANUARY 2014
(2006 Orthophoto)

Whirlpool Facility - Fort Smith, Arkansas

ENVIRON

Figure 3-3

DRAFTED BY: KTS	DATE: 05/14/2014	PROJECT: 3433253A



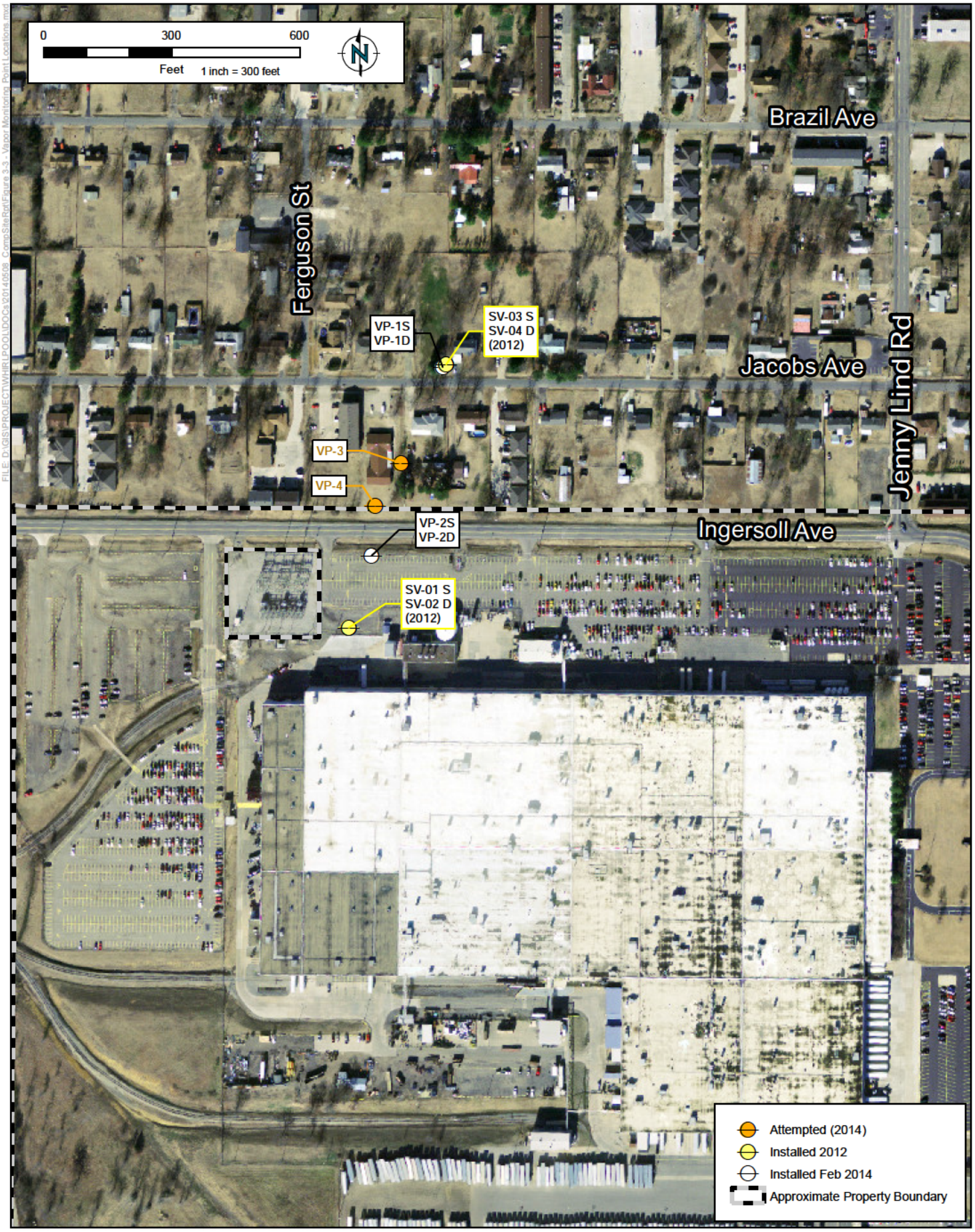
ENVIRON

RADD DESIGNATED MONITORING WELLS

Whirlpool Facility - Fort Smith, Arkansas

Figure 3-4

DRAFTED BY: KTS | DATE: 05/14/2014 | PROJECT: 3433253A



ENVIRON

VAPOR MONITORING POINT LOCATIONS

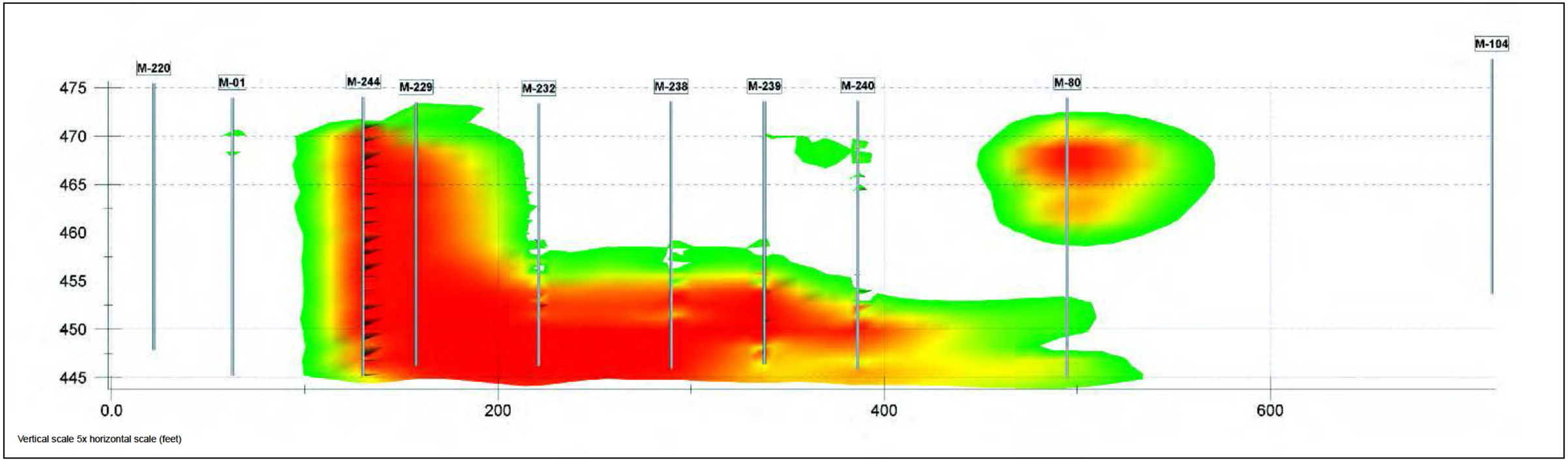
Whirlpool Facility - Fort Smith, Arkansas

Figure 3-5

DRAFTED BY: KTS

DATE: 05/14/2014

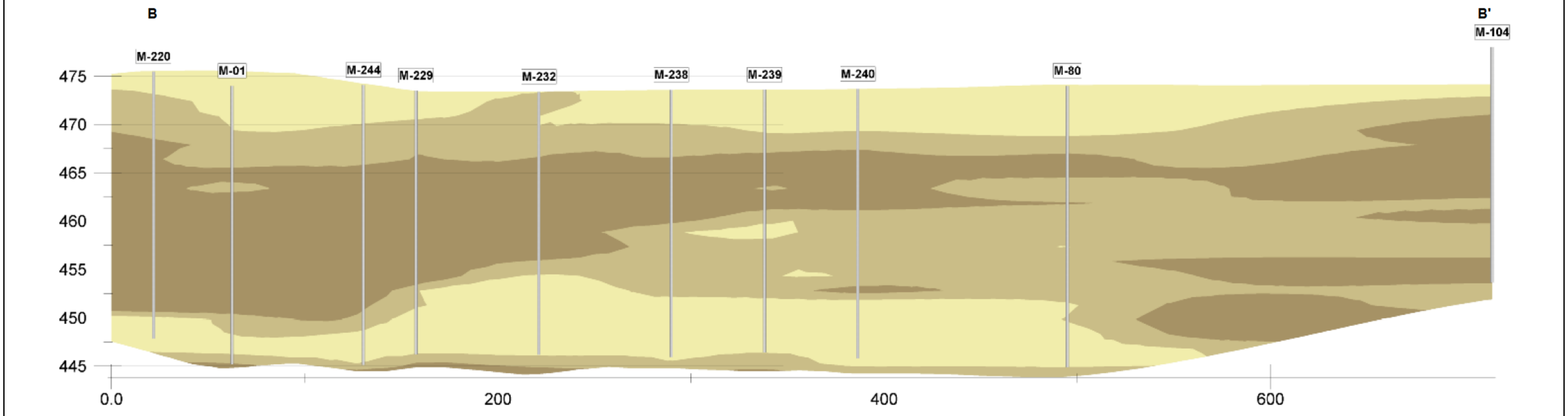
PROJECT: 3433253A



Vertical scale 5x horizontal scale (feet)

B

B'



Vertical scale 5x horizontal scale (feet)

Legend

Decreasing Fines ------ Increasing Fines

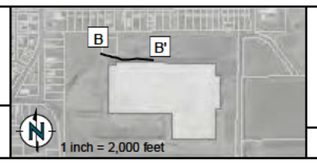
0	35	70	140	200

Electrical Conductivity - EC (mS/m)

Decreasing CVOCs ------ Increasing CVOCs

$1.0x10^{-6}$	$2.0x10^{-6}$	$5.0x10^{-6}$	$1.0x10^{-7}$	$1.5x10^{-7}$

Electron Capture Detector - ECD (uV)



Notes

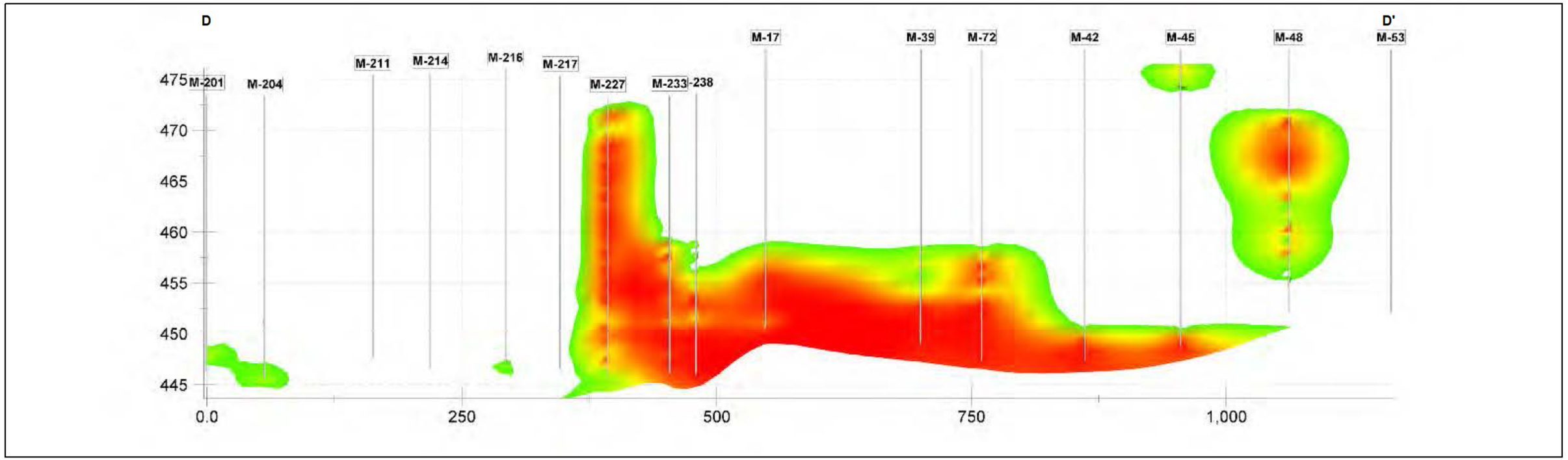
- EC and ECD response data kriged using C Tech's MVS application
- Electron Capture Device (ECD) results reported in microvolts (µV)
- Electrical Conductivity (EC) results reported in milli-siemens/Meter

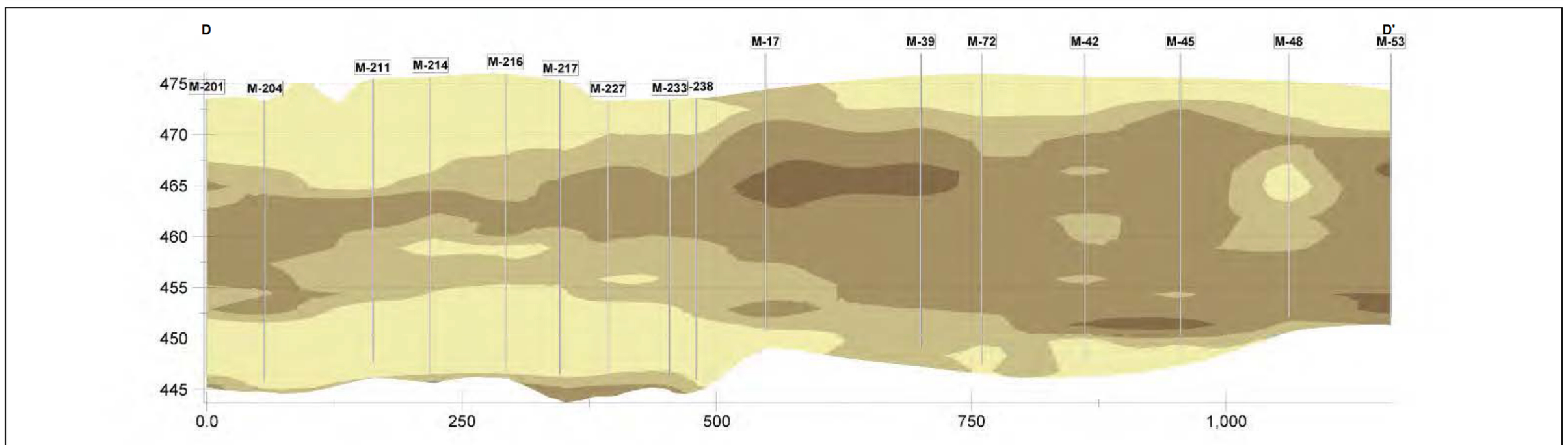
ENVIRON

MEMBRANE INTERFACE PROBE CROSS SECTION B - B'

Figure 4-1

DRAFTED BY: KTS | DATE: 05/12/2014 | Whirlpool Facility - Fort Smith, Arkansas | PROJECT: 2131344A





Legend

Decreasing Fines - - - - - - Increasing Fines

0	35	70	140	200

Electrical Conductivity - EC (mS/m)

Decreasing CVOCs - - - - - - Increasing CVOCs

$1.0x10^{-8}$	$2.0x10^{-8}$	$5.0x10^{-8}$	$1.0x10^{-7}$	$1.5x10^{-7}$

Electron Capture Detector - ECD (uV)

Notes

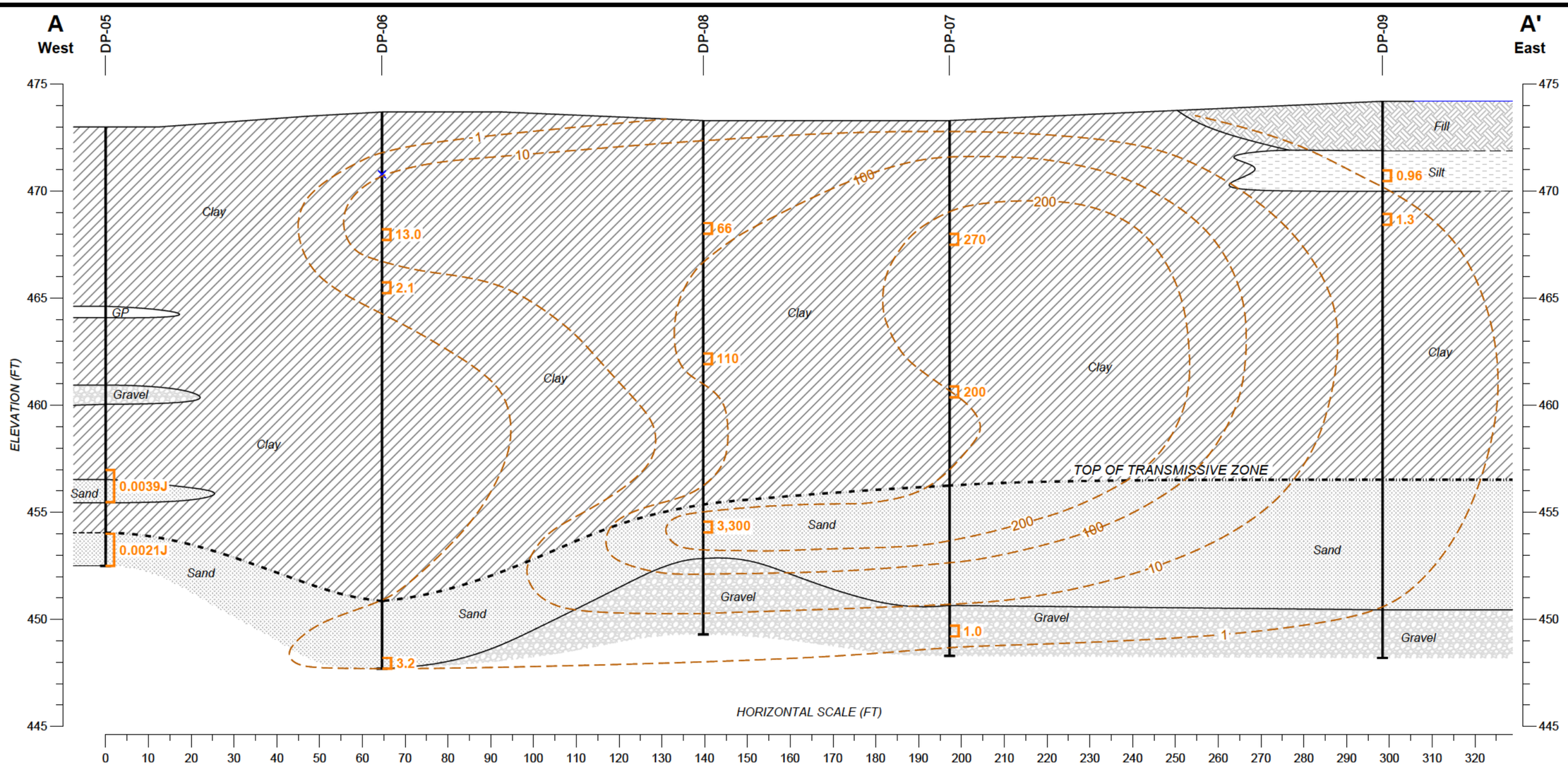
- EC and ECD response data kriged using C Tech's MVS application
- Electron Capture Device (ECD) results reported in microvolts (µV)
- Electrical Conductivity (EC) results reported in milli-siemens/Meter

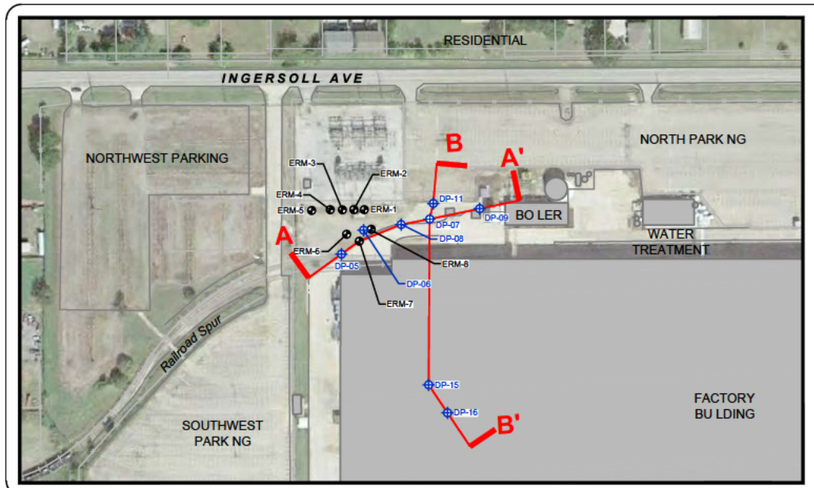
ENVIRON

MEMBRANE INTERFACE PROBE CROSS SECTION D - D'

Figure 4-2

DRAFTED BY: KTS | DATE: 05/12/2014 | Whirlpool Facility - Fort Smith, Arkansas | PROJECT: 2131344A





CROSS-SECTION OVERVIEW

APPROX. SCALE (ft.)

0 300

CROSS-SECTION A-A'

LITHOLOGY	
FILL	SAND
CLAY	GRAVEL
SILT	

LEGEND	
⊥	BORING
66	TCE CONCENTRATION (mg/kg)

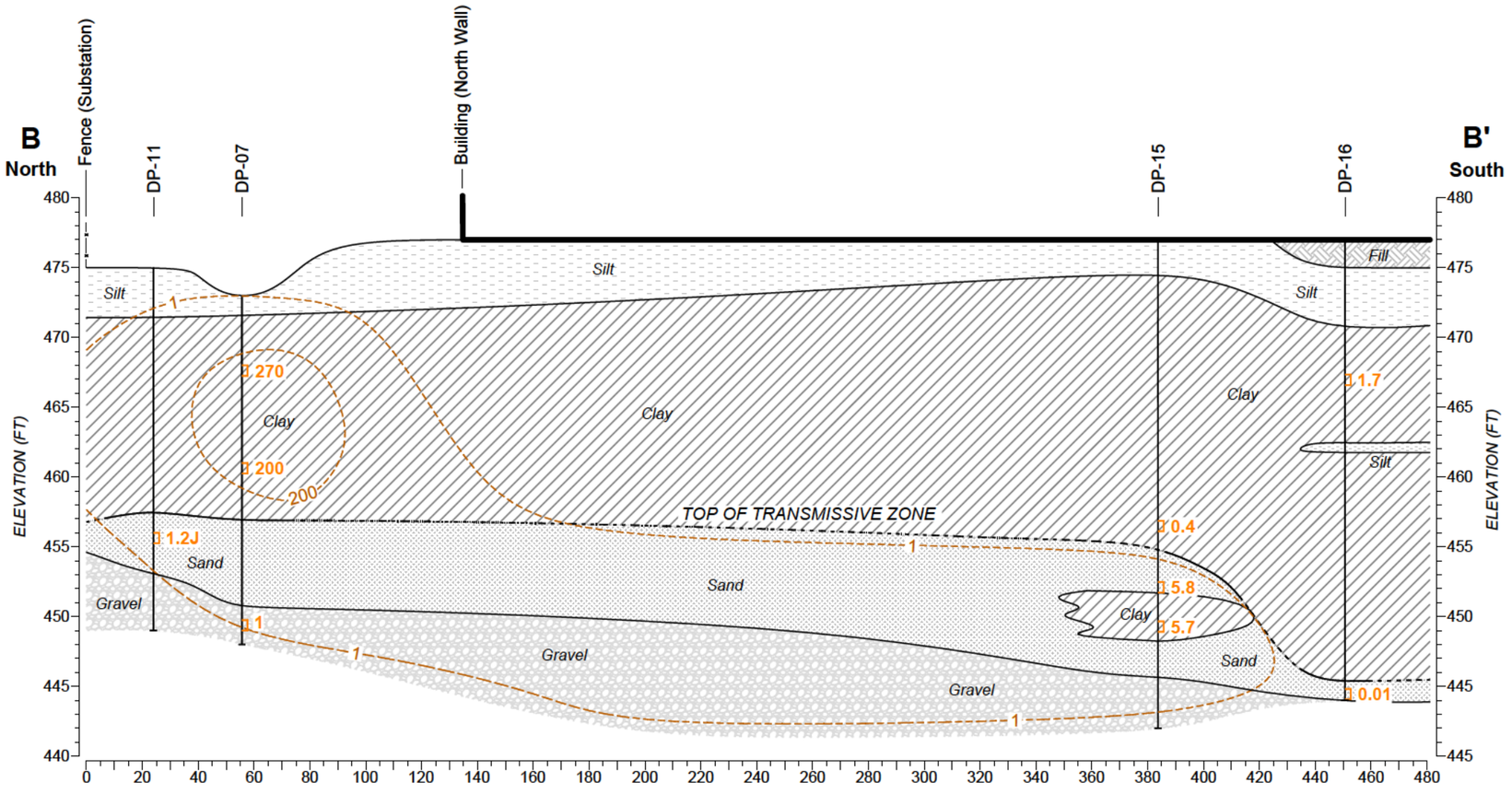
CROSS-SECTION A-A'
WHIRLPOOL FACILITY
FORT SMITH, ARKANSAS

ENVIRON

FIGURE 4-3

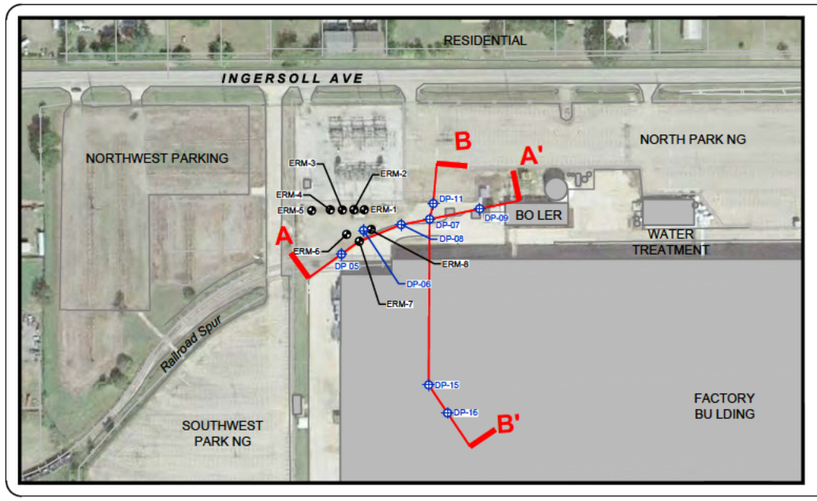
DRAFTED BY: APR/CKL/ELS | DATE: 5/12/14 | 3433253A

L:\Loop Project Files\00_CAD FILES\341Whirlpool Pre-Design Activities 3433253A\4-3_Cross-Section A-A' dwg



HORIZONTAL SCALE (FT)

CROSS-SECTION B-B'



CROSS-SECTION OVERVIEW

APPROX. SCALE (ft.)
0 300

LITHOLOGY	
FILL	SAND
CLAY	GRAVEL
SILT	

LEGEND	
⊥	BORING
200	TCE CONCENTRATION (mg/kg)

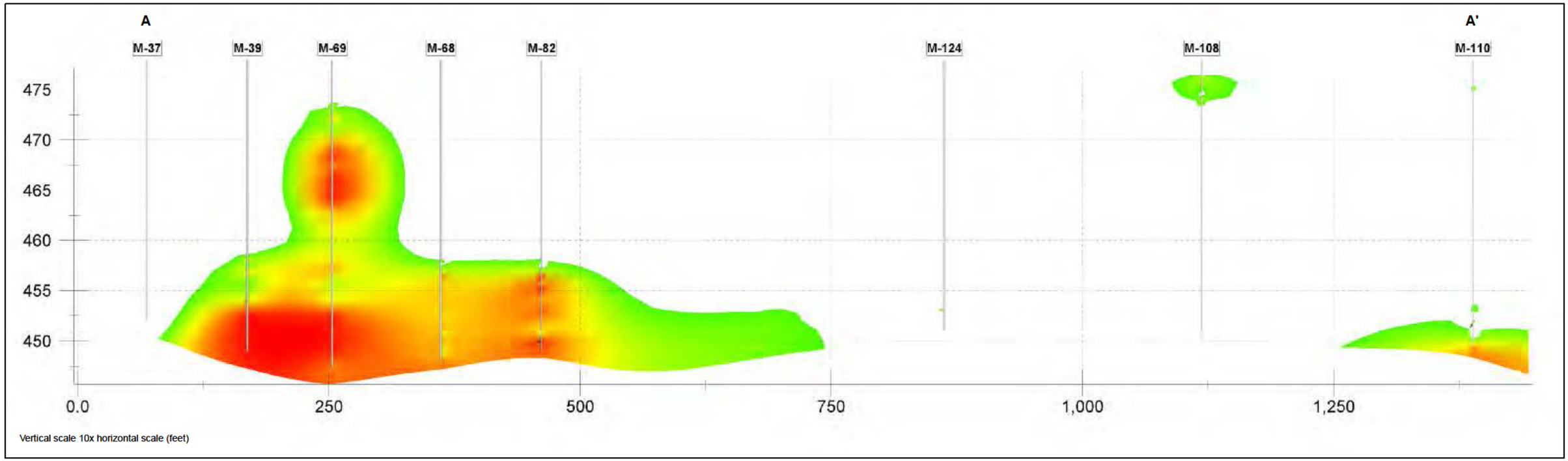
CROSS-SECTION B-B'
WHIRLPOOL FACILITY
FORT SMITH, ARKANSAS

ENVIRON

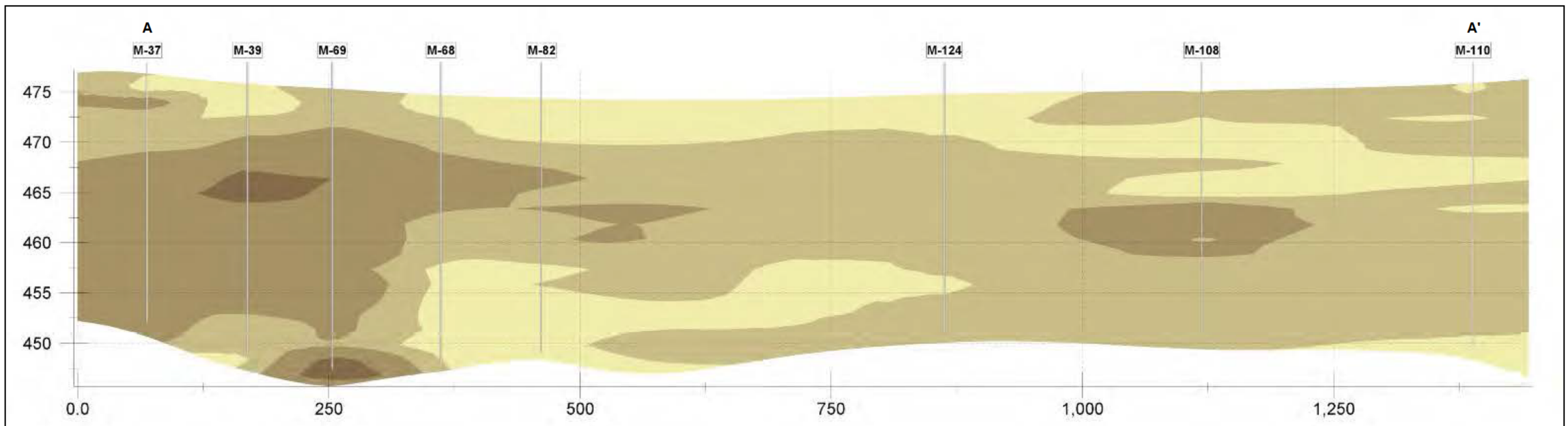
FIGURE
4-4

DRAFTED BY: ELS	DATE: 5/13/14	3433253A

L:\Loop Project Files\00_CAD FILES\34\Whirlpool Pre-Design Activities 3433253A\4-4_Cross-Section B-B' (r051314).dwg



Vertical scale 10x horizontal scale (feet)



Vertical scale 10x horizontal scale (feet)

Legend

Decreasing Fines - - - - - - Increasing Fines

0	35	70	140	200

Electrical Conductivity - EC (mS/m)

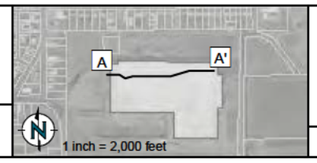
Decreasing CVOCs - - - - - - Increasing CVOCs

$1.0x10^{-6}$	$2.0x10^{-6}$	$5.0x10^{-6}$	$1.0x10^{-7}$	$1.5x10^{-7}$

Electron Capture Detector - ECD (uV)

Notes

- EC and ECD response data kriged using C Tech's MVS application
- Electron Capture Device (ECD) results reported in microvolts (µV)
- Electrical Conductivity (EC) results reported in milli-siemens/Meter

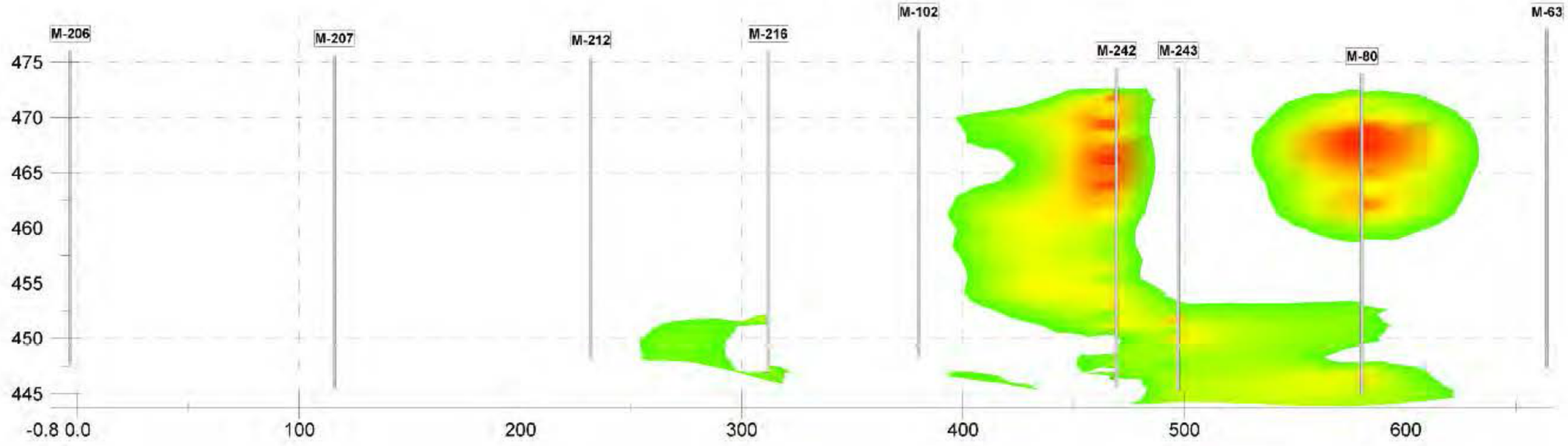


ENVIRON

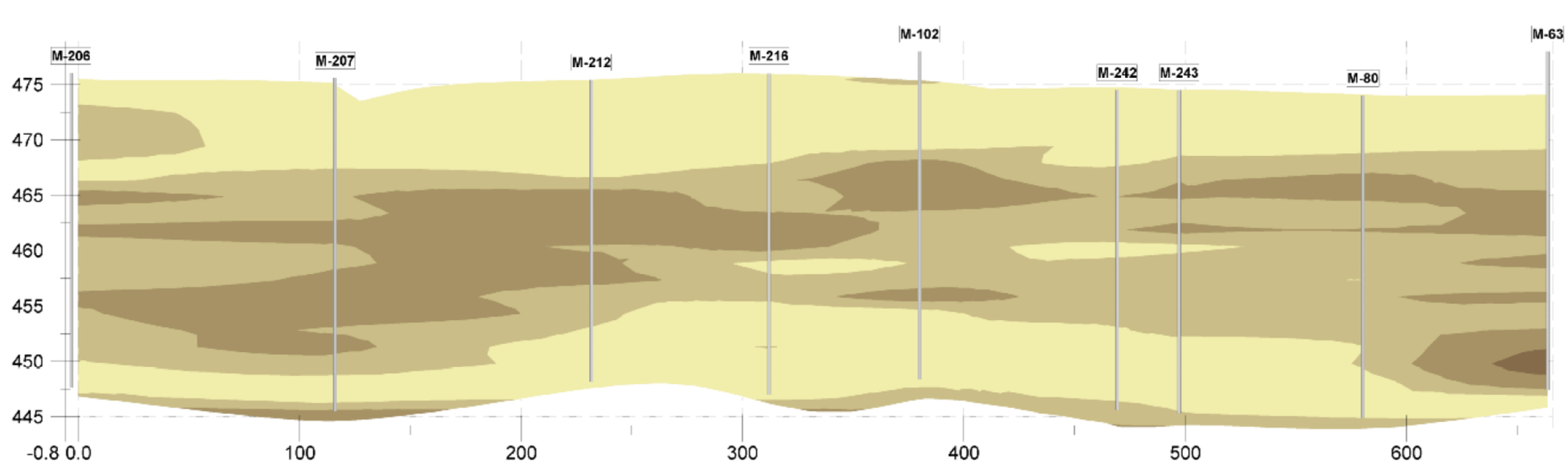
MEMBRANE INTERFACE PROBE CROSS SECTION A - A'

Figure 4-5

DRAFTED BY: KTS | DATE: 05/12/2014 | Whirlpool Facility - Fort Smith, Arkansas | PROJECT: 2131344A



Vertical scale 5x horizontal scale (feet)



Vertical scale 5x horizontal scale (feet)

Legend

Decreasing Fines - - - - - - Increasing Fines

0 | 35 | 70 | 140 | 200

Electrical Conductivity - EC (mS/m)

Decreasing CVOCs - - - - - - Increasing CVOCs

1.0×10^{-6} | 2.0×10^{-6} | 5.0×10^{-6} | 1.0×10^{-7} | 1.5×10^{-7}

Electron Capture Detector - ECD (uV)

Notes

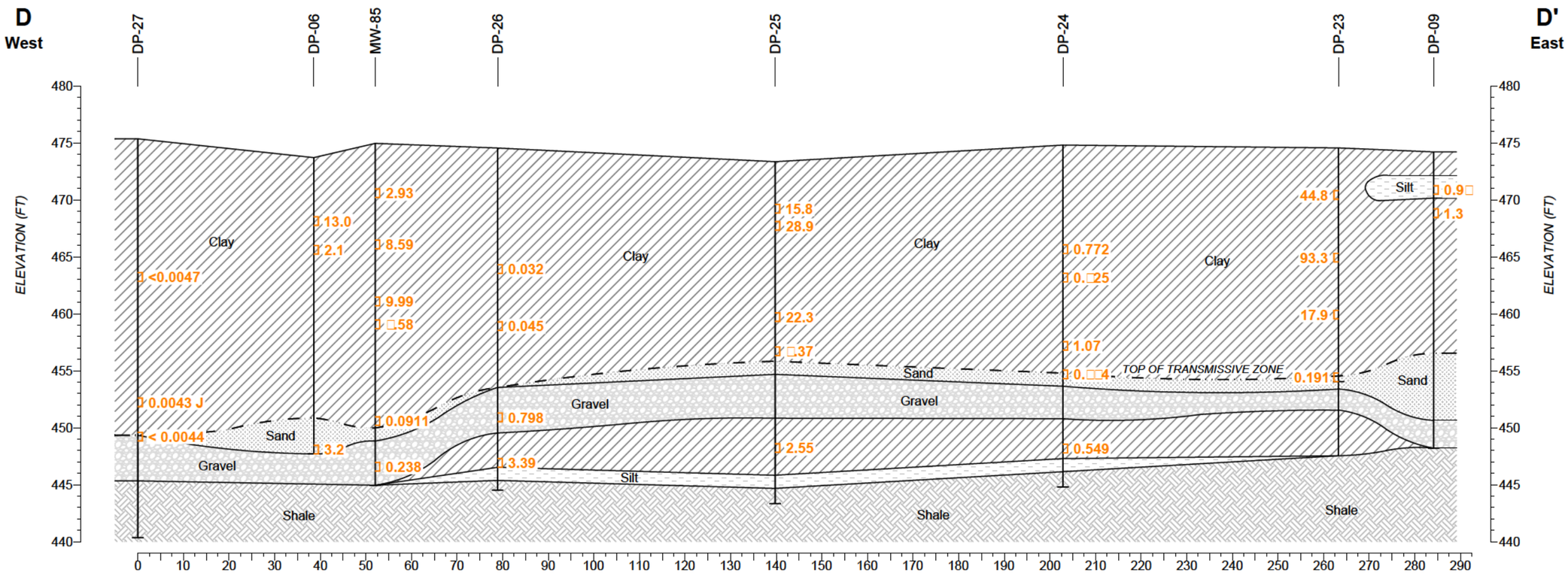
- EC and ECD response data kriged using C Tech's MVS application
- Electron Capture Device (ECD) results reported in microvolts (µV)
- Electrical Conductivity (EC) results reported in milli-siemens/Meter

ENVIRON

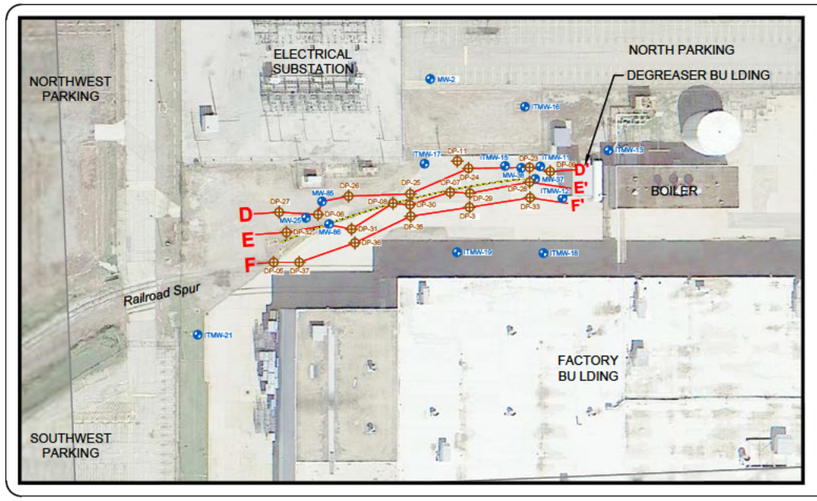
MEMBRANE INTERFACE PROBE CROSS SECTION C - C'

Figure 4-6

DRAFTED BY: KTS | DATE: 05/12/2014 | Whirlpool Facility - Fort Smith, Arkansas | PROJECT: 2131344A



CROSS-SECTION D-D'



CROSS-SECTION OVERVIEW

APPROX. SCALE (ft.)
0 150

LITHOLOGY	
SHALE	SAND
CLAY	GRAVEL
SILT	

LEGEND	
DP BORINGS	
MONITORING WELLS	
BORING	
200	TCE CONCENTRATION (mg/kg)

NOTE:
Vertical Exaggeration is 2.5x.

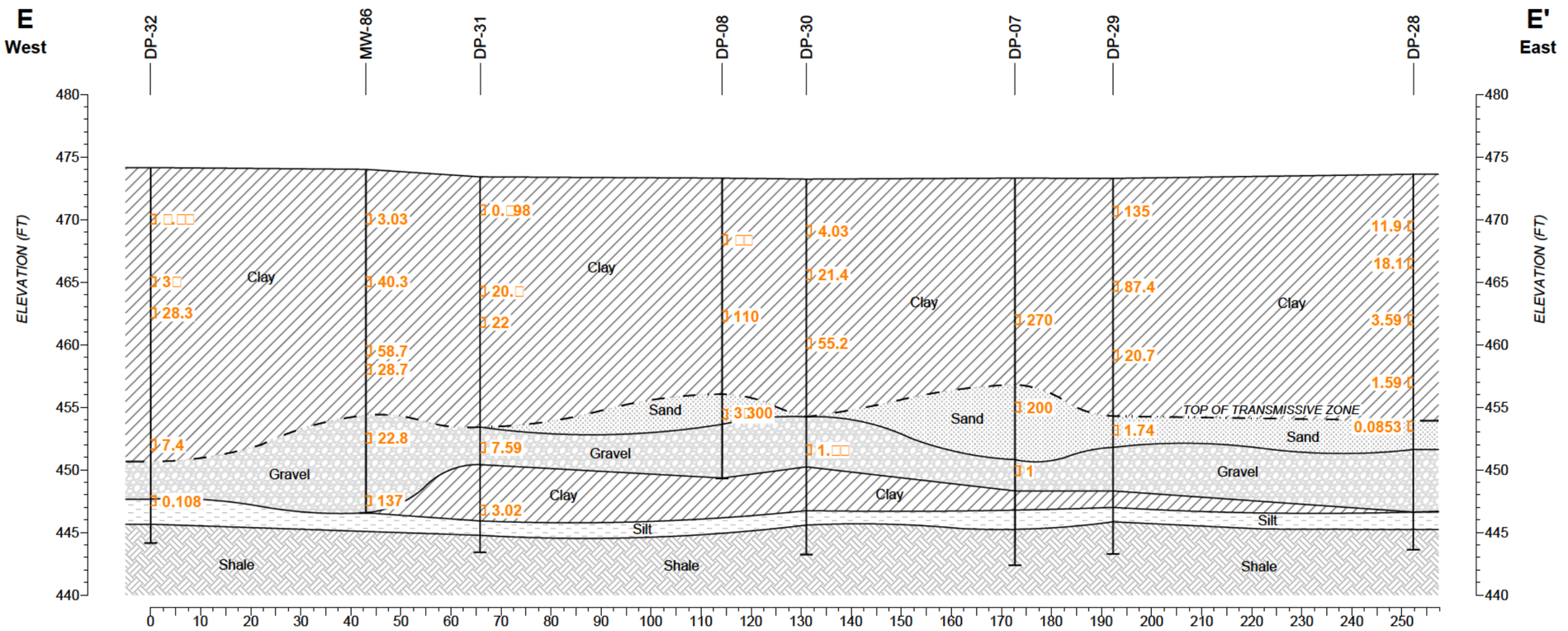
CROSS-SECTION D-D'
WHIRLPOOL FACILITY
FORT SMITH, ARKANSAS

ENVIRON

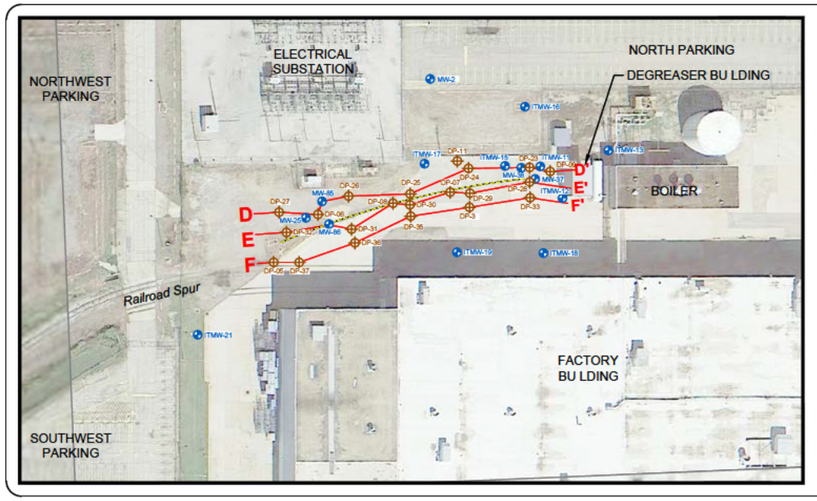
FIGURE
4-7

DRAFTED BY: CKL/ELS | DATE: 1/12/15 | 3433233A

L:\Loop Project Files\00_CAD FILES\34\NMRS_Whirlpool Ft. Smith LitSup 3433233A\2015-01\4-7, 4-8 & 4-9_Cross Sections.dwg



CROSS-SECTION E-E'



CROSS-SECTION OVERVIEW

APPROX. SCALE (ft.)
0 150

LITHOLOGY	
SHALE	SAND
CLAY	GRAVEL
SILT	

LEGEND	
DP BORINGS	
MONITORING WELLS	
BORING	
200	TCE CONCENTRATION (mg/kg)

NOTE:
Vertical Exaggeration is 2.5x.

CROSS-SECTION E-E'
WHIRLPOOL FACILITY
FORT SMITH, ARKANSAS

ENVIRON

FIGURE
4-8

DRAFTED BY: CKL/ELS | DATE: 1/12/15 | 3433233A

L:\Loop Project Files\00_CAD FILES\34\NMRS_Whirlpool Ft. Smith LitSup 3433233A\2015-01\4-7, 4-8 & 4-9_Cross Sections.dwg

F West — **F'** East

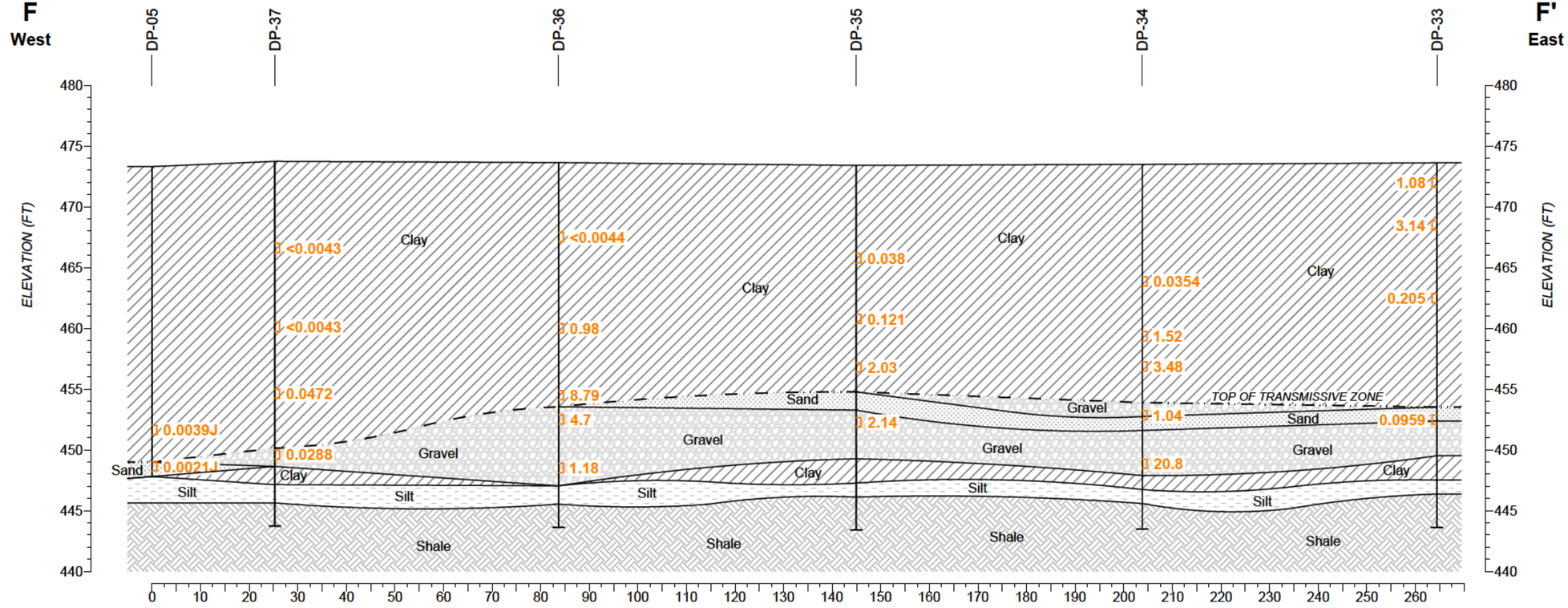
DP-05 | DP-37 | DP-36 | DP-35 | DP-34 | DP-33

ELEVATION (FT)

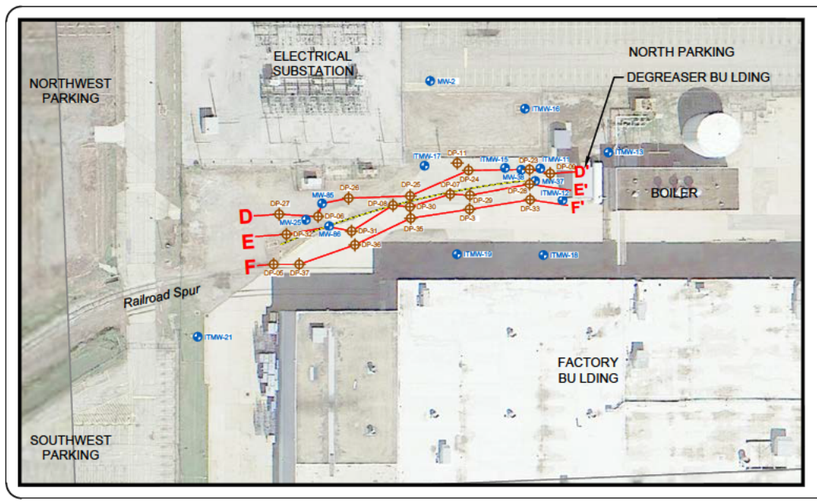
480 475 470 465 460 455 450 445 440

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260

HORIZONTAL SCALE (FT)



CROSS-SECTION F-F'



CROSS-SECTION OVERVIEW

APPROX. SCALE (ft.)
0 150

LITHOLOGY	
SHALE	SAND
CLAY	GRAVEL
SILT	

LEGEND	
DP BORINGS	
MONITORING WELLS	
BORING	
200	TCE CONCENTRATION (mg/kg)

NOTE:
Vertical Exaggeration is 2.5x.

CROSS-SECTION F-F'
WHIRLPOOL FACILITY
FORT SMITH, ARKANSAS

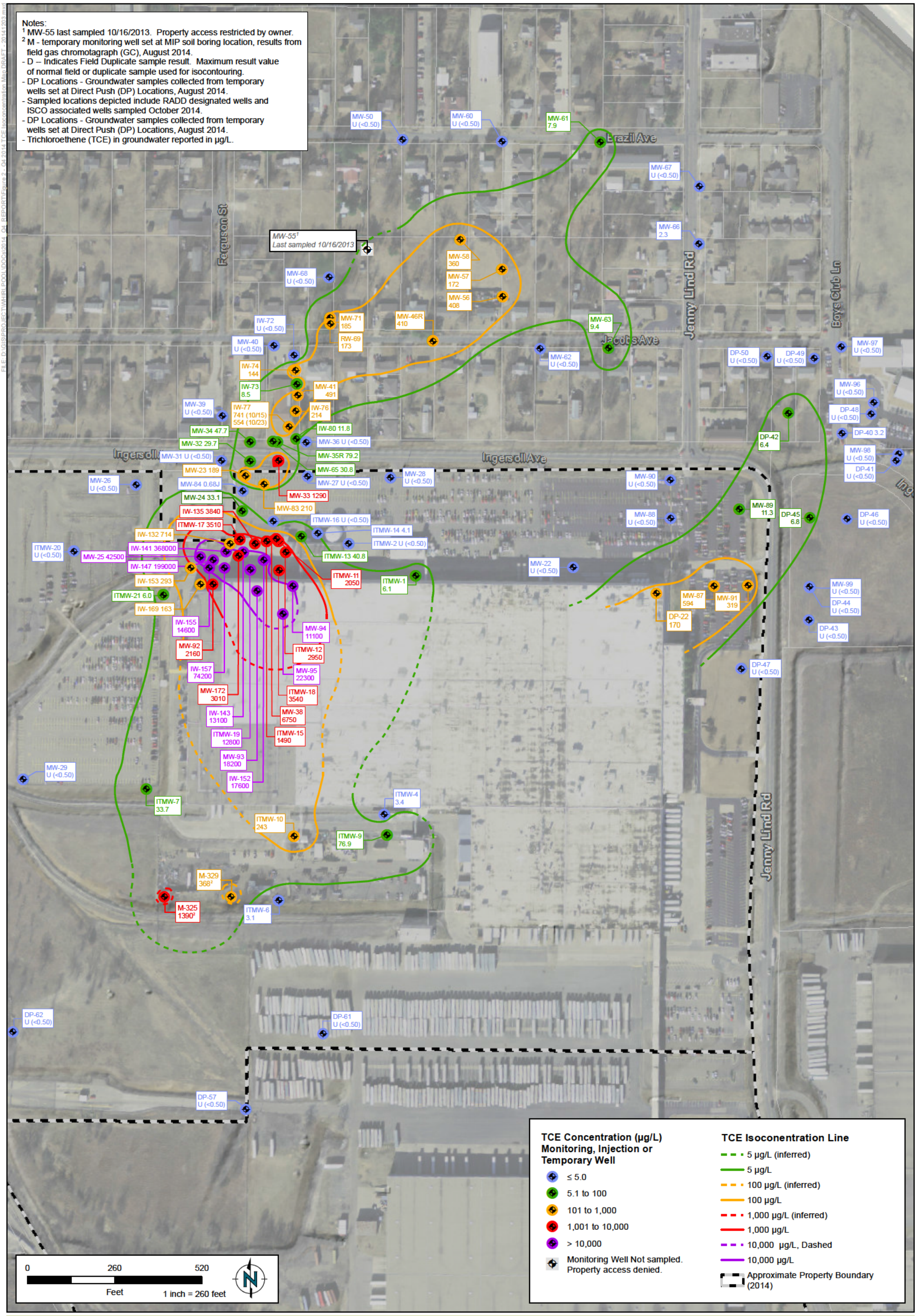
ENVIRON

FIGURE **4-9**

DRAFTED BY: CKL/ELS | DATE: 1/12/15 | 3433233A

L:\Loop Project Files\00_CAD FILES\34\NMRS_Whirlpool Ft. Smith LitSup 3433233A\2015-01\4-7, 4-8 & 4-9_Cross Sections.dwg

Notes:
[1] MW-55 last sampled 10/16/2013. Property access restricted by owner.
[2] M - temporary monitoring well set at MIP soil boring location, results from field gas chromatograph (GC), August 2014.
- D -- Indicates Field Duplicate sample result. Maximum result value of normal field or duplicate sample used for isocontouring.
- DP Locations - Groundwater samples collected from temporary wells set at Direct Push (DP) Locations, August 2014.
- Sampled locations depicted include RADD designated wells and ISCO associated wells sampled October 2014.
- DP Locations - Groundwater samples collected from temporary wells set at Direct Push (DP) Locations, August 2014.
- Trichloroethene (TCE) in groundwater reported in µg/L.



ENVIRON

FOURTH QUARTER 2014 TCE ISOCONCENTRATION MAP

Whirlpool Facility - Fort Smith, Arkansas

Figure 4-10

DRAFTED BY: KTS | DATE: 01/09/2015 | PROJECT: 2131344A

FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCs\2014_Q4_REPORT\Figure 2 - Q4 2014 TCE Isoconcentration Map DRAFT - 20141203.mxd

FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCs\2014_Q4_REPORT\EVS_Q4\Figure 4-8 - 2014 Remedial Effectiveness Map DRAFT 20150109.mxd

Notes

[1] MW-55 last sampled 10/16/2013. Property access restricted by owner.

[2] M - temporary monitoring well set at MIP soil boring location, results from field gas chromotagraph (GC), August 2014.

- Trichloroethene (TCE) in groundwater reported in µg/L.
- DP Locations - Groundwater samples collected from temporary wells set at Direct Push (DP) Loca ions, August 2014.
- Sampled locations depicted include RADD designated wells and ISCO associated wells sampled October and Decemberr 2014.
- DP Locations - Groundwater samples collected from temporary wells set at Direct Push (DP) Loca ions, August 2014.

Brazil Ave
Ferguson St
Jenny Lind Rd
Boys Clrb Ln
Jacobs Ave
Ingersoll Ave
Jenny Lind Rd

MW-55[1] Last sampled 10/16/2013
MW-50 <0 50U
MW-60 <0.50U
MW-61 7 9
MW-67 <0 50U
MW-66 2.3J
MW-58 360
MW-57 172
MW-56 408
MW-68 <0 50U
IW-72 <0.50U
MW-71 185
RW-69 173
MW-46R 410
MW-40 <0.50U
MW-63 9.4
MW-62 <0.50U
MW-97 <0 50U
IW-74 144
IW-73 8.5
MW-41 491
MW-39 <0 50U
MW-65 30.8
IW-76 214
IW-77 554
MW-34 47.7
IW-80 11.8
MW-32 29.7
MW-36 <0.50U
MW-35R 79 2
MW-96 <0.50U
DP-42 6.4
MW-98 <0 50U
MW-31 <0 50U
MW-27 <0.50U
MW-28 <0.50U
MW-90 <0.50U
MW-26 <0.50U
MW-23 189
MW-33 1290
MW-84 0.68J
MW-83 210
MW-24 33.1
MW-89 11.3
IW-132 714
ITMW-16 <0.50U
MW-88 <0.50U
IW-141 46300
ITMW-14 4.1J
MW-85 27700
ITMW-2 <0.50U
ITMW-20 <0 50U
MW-25 2620J
ITMW-13 40 8
MW-86 169000
ITMW-11 1530
ITMW-1 6.1
MW-22 <0 50U
MW-99 <0.50U
IW-153 1.6J
ITMW-12 468
MW-87 594
ITMW-21 6
IW-127 182
DP-22 170
MW-91 319
IW-155 14600
MW-94 9570
IW-147 91600
MW-95 20900
IW-169 163
ITMW-18 3690
MW-92 2200
IW-157 31700
MW-38 3190
MW-172 1810
ITMW-15 63
ITMW-17 4630
IW-152 <0.50U
IW-143 13100
MW-93 14600
ITMW-19 33.5
IW-135 3840
MW-29 <0.50U
ITMW-7 33.7
ITMW-4 3.4J
ITMW-10 243
ITMW-9 76.9
M-329 368[2]
M-325 1390[2]
ITMW-6 3.1J

0 260 520
Feet
1 inch = 260 feet

TCE Concentration (µg/L) Monitoring Well

- ≤ 5.0
- 5.1 to 100
- 101 to 1,000
- 1,001 to 10,000
- > 10,000
- Monitoring Well Not sampled. Property access denied.

TCE Isoconentration 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, Dashed
- 10,000 µg/L
- Approximate Property Boundary (2014)

ENVIRON

DRAFTED BY: KTS | DATE: 01/09/2015

2014 REMEDY EFFECTIVENESS PLUME MAP

Whirlpool Facility - Fort Smith, Arkansas

Figure 4-11

PROJECT: 2131344A

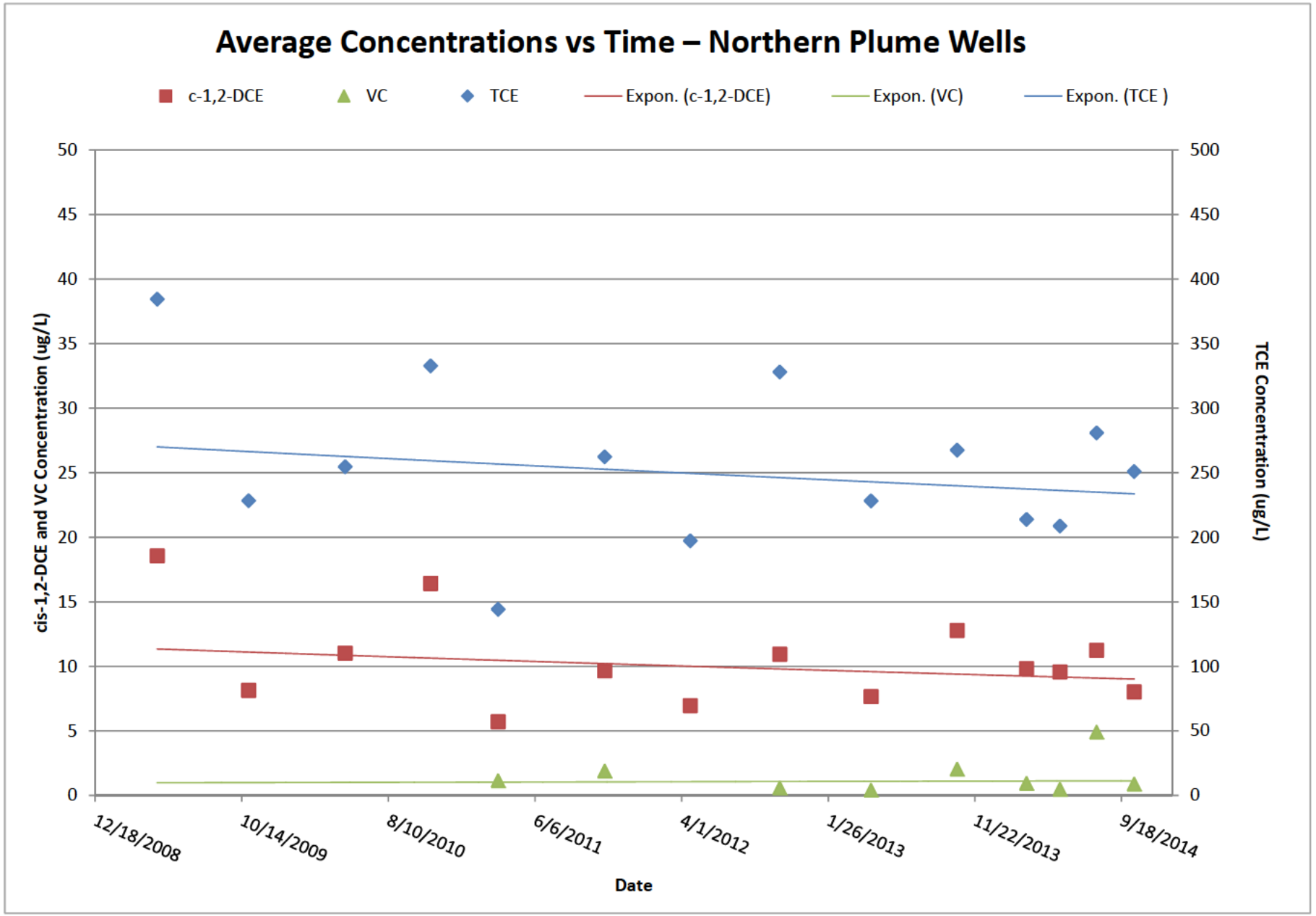


Figure 5-1
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

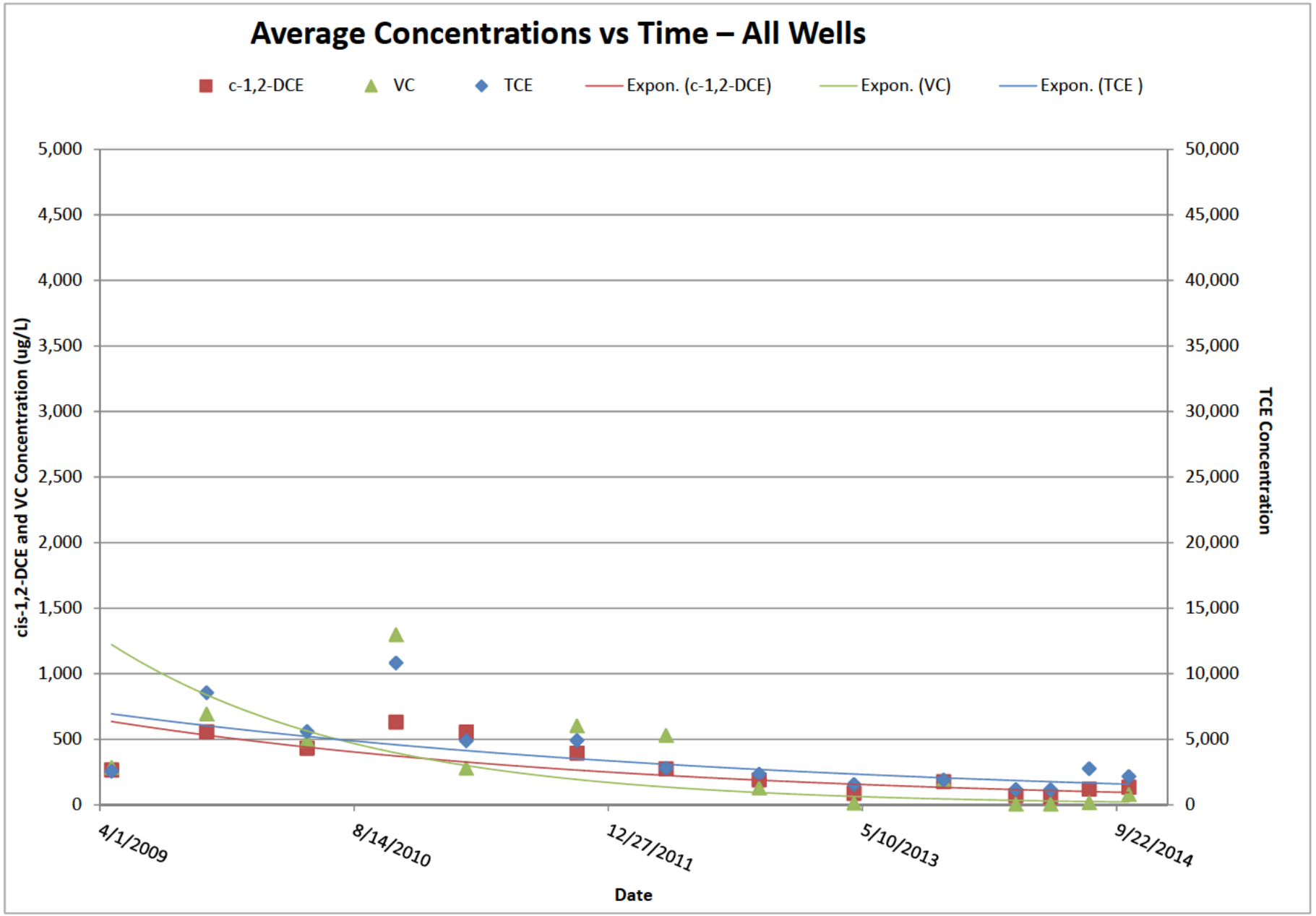


Figure 5-2
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

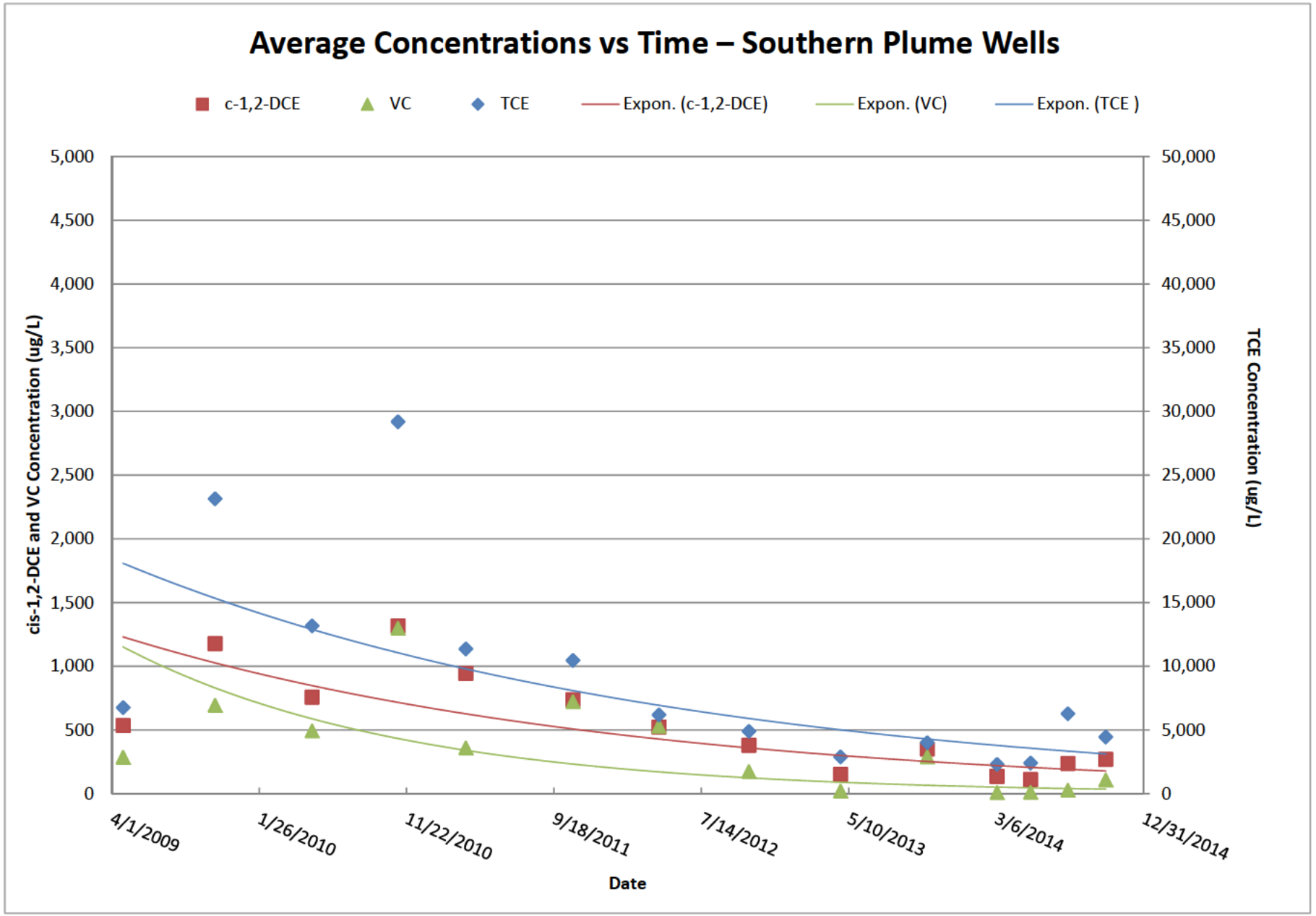


Figure 5-3
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

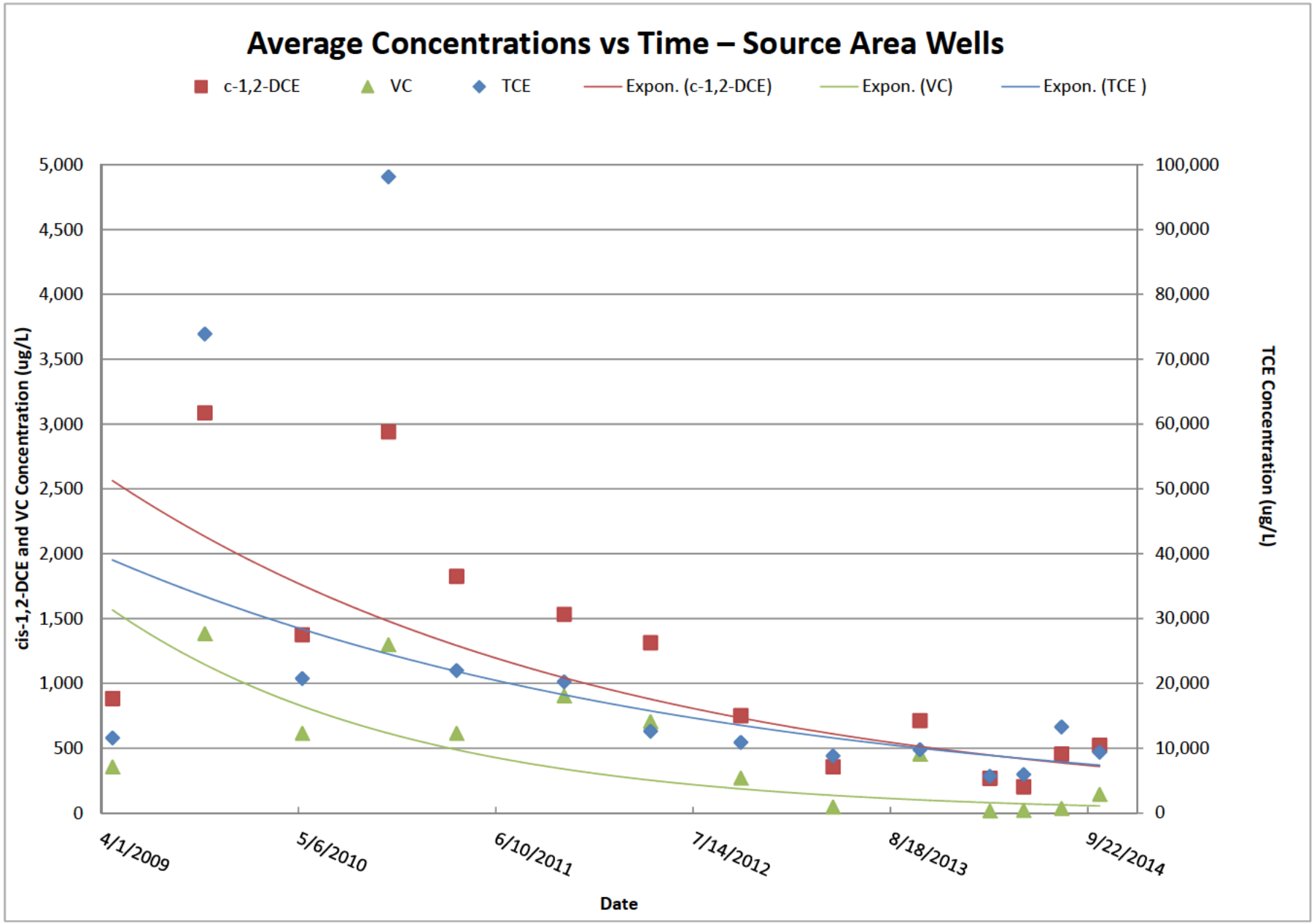
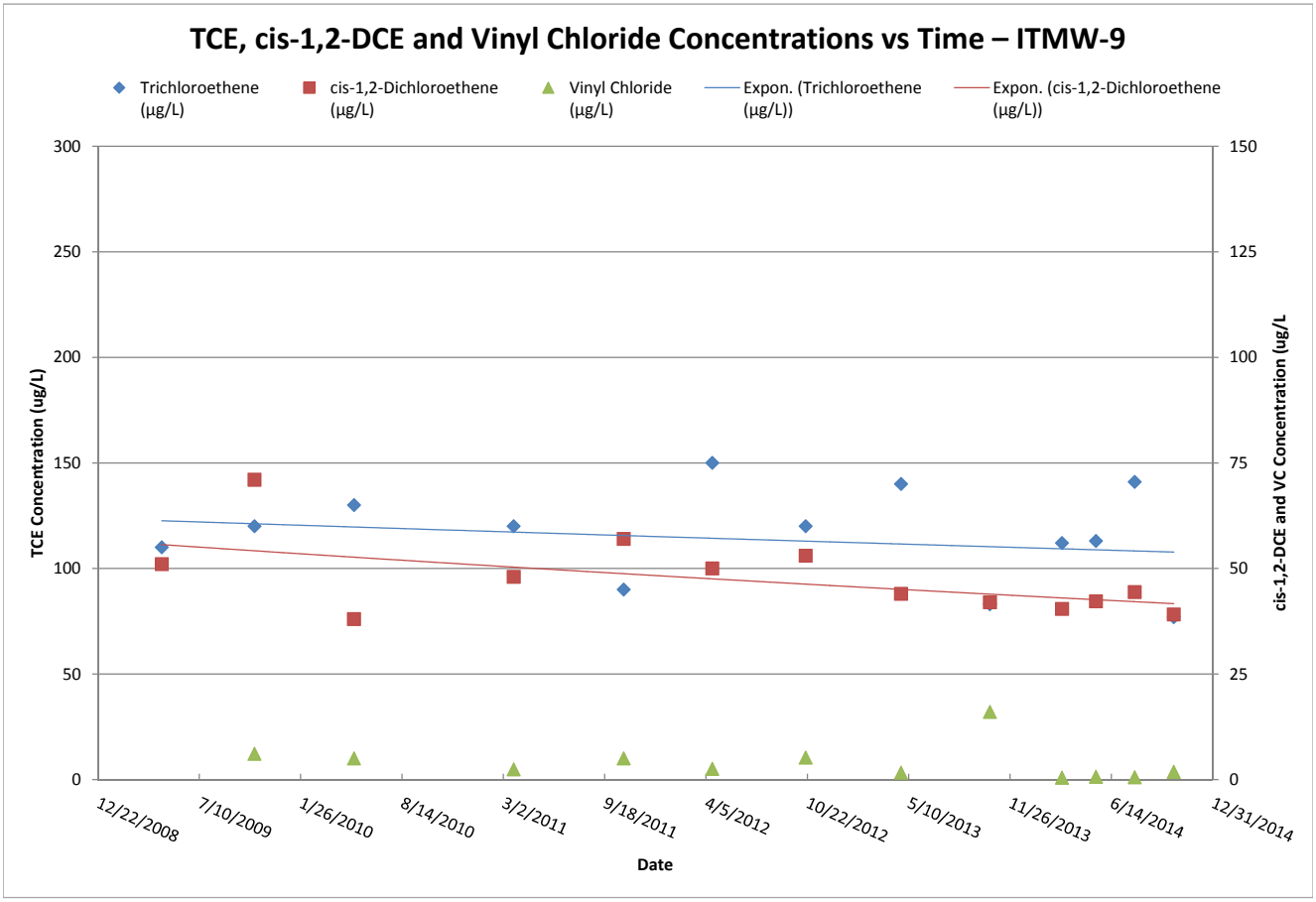


Figure 5-4
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON



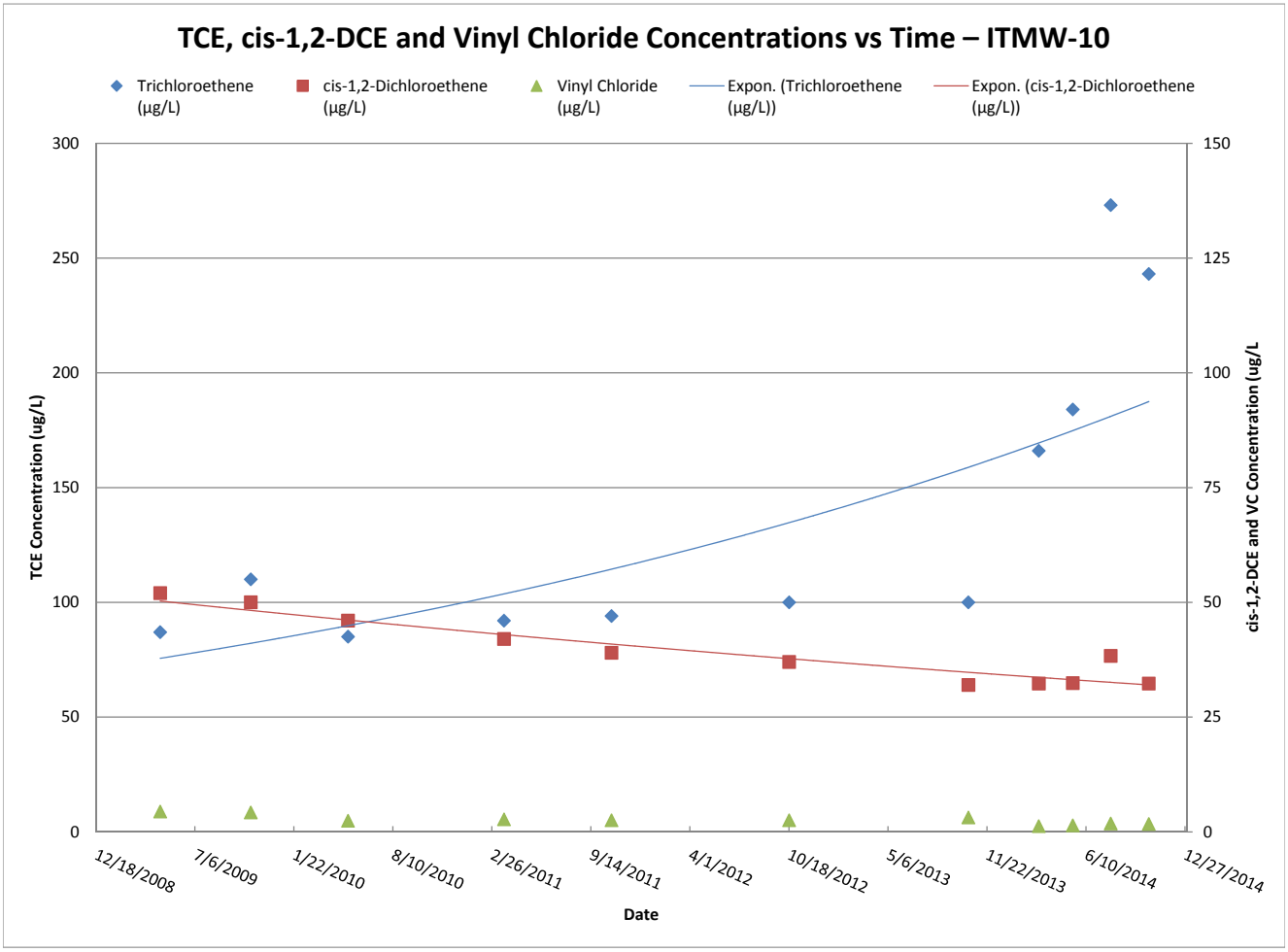
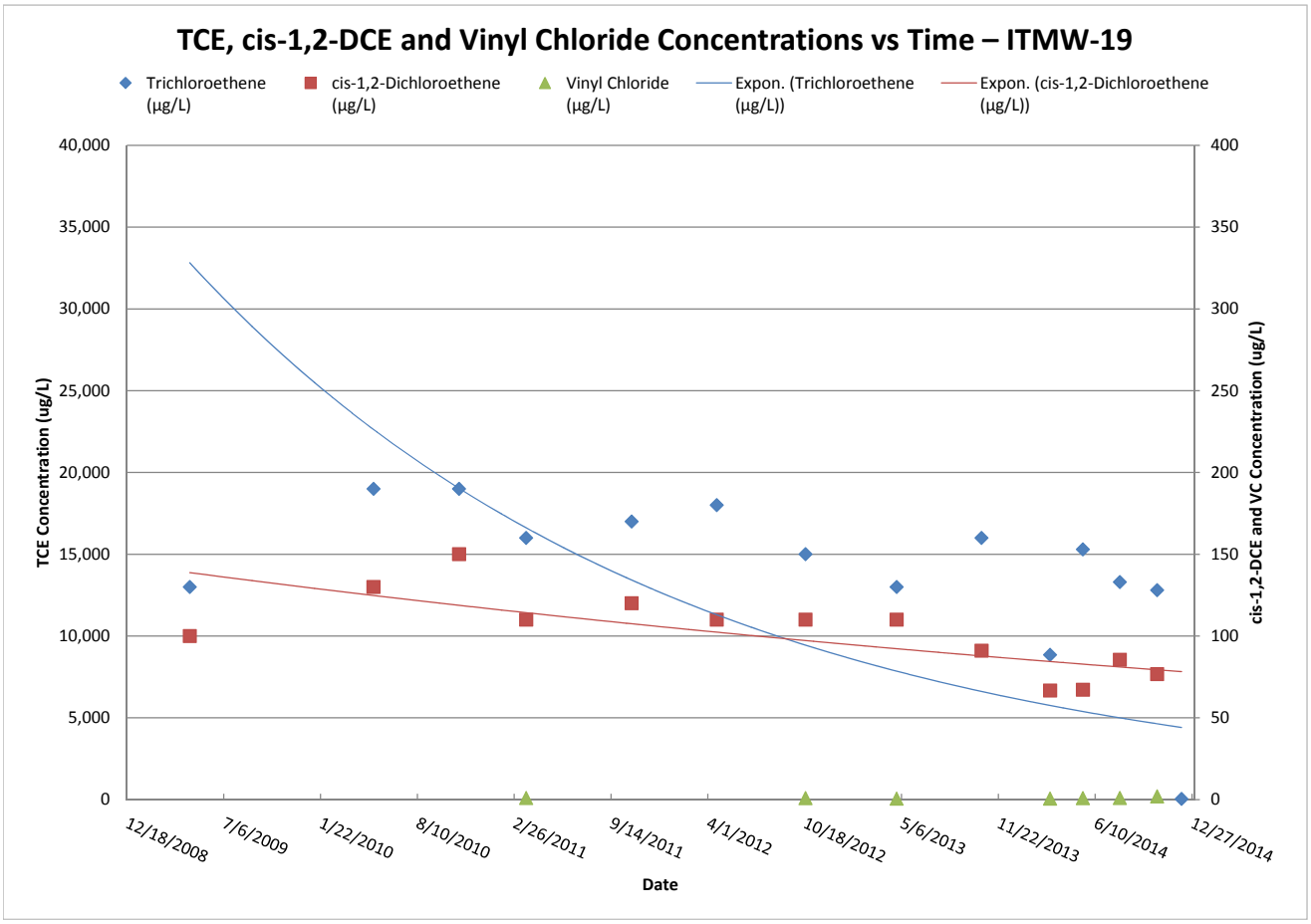


Figure 5-5
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON



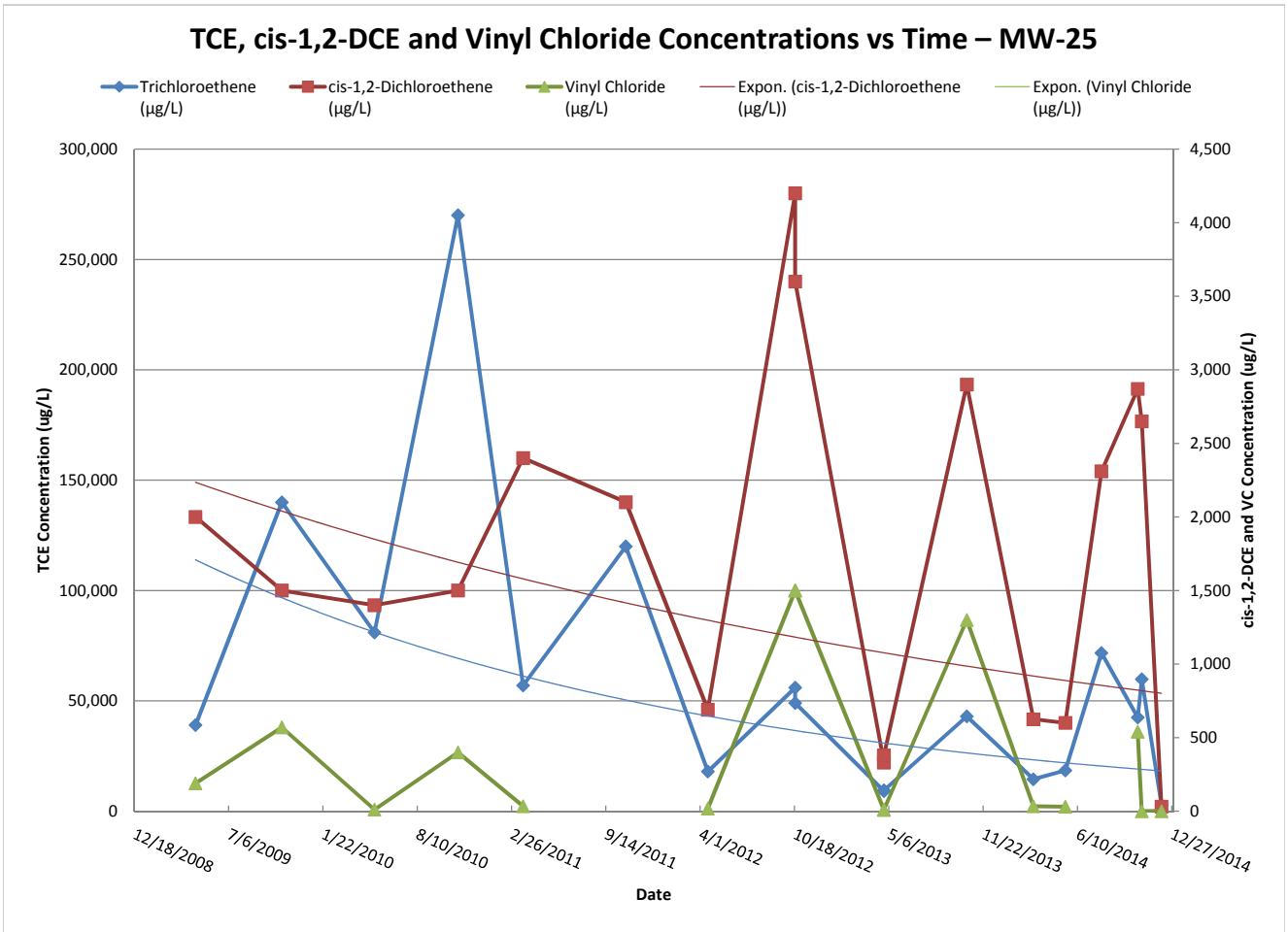
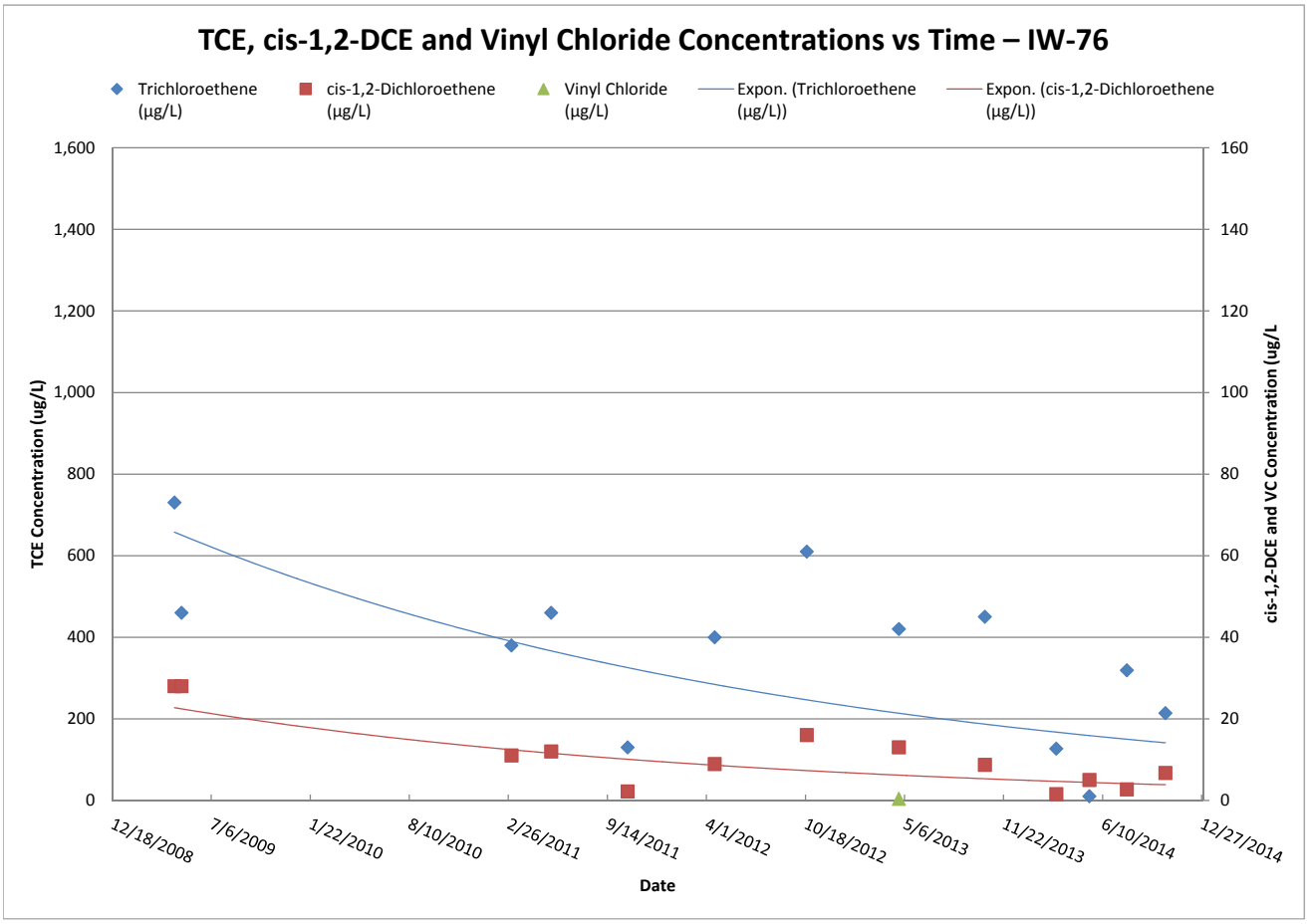


Figure 5-6
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON



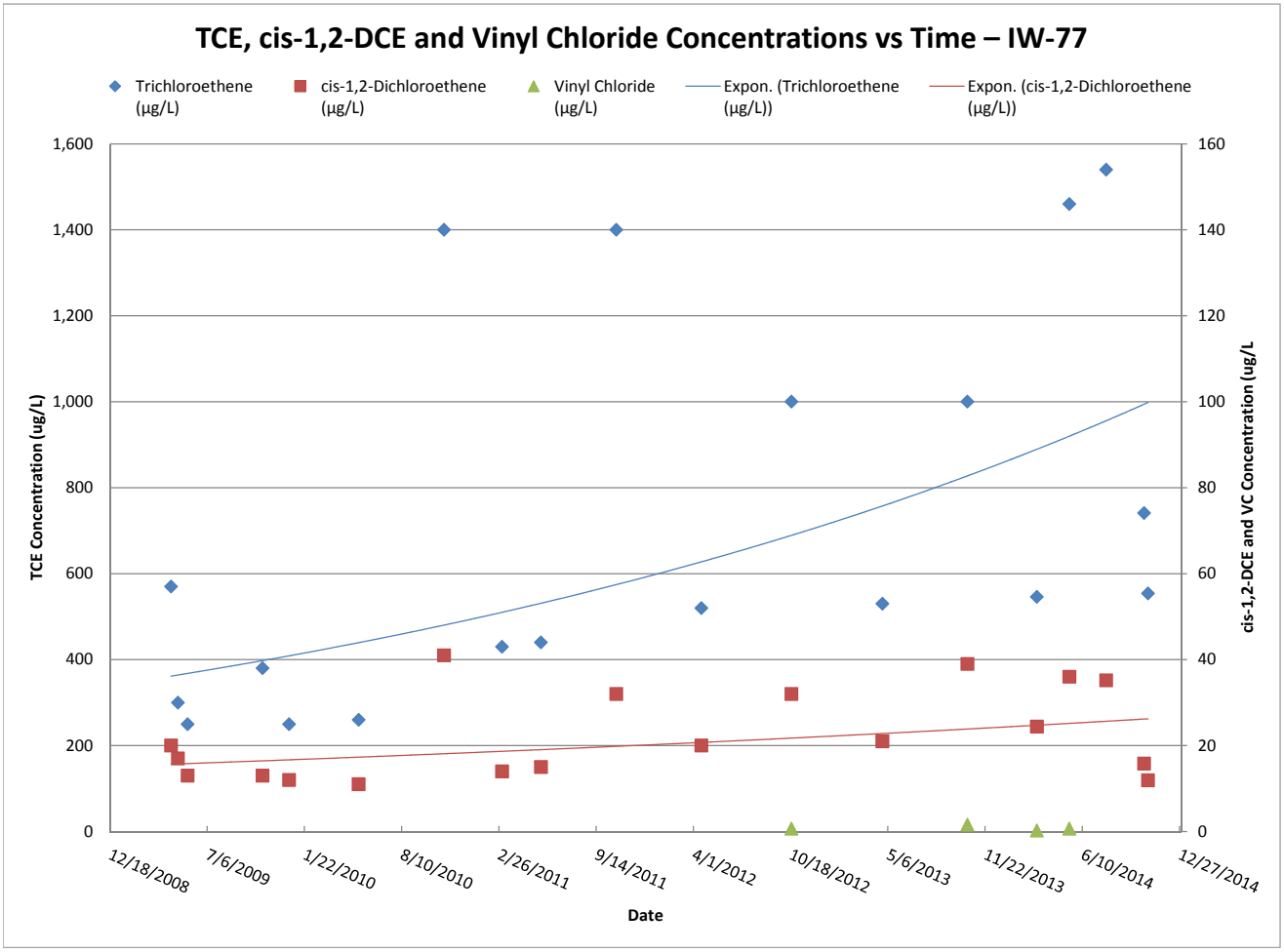


Figure 5-7
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

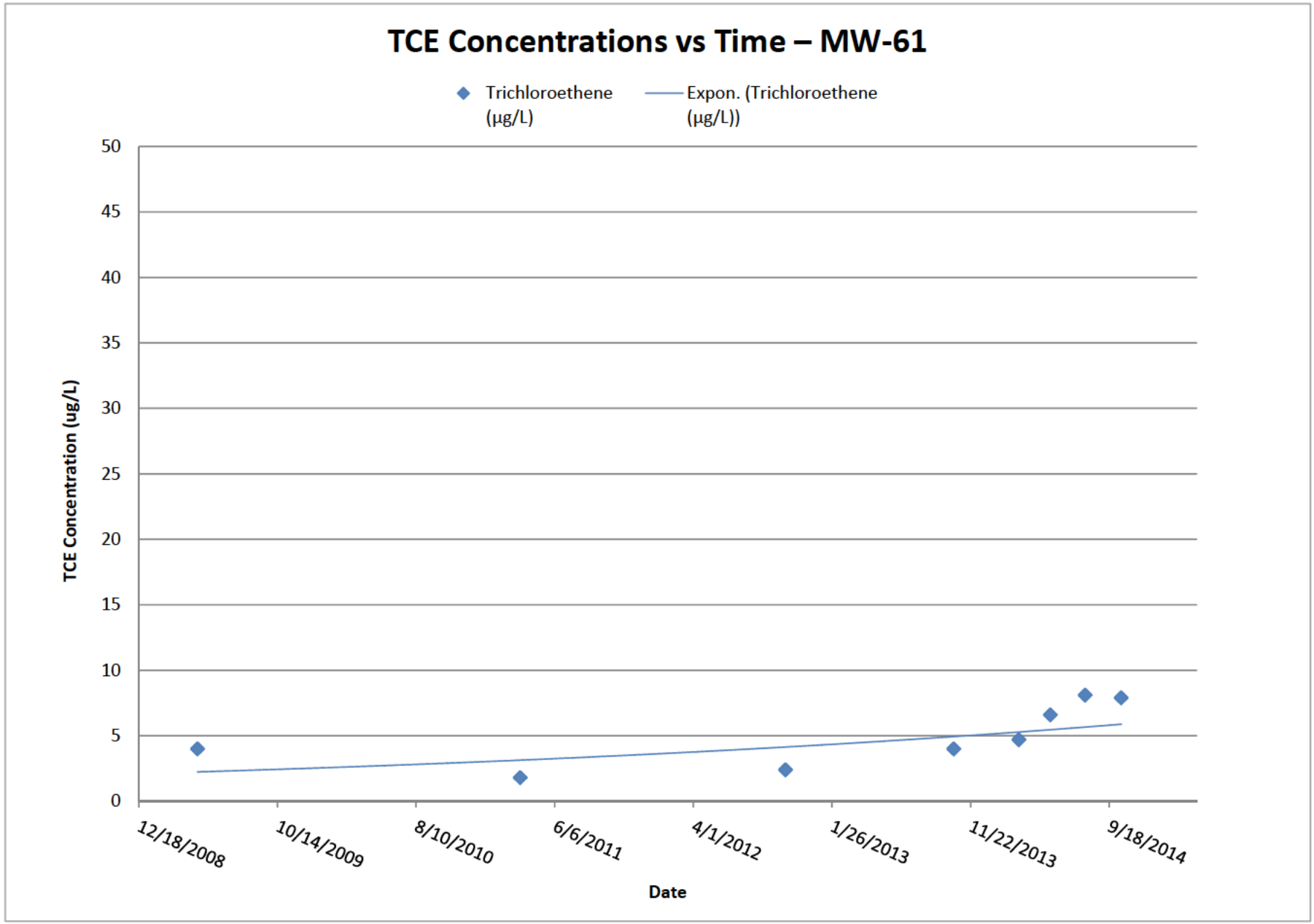
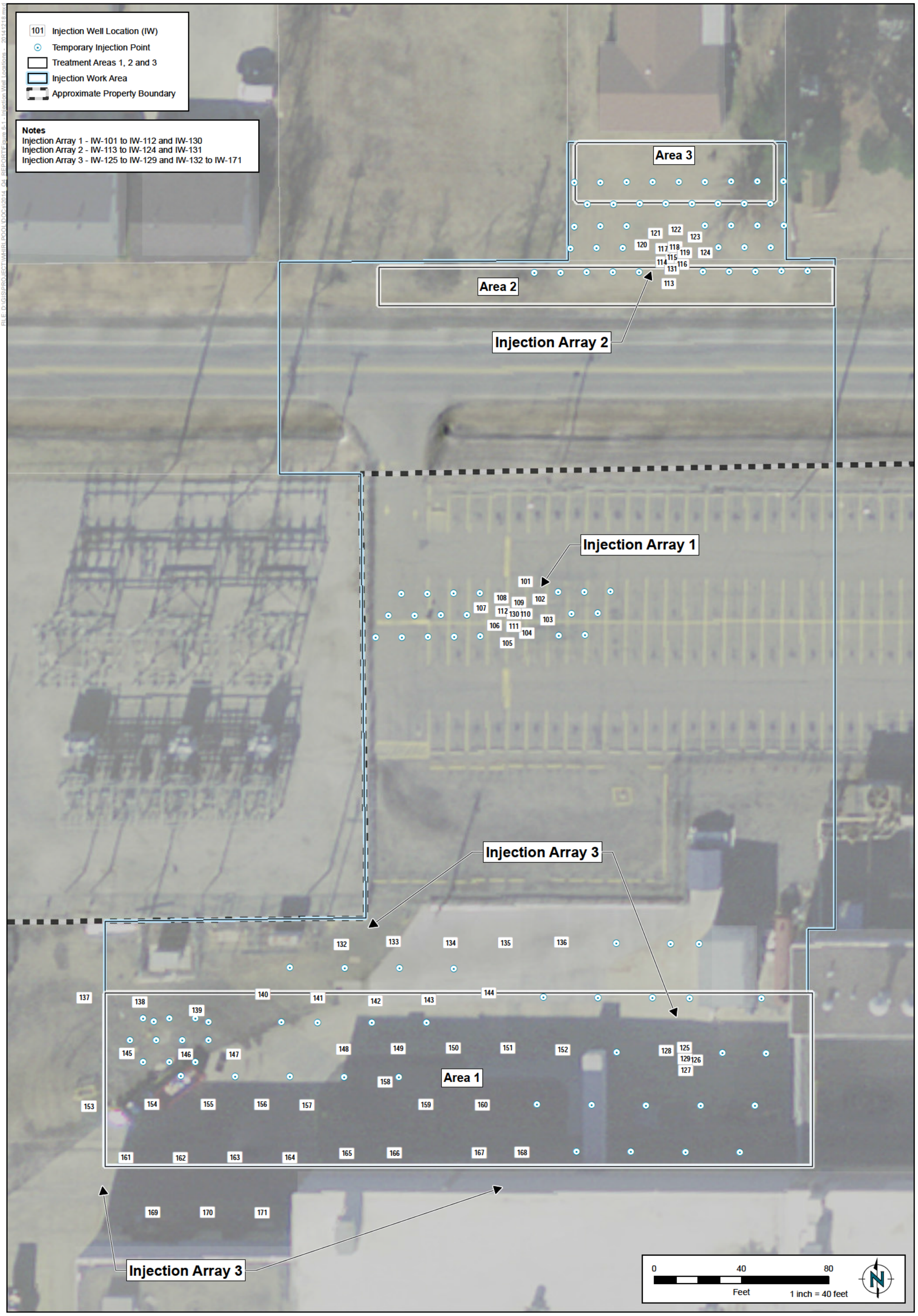


Figure 5-8
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON



ENVIRON

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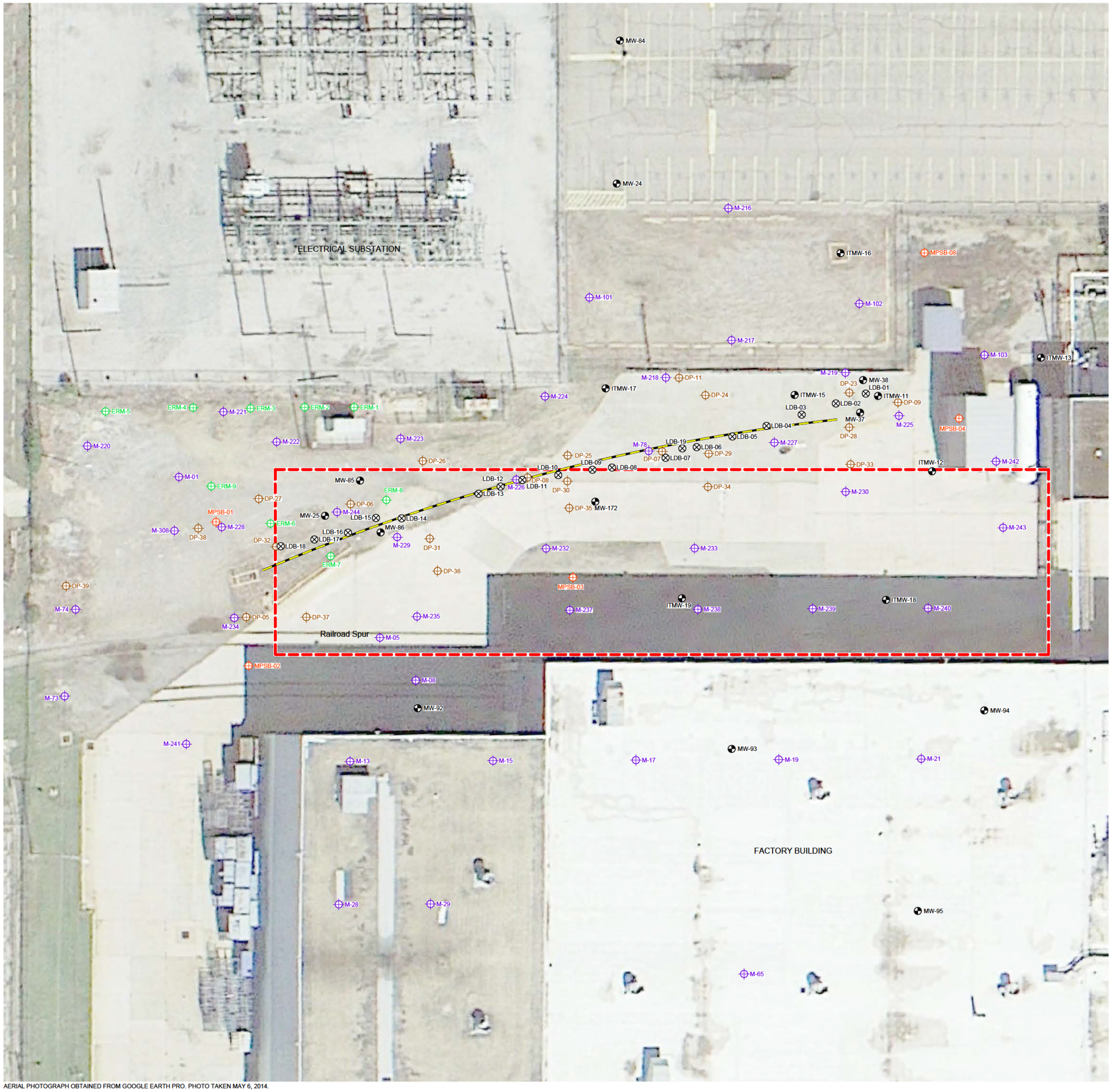
INJECTION ARRAYS ONE, TWO AND THREE

Whirlpool Facility - Fort Smith, Arkansas

Figure 6-1

PROJECT: 3433253A



AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO. PHOTO TAKEN MAY 6, 2014.

LEGEND

- EXTENT OF AREA 1
- FORMER LINEAR DRAINAGE FEATURE
- MIP BORINGS
- ERM BORINGS
- DP BORINGS
- MPSB BORINGS
- MONITORING WELLS
- LARGE DIAMETER BORINGS

0 15 30 60

APPROXIMATE SCALE (FT)

LARGE DIAMETER BORINGS

AREA 1 DETAIL
WHIRLPOOL FACILITY
FORT SMITH, ARKANSAS

ENVIRON

FIGURE 6-2

DRAFTED BY: CKL/ELS | DATE: 12/19/14 | 3433233A

L:\Loop Project Files\00_CAD FILES\34\Whirlpool Pre-Design Activities 3433253A\6-2_Large Diameter Borings.dwg