

GW – 001

1 of 3

**GW
REMEDIATION
& MONITORING
REPORT**

2014



Bloomfield Terminal

2014 Groundwater Remediation and Monitoring Annual Report

January - December 2014

Submitted April 2015

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Bloomfield Terminal

Western Refining Southwest, Inc.

#50 Rd 4990

Bloomfield, New Mexico 87413

Submitted: April 2015

Prepared for
New Mexico Oil Conservation Division and
New Mexico Environment Department – Hazardous Waste Bureau

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List of Acronyms

benzene, toluene, ethylbenzene, and xylene (BTEX)
below grade level (bgl)
diesel range organics (DRO)
dissolved oxygen (D.O.)
Environmental Protection Agency (EPA)
feet (ft)
gallons per minute (gpm)
gasoline range organics (GRO)
New Mexico Environment Department Hazardous Waste Bureau (NMED-HWB)
New Mexico Environment Department Oil Conservation Division (NMOCD)
investigation derived waste (IDW)
liters (L)
maximum contaminant level (MCL)
methyl tert-butyl ether (MTBE)
micrograms per liter (ug/L)
micro Siemens per centimeter (uS/cm)
milligrams per liter (mg/L)
millivolts (mV)
monitoring well (MW)
New Mexico Administrative Code (NMAC)
Oxidation reduction potential (ORP)
parts per million (ppm)
photoionization detector (PID)
polyvinyl chloride (PVC)
pounds per square inch (psi)
Resource Conservation and Recovery Act (RCRA)
Semi-volatile organic compounds (SVOCs)
separate phase hydrocarbon (SPH)
Standard cubic feet per minute (scfm)
Temporary piezometer (TP)
top of casing (TOC)
total petroleum hydrocarbon (TPH)

toxicity characteristic leaching procedure (TCLP)

volatile organic compounds (VOC)

Wastewater Treatment System (WWTS)

Water Quality Control Commission (WQCC)

EXECUTIVE SUMMARY

This Annual Report includes a summary of activities conducted at the Bloomfield Terminal in 2014 pursuant to the reporting requirements outlined in Section IV.A.2. of the July 2007 Consent Order (NMED, 2007) issued by the New Mexico Environment Department Hazardous Waste Bureau (NMED-HWB), and Section 22 of Discharge Permit GW-001 (NMOCD, 2010) issued to the by the New Mexico Energy, Mineral, and Natural Resources Department Oil Conservation Division (NMOCD). This report includes a summary of sampling activities, total fluids recovery, below-grade testing, and remediation monitoring activities conducted in 2014.

Groundwater Measurements

Depth-to-groundwater and depth-to-product measurements were collected from the facility monitoring wells, recovery wells, observation wells, and collection wells prior to the collection of groundwater samples during the Semi-Annual and Annual Sampling Events conducted in April 2014 and August 2014, respectively. The field measurements were collected a minimum of 48 hours after the recovery well pumps were turned off to allow the groundwater elevation to stabilize. Groundwater elevation contours show that groundwater generally flows in the northwest general direction, with groundwater under the former process areas flowing towards the north boundary barrier wall and Hammond Ditch collection system.

Groundwater Monitoring

Groundwater monitoring activities conducted in 2014 included the collection of groundwater samples and field data from the following four areas of facility.

- Refinery Complex – includes Refinery, Cross-Gradient, Downgradient, and RCRA Wells
- North Boundary Barrier – includes observation and collection wells
- San Juan River Bluff – includes Outfall and Seep locations
- San Juan River Terrace – includes San Juan River samples

Sampling associated with the Bioventing System located at the River Terrace is summarized in the *River Terrace Voluntary Corrective Measures Bioventing System Annual Report*, which is submitted in March of each year. Groundwater monitoring activities conducted in April 2014 followed the guidelines outlined in the approved Facility-Wide Groundwater Monitoring Plan dated June 2012. Monitoring activities conducted in August 2014 followed the guidelines outlined in the approved Facility-Wide Groundwater Monitoring Plan dated June 2013.

Groundwater concentrations above respective screening levels are primarily localized near the refinery process units. Active groundwater recovery systems within the facility provide hydraulic capture of the impacted groundwater, and thus eliminate the concern of impacts to the San Juan River.

Outfall and Seep Inspections

Bi-monthly visual inspections of Seep 1 through Seep 9 and along the San Juan River Bluff, which includes the East Fork area, were conducted in 2014. Visual inspection results and samples collected along the San Juan River as part of the groundwater monitoring program for the Bloomfield Refinery indicate that there has been no impact to the San Juan River.

Total Fluids Recovery Systems

The Bloomfield Terminal operates and monitors several fluid recovery systems within the facility, which include:

- Groundwater Recovery System using recovery wells within the Refinery Complex;
- North Boundary Barrier Collection System;
- Hammond Ditch Recovery System;
- River Terrace Remediation system; and
- East Outfall Recovery System.

All fluids recovered from these systems, are pumped to the on-site Waste Water Treatment Plant for treatment prior to disposal through the on-site injection well.

Below-Grade Testing and Tank Inspections

In compliance with the Facility's Discharge Permit dated July 2010, underground process piping and sumps were inspected to determine their integrity for service. All piping and sumps tested in 2014 passed inspections and were returned to normal service following completion of testing activities. In addition, petroleum storage tanks continue to be inspected at a frequency that is in compliance with API 650 and 653 guidelines.

SECTION 1.0

INTRODUCTION

1.1 Site Location and Description

Owner: San Juan Refining Company, a New Mexico Corporation
1250 Washington Street
Tempe, Arizona 85281

Operator: Western Refining Southwest, Inc.
(Formerly Giant Industries Arizona, Inc.), an Arizona Corporation
1250 Washington Street
Tempe, Arizona 85281

Facility: Bloomfield Terminal (physical address)
50 Road 4990
Bloomfield, New Mexico 87413

Western Refining Southwest, Inc. (postal address)
P.O. Box 159
Bloomfield, New Mexico 87413

US EPA ID: NMD089416416

SIC Code: 5171

The former Bloomfield Refinery facility is currently owned by San Juan Refining Company, a New Mexico corporation, and operated by Western Refining Southwest, Inc. formerly known as Giant Industries Arizona, Inc., an Arizona corporation. The facility had an approximate refining capacity of 18,000 barrels per day. Various process units operated at the facility, which included crude distillation, reforming, fluidized catalytic cracking, sulfur recovery, merox treater, catalytic polymerization, and diesel hydrotreating. Products produced at the refinery included gasoline, diesel fuels, jet fuels, kerosene, propane, butane, naphtha, residual fuel, fuel oils, and LPG.

The Bloomfield Facility is located on approximately 263 acres south of Bloomfield, New Mexico in San Juan County (Figure 1). The Bloomfield complex is bisected by County Road 4990 (Sullivan Road), which runs east-west. The terminal offices, former process units, tank farm, wastewater treatment system, raw water ponds, and fire training area are located north of the county road. On November 23, 2009, Western Refining indefinitely suspended refining operations at the Bloomfield Facility. The crude oil unloading areas, product loading racks, former LPG storage tanks, maintenance buildings/90-day storage area, pipeline offices, transportation truck shop, and Class I injection well are located south of the country road (Figure 2).

The Bloomfield facility is located on a bluff 120 feet above the south side of the San Juan River. The top of the bluff is relatively flat and is at an elevation of 5,540 feet above sea level. Based on the available site-specific and regional subsurface information, the site is underlain by the Quaternary Jackson Lake terrace deposits, which unconformably overlie the tertiary Nacimiento Formation. The Jackson Lake deposits consist of fine grained sand, silt, and clay that grades to coarse sand, gravel and cobble size material closer to the contact with the Nacimiento Formation. The Jackson Lake Formation is over 40 feet thick near the southeast portion of the site and generally thins to the northwest toward the San Juan River. The Nacimiento Formation is primarily composed of fine grained materials (e.g., carbonaceous mudstone/claystone with interbedded sandstones) with a reported local thickness of approximately 570 feet (Groundwater Technology, 1994).

1.2 History of Facility Modifications and Improvements

1.2.1 Previous Owner's Activities

Local entrepreneur, Kimball Campbell, constructed the crude topping unit that eventually became the Bloomfield Refinery facility in the late 1950s. O.L. Garretson bought the facility in the early 1960s, renamed it Plateau, Inc. and sold it in 1964 to Suburban Propane of New Jersey.

Operationally, the facility had steadily evolved through a series of improvements, modifications and expansions. Suburban upgraded the facility in 1966, increasing the Crude Unit throughput to 4,100 barrels per calendar day (bpcd) and adding 1,850 bpcd Reformer and Naphtha Hydrotreater. In 1975, the Crude Unit was expanded to 8,400 bpcd.

In 1979, the Crude Unit was expanded again to 16,800 bpcd (later demonstrated to have a hydraulic capacity in excess of 18,000 bpcd). A Fluidized Catalytic Cracker (FCC) with a nominal capacity of 6,000 bpcd, an Unsaturated Gas Plant and a Treater Unit were also added at that time. The capacity of the Reformer / Hydrotreater was increased to 2,250 bpcd. The FCC was upgraded in 1982 to conform to State and Federal air quality standards.

1.2.2 Bloomfield Refining Activities

Bloomfield Refining Company (BRC) acquired the facility from Suburban Propane (Plateau) on October 31, 1984. The current owner of the facility is San Juan Refining Company. Western Refining Southwest, Inc. is the facility operator.

Over the years, there have been many improvements made to facility operations and equipment. These improvements are summarized below.

1986

- Relocated the spent caustic tank onto a concrete pad with retaining walls.

1987

- Upgraded the Reformer and increased its capacity to 3,600 barrels per day (bpd). Modified the Laboratory and Treater Unit and increased tank storage capacity.
- Cleaned up the North and South bone yards.
- Decommissioned and dismantled old Tanks 6 and 7.
- Relocated the API recovered oil Tank 8 and Tank 9 to concrete pads with concrete retaining walls.
- Established a systematic inspection, maintenance, and repair program for tanks.

1988

- Added a 2,000 bpd Catalytic Polymerization Unit. Removed the facility's two underground storage tanks and replaced them with aboveground storage tanks.
- Completed installation of a Cathodic Protection System for the Tank Farm and underground piping.
- Rebuilt the process area sewer system and added curbed, concrete paving to the unpaved process areas.

1989

- Increased Reformer throughput to 4,000 bpd.
- Activated the groundwater hydrocarbon recovery system.
- Constructed the first double-lined Evaporation Pond as part of Refinery's Discharge Plan improvements.

1990

- Constructed the second double-lined Evaporation Pond as part of the Refinery's Discharge Plan improvements.
- Constructed a drum storage shed and converted to bulk chemical usage, where possible, in order to minimize the use of drummed chemicals.

1991

- Revamped the burner fuel sales rack with concrete paving and curbing.
- Submitted the permit application for a Class 1 Disposal Well.
- Upgraded the groundwater hydrocarbon recovery system.

1992

- Submitted an air quality permit application. The application included a proposal to install a Diesel Hydrodesulphurization (HDS) Unit and a Sulfur Recovery Unit (SRU) in order to comply with new EPA low-sulfur diesel regulations and decrease air emissions.

1993

- Began a program under a Consent Agreement with the United States Environmental Protection Agency (USEPA) to conduct Interim Measures (IM), a RCRA Facility

Investigation (RFI) and a Corrective Measures Study (CMS) addressing groundwater contamination.

- Replaced portions of the underground cooling water piping.
- Added concrete paving around the API Separator.
- Installed the HDS Unit and SRU.

1994

- Completed installation of the Class 1 Injection Well.
- Retrofitted the Aeration Lagoons with two additional liners.
- Installed a floating cover for the API Separator.
- Closed the clay-lined evaporation ponds and spray evaporation area.

1995

- Improved the diking south of the Refinery to further reduce storm water runoff.
- Began implementation of additional corrective measures for groundwater cleanup as determined from the CMS.

1998

- Converted the former evaporation ponds on the east side of the Refinery to raw water storage ponds.

1999

- Installed sheet pilings and a bentonite slurry wall adjacent to the San Juan River, North of the process units, in order to intercept a small hydrocarbon seep that had been detected in the area.

2001

- Initiated a program to inoculate the Aeration Lagoons with sludge-consuming micro-organisms.

2002

- A concrete liner was installed on the Hammond Ditch. At that time, Giant constructed the Hammond Ditch French Drain Recovery System to address contamination under the ditch.

2003

- Several monitoring wells were converted into recovery wells to further enhance the continuing ground water remediation efforts. MW-45, MW-46 & MW-47 were installed to facilitate sample collection. East Outfall #1 Recovery System was set up to return impacted water back to the refinery.

2004

- Monitoring well MW-48, MW-49 and eight temporary piezometers were installed as part of Voluntary River Terrace Investigation activities.

- Several temporary piezometers were drilled on the north side of Hammond Ditch to chart the surface elevation of the Nacimiento Formation. Design of a slurry wall to be constructed on the north side of Hammond Ditch was completed.
- Lined containments were constructed in the draws north of Hammond Ditch in order to collect potentially contaminated groundwater which discharged to the land surface.
- Sewer lines were replaced in the Treater and FCC.

2005

- The North Boundary Barrier Wall installation was completed March 2005. Fourteen observation wells were installed on the north side of the slurry wall and fifteen collection wells were installed on the south side of the slurry wall in April 2005.
- As a matter of preventive maintenance, the lined containments in the draws north of the slurry wall were upgraded periodically.
- In April, five more temporary piezometers were installed at the River Terrace. In August, Dewatering Wells (DW-1 and DW-2) and thirteen bioventing wells were drilled and construction of the River Terrace Bioventing Project was initiated.

2006

- The River Terrace Bioventing System was put on-line in January 2006. Monitoring data from that project is submitted in a separate report to the regulatory agencies.
- During the week of February 13, 2006 seven sump wells were installed along the bluff north of the barrier wall. These wells were drilled in accordance with the North Barrier Wall Work Plan which was submitted to OCD February 7, 2006.
- Fluids extraction from the observation and collection wells, the north draws, and the sump wells continued throughout 2006.
- As a matter of preventive maintenance, the lined containments in the draws north of the slurry wall were upgraded periodically.

2007

- On May 31, 2007, Giant Industries, Inc. became a wholly-owned subsidiary of Western Refining, Inc. of El Paso, Texas.
- Construction of the Ammonia Refrigeration Unit (ARU) was completed and the system put on line by March 2007. This unit is used to recover propane from hydrogen streams.
- Construction of the Benzene Stripper was completed and the system put in service by October 2007. This unit is used to strip benzene from process waste water.
- Discharge piping was installed at RW #1 to increase the recovery capacity of the well.
- As a matter of preventive maintenance, the lined containments in the draws north of the slurry wall (Seeps 1-9) were upgraded periodically.

2008

- The *Facility-Wide Groundwater Monitoring Plan (Revised May 2008)* was approved and implemented in the latter half of 2008.

- In September, Group No. 2 RCRA Site Investigation activities commenced. Areas included in Group No. 2 are SWMU 2, SWMU 8, SWMU 9, SWMU 11, and SWMU 18.
- As part of the *Closure Plan North and South Aeration Lagoons* the ponds were drained, cleaned out, inspected, repaired, and put back in service. This process started in October 2008 and was completed in February 2009.

2009

- In March, monitoring wells were installed around the Aeration Lagoons to satisfy Group No. 1 RCRA site investigation requirements. Group No. 3 Site Investigation activities began in April. This group includes SWMU 4, SWMU 5, AOC 22, AOC 23, AOC 24, AOC 25, and AOC 26.
- On November 23, 2009, Western Refining indefinitely suspended refining operations at the Bloomfield Refinery. The crude unloading and product loading racks, storage tanks and other supporting equipment remain in operation. Guidelines from the *Facility-Wide Groundwater Monitoring Plan December 2007(Revised May 2008)* will continue to be followed.

2010

- In January 2010, due to analytical results indicating high benzene levels, piping was installed to permanently route discharge water from Tank 33 to the API Separator.
- Guidelines from the *Facility-Wide Groundwater Monitoring Plan December 2007(Revised May 2008)* were followed through the first six months of 2010.
- In August, Group No. 4 and Group No. 5 investigation field activities were conducted which included the installation of three monitoring wells.
- After receipt of the New Mexico Environmental Department (NMED) letter *Approval with Direction Facility-Wide Groundwater Monitoring* dated July 26, 2010, Western personnel followed guidelines from the *Facility-Wide Groundwater Monitoring Plan (FWGMP)* dated June 2010.

2011

- In August 2012, Group No. 6 RCRA Investigation activities were conducted, which involved soil sampling within each of the Seep Areas located along the northwest portion of the facility.

2012

- In January 2012 the group 8 RCRA Investigation activities commenced, which involved soil sampling within SMWU No. 3 – Underground Piping Currently in Use, and SWMU No. 6 – Abandoned Underground Piping.
- On October 12, 2012, NMED Hazardous Waste Bureau approved a Work Plan submitted by Western dated October 9, 2012 authorizing Western to optimize the remediation efforts at the River Terrace area. Optimization activities conducted in 2012 included the removal of approximately 250 cubic yards of impacted clay-type soil from the river terrace area, and conversion of a portion of the biovent system to an air

sparging system in efforts to target the most impacted groundwater area located within the southwest corner of the River Terrace Area.

- In the third quarter 2012, Western commenced work that involves enhancement of the total fluids recovery system. This work involves transitioning five monitoring wells (MW-20, MW-55, MW-56, MW-57, and MW-58) and one recovery well (RW-3) to operational total fluids recovery wells. RW-3 was returned to operation by the fourth quarter 2012. Operation of the monitoring wells located near the aeration lagoons is expected to begin in April 2013.

2013

- In the first quarter 2013, Western completed work that involves enhancement of the total fluids recovery system. This work involved transitioning five monitoring wells to active total fluids recovery wells (MW-20, MW-55, MW-56, MW-57, and MW-58). Operation of the monitoring wells located near the aeration lagoons has commenced.
- In June 2013, Western removed two former diesel dispenser pumps, storage tank, associated piping, former fueling pad and approximately 500 cubic yards of soil. Soil samples confirmed all the impacted soil was removed from the immediate vicinity of the former diesel fueling pumps.
- In 2013 Western replaced Tank 37, Tank 38 and Tank 34 with new equivalent tanks. Tank 37 and Tank 34 containments were also lined.
- Well MW-70 was developed on May 22, 2013 and baseline samples were collected on June 13, 2013.

2014

- In 2014 Western Refining performed an environmental site investigation for the SWMUs designated as Group 9 and SWMU No. 27 Wastewater Collection System. Group 9 includes SWMU No. 12 (API Separator), SWMU No. 13 (Process Area) and SWMU No. 14 (Tanks 3, 4, and 5).

SECTION 2.0

SCOPE OF ACTIVITIES

This Annual Report includes a summary of activities conducted at the Bloomfield facility in 2014 pursuant to the reporting requirements outlined in Section IV.A.2. of the July 2007 Consent Order issued by the NMED-HWB, and Section 22 of Discharge Permit GW-001 issued to the Bloomfield Refinery by the NMOCD. This report includes a summary of sampling activities, total fluids recovery, below-grade testing, and remediation monitoring activities conducted in 2014.

2.1 Groundwater Monitoring Activities

Groundwater monitoring activities conducted in 2014 included the collection of groundwater samples and field data from the following four areas of the facility:

- Refinery Complex
- North Boundary Barrier
- San Juan River Bluff
- San Juan River Terrace

Groundwater monitoring activities conducted in April 2014 follow the guidelines outlined in the approved Facility-Wide Groundwater Monitoring Plan dated June 2013. Monitoring activities conducted in August 2014 follow the guidelines outlined in the approved Facility-Wide Groundwater Monitoring Plan dated June 2013. Any activities conducted contrary to the approved Monitoring Plans are noted in this report.

General groundwater sampling procedures followed during each sampling event are included in Appendix A. Detailed information regarding groundwater monitoring activities conducted in 2014 is included in Section 3.1.

2.1.1 Fluid Measurements

Depth-to-groundwater and depth-to-product measurements were collected from the facility monitoring wells, recovery wells, observation wells, and collection wells prior to the collection of groundwater samples during the Semi-Annual and Annual Sampling Events conducted in April 2014 and August 2014, respectively. All fluid level measurements were collected using a Geotech Interface Probe that measures to an accuracy of 0.01 feet. The field measurements were collected a minimum of 48 hours after the recovery well pumps were turned off to allow the groundwater elevation to stabilize. A summary of the fluid measurements collected is provided in Section 3.1.1.

2.1.2 Groundwater Field Parameters

Prior to collecting groundwater samples, each well was purged a minimum of three well volumes. Groundwater field parameters (temperature, pH, and conductivity) were collected

every two gallons or after purging one well volume, whichever was less. The total volume purged at each well was determined once the pH, temperature, and conductivity field parameters stabilized to within 10 percent for three measurements. A summary of the field measurements collected and procedures followed is provided in Section 3.1.2 and Appendix A, respectively.

In addition, field parameters were collected at the outfalls and seeps when sufficient water was present.

2.1.3 Refinery Complex Sampling

Groundwater samples were collected from specified wells located within the Refinery Complex during the Semi-Annual Sampling Event and Annual Sampling Event conducted in April 2014 and August 2014, respectively, with the exception of wells that contained SPH, wells that were dry, or wells that did not contain enough water to collect a sample. Figure 10 and Figure 11 show the location of the wells sampled during each sampling event. A summary of the analytical results is provided in Section 3.1.3.

Semi-Annual Sampling Event

Groundwater samples were collected from the following wells during the Semi-Annual Sampling Event conducted in April 2014:

- Refinery Wells: MW-8
- Cross-Gradient Wells: MW-1, MW-13, MW-33
- Downgradient Wells: MW-12, MW-35, MW-37, MW-38

Groundwater samples collected during the Semi-Annual Sampling Event were submitted to Hall Environmental Analytical Laboratory and analyzed for the following:

- VOCs –BTEX, and MTBE by EPA Method 8260B
- TPH – GRO by EPA Modified Method 8015B (MW-1, MW-12, MW-33, MW-37, and MW-38 only)
- TPH DRO by EPA Modified Method 8015B (MW-1, MW-33, MW-12, MW-37, and MW-38 only)

Groundwater samples were not collected from MW-20 and MW-30 due to the presence of SPH. In addition, groundwater samples were not collected from MW-6 due to insufficient groundwater for sample collection.

Annual Sampling Event

Groundwater samples were collected from the following wells during the Annual Sampling Event conducted in August 2014:

- Refinery Wells: MW-4, RW-15, MW-29, MW-30, MW-31, and MW-44
- Cross-Gradient Wells: MW-1, MW-13, MW-27, MW-32 and MW-33.

- Downgradient Wells: MW-11, MW-12, MW-34, MW-35, MW-37, and MW-38
- RCRA Investigation Wells: MW-51, MW-52, MW-53, MW-59, MW-62, MW-63, MW-64, MW-65, MW-67, MW-68, and MW-70.

Groundwater samples were not collected from RW-1, RW-9, RW-18, MW-20, MW-21, RW-23, MW-26, RW-28, MW-40, RW-42, RW-43, MW-54, MW-55, MW-56, MW-57, MW-58, MW-61, and MW-66 due to the presence of SPH. SPH appeared at RW-1, RW-18 and RW-23 during the bailing process and was not apparent prior to sampling. In addition, groundwater samples were not collected from MW-60 and MW-69 due to insufficient groundwater for sample collection.

Groundwater samples collected during the Annual Sampling Event were submitted to Hall Environmental Analytical Laboratory and analyzed for the following:

- VOCs by EPA Method 8260B
- SVOCs by EPA Method 8270 (RCRA Wells, MW-11, MW-12, and MW-38 only)
- TPH-DRO by EPA Method 8015B
- TPH-GRO by EPA Method 8015B
- Total RCRA 8 Metals by EPA Method 6010B/7470)
- Total Dissolved Metals by EPA Method 6010B/7470
- Alkalinity by EPA Method 310.1
- Anions by EPA Method 300.0
- Carbon Dioxide by EPA Method 310.1

2.1.4 North Boundary Barrier Sampling

Groundwater samples were collected from observation wells and specified collection wells in April 2014 and August 2014, with the exception of wells that contained SPH, wells that were dry, or wells that did not contain enough water to collect a sample. Figure 10 and Figure 11 shows the location of the North Boundary Barrier wells that were sampled in April 2014 and August 2014, respectively. A summary of the groundwater results is provided in Section 3.1.4.

Semi-Annual Sampling Event

Groundwater samples were collected from the following wells during the Semi-Annual Sampling Event conducted in April 2014:

- Collection Wells: CW 0+60, and CW 25+95
- Observation Wells: OW 3+85, OW 16+60, OW 22+00, OW 23+10, OW 23+90, and OW 25+70

Groundwater samples were not collected from OW 11+15 due to the presence of SPH. In addition, groundwater samples were not collected from OW 0+60, OW 1+50, OW 5+50, OW 6+70, OW 8+10, OW 14+10, and OW 19+50 due to insufficient groundwater for sample collection.

Groundwater samples collected in April 2014 were submitted to Hall Environmental Analytical Laboratory and analyzed for the following:

- VOCs -BTEX and MTBE only by EPA Method 8260B
- TPH-GRO by EPA Modified Method 8015B
- TPH-DRO by EPA Modified Method 8015B

Annual Sampling Event

Groundwater samples were collected from the following wells during the Annual Sampling Event conducted in August 2014:

- Collection Wells: CW 0+60, and CW 25+95
- Observation Wells: OW 0+60, OW 11+15, OW 16+60, OW 22+00, OW 23+10, OW 23+90, and OW 25+70

Groundwater samples were not collected from OW 1+50 and OW 3+85 and due to the presence of SPH. In addition, groundwater samples were not collected from OW 5+50, OW 6+70, OW 8+10, OW 14+10, and OW 19+50 due to insufficient groundwater for sample collection.

Groundwater samples collected during the Annual Sampling Event were submitted to Hall Environmental Analytical Laboratory and analyzed for the following:

- VOCs – BTEX and MTBE by EPA Method 8260B
- TPH-GRO by EPA Modified Method 8015B
- TPH-DRO by EPA Modified Method 8015B

2.1.5 San Juan River Bluff Sampling

San Juan River Bluff sampling includes the collection of surface water samples at the outfall location along the eastern portion of the facility, and at the seeps located along the western portion of the facility. Figure 3 shows the outfall and seep locations. A summary of the surface water analytical results is provided in Section 3.1.5.

Semi-Annual Sampling Event

Surface water samples were collected from the following locations during the Semi-Annual Sampling Event conducted in April 2014:

- Outfalls: East Outfall #2, and East Outfall #3
- Seeps: Seep 1, Seep 6, and Seep 9

Surface water samples were not collected from Seep 2, Seep 3, Seep 4, Seep 5, Seep 7, and Seep 8 due to the absence of an active discharge at each location.

Surface water samples collected in April 2014 were submitted to Hall Environmental Analytical Laboratory and analyzed for the following:

- VOCs – BTEX and MTBE by EPA Method 8260B
- Total RCRA 8 Metals by EPA Method 6010B/7470 (Outfall locations only)
- Total Dissolved Metals by EPA Method 6010B/7470 (Outfall locations only)

- Alkalinity by EPA Method 310.1
- Anions by EPA Method 300.0
- Carbon Dioxide by EPA Method 310.1

Annual Sampling Event

Surface water samples were collected from the following locations during the Annual Sampling Event conducted in August 2014:

- Outfalls: East Outfall 2, and East Outfall 3
- Seeps: Seep 1

Surface water samples were not collected from Seep 2, Seep 3, Seep 4, Seep 5, Seep 6, Seep 7, Seep 8, and Seep 9 due to the absence of an active discharge at each location.

Surface water samples collected during the Semi-Annual Sampling Event were submitted to Hall Environmental Analytical Laboratory and analyzed for the following:

- VOCs – BTEX and MTBE by EPA Method 8260B
- Total RCRA 8 Metals by EPA Method 6010B/7470 (Outfall locations only)
- Total Dissolved Metals by EPA Method 6010B/7470 (Outfall locations only)
- Alkalinity by EPA Method 310.1
- Anions by EPA Method 300.0
- Carbon Dioxide by EPA Method 310.1

2.1.6 San Juan River Terrace Sampling

San Juan River Bluff sampling includes the collection of surface water samples at the four locations along the San Juan River, and includes the collection of groundwater samples at San Juan River Terrace. A summary of activities conducted and groundwater samples collected that are associated with the bioventing system located at the San Juan River Terrace are included in the previously submitted *River Terrace Voluntary Corrective Measures Bioventing System Report* dated March 2015. Therefore sampling activities associated with the Bioventing System are not included in this report.

Figure 3 shows the approximate sample locations along the San Juan River. A summary of the surface water analytical results is provided in Section 3.1.6.

Semi-Annual Sampling Event

Surface water samples were collected from the following locations during the Semi-Annual Sampling Event conducted in April 2014:

- San Juan River: Upstream, North of MW-46, North of MW-45, and Downstream

Surface water samples collected during the Semi-Annual Sampling Event were submitted to Hall Environmental Analytical Laboratory and analyzed for the following:

- VOCs – BTEX and MTBE by EPA Method 8260B
- TPH-DRO by EPA Method 8015B
- TPH-GRO by EPA Method 8015B
- Total RCRA 8 Metals by EPA Method 6010B/7470
- Total Dissolved Metals by EPA Method 6010B/7470
- Alkalinity by EPA Method 310.1
- Anions by EPA Method 300.0

2.1.7 Outfall and Seep Inspections

Bi-monthly visual inspections of Seeps 1 through 9 and along the San Juan River Bluff, which includes the East Fork area, were conducted in 2014. Figure 3 shows the location of the outfalls and seeps. A summary of the inspections performed is provided in Section 3.1.7.

2.2 Total Fluids Recovery Systems

2.2.1 Groundwater Recovery System

The Bloomfield Facility operates a total fluid pumping system used to bring SPH and hydrocarbon impacted groundwater to the surface for treatment and disposal. This is accomplished by actively pumping wells within the groundwater impacted area. Recovered fluids are pumped to the on-site API separator for product recovery. The remaining recovered fluid is pumped through the wastewater treatment system prior to disposal. The groundwater recovery system was operational throughout 2014. The wells that operated as active recovery wells in 2014 are RW-1, RW-2, RW-3, RW-9, RW-14, RW-15, RW-16, RW-17, MW-20, RW-22, RW-23, RW-28, RW-42, and RW-43 MW-55, MW-56, MW-57 and MW-58. Figure 2 shows the location of the recovery wells within the Bloomfield Refinery. An operational summary of the groundwater recovery system is included in Section 3.3.1.

2.2.2 North Boundary Barrier Wall Collection System

The North Boundary Barrier Wall, which was installed by April 2005, consists of a 2,700 foot long bentonite slurry wall that extends two to five feet into the Nacimiento Formation. The primary purpose of the wall is to prevent the migration of hydrocarbon-impacted groundwater towards the San Juan River. The collection system consists of 15 collection wells positioned along the refinery-side of the barrier wall. For every collection wells there was installed an observation well along the river-side of the barrier wall. Bloomfield Terminal personnel continued to monitor fluid levels on both sides of the barrier wall in 2014 by collecting depth-to-water and depth-to-product measurements. Figure 2 shows the location of the collection wells and observation wells along the north boundary barrier wall. A summary of the data collected along the north boundary barrier wall is provided in Section 3.3.2.

2.2.3 Hammond Ditch Recovery System

The Hammond Ditch Recovery System consists of recovery Tank 37, located along the western portion of the facility, and a French Drain system that was constructed below the concrete-lined Hammond ditch. Tank 37 collects groundwater from two 8-inch influent lines connected to the

perforated sub-drain (the French Drain) beneath the Hammond Irrigation Canal. Tank 37 is equipped with a liquid level float control system and dedicated flow meter. Recovered water from Tank 37 is automatically pumped through a flow meter to the API Separator. The location of Tank 37 is shown on Figure 3.

The Hammond Ditch Recovery System serves as a hydraulic relief mechanism for groundwater that mounds along the Facility-side of the north barrier wall. Figure 3 shows the location of Tank 37. A summary of operational data for the Hammond Ditch Recovery System is included in Section 3.3.3.

2.2.4 River Terrace Remediation System

The River Terrace Bioventing System commenced operation in January 2006. A summary of activities associated with the River Terrace Bioventing System are submitted separately to the agency in March of each year.

2.2.5 East Outfall Recovery System

Outfall 1 is equipped with a holding tank and automatic pumping system. Water from Outfall 1 discharges into Tank 38 directly and then pumped to the on-site Wastewater Treatment System prior to disposal. Figure 3 shows the location of Tank 38.

The flow rate of recovered water entering Tank 38 is dependent upon the operation the Hammond Ditch, which is located just south of Tank 38. A summary of the operational data of the East Outfall Recovery System for 2014 is included in Section 3.3.4.

2.3 Below-Grade Testing and Tank Inspections

Pursuant to conditions of approval stated in Discharge Permit GW-001 (regulated by the NMOCD), below-grade sumps, sewer boxes, and underground piping are tested annually.

2.4 Waste Disposal

Western Refining indefinitely suspended refining operations at the Bloomfield Refinery on November 23, 2009. The crude unloading and product loading racks, storage tanks and other supporting equipment remain in operation. Recovered water from on-site remediation activities and facility operations is treated through the on-site WWTS. Treated water is then disposed of through the on-site Class I injection well.

Significantly less waste is routinely generated since the suspension of refining operations in November 2009. The on-site landfill is no longer operational, and therefore all operational waste generated is properly characterized and disposed of off-site. Additional information regarding waste disposal activities is provided in Section 3.5.

SECTION 3.0

RESULTS SUMMARY

The following is a summary of the data collected, visual inspections conducted, and analytical results collected during monitoring and testing performed in 2014. Figure 8 and Figure 9 provide a summary of the BTEX concentrations detected during the April 2014 and August 2014 sampling events, respectively.

3.1 Groundwater Monitoring

A summary of the groundwater analytical results collected over the past few years are included in Table 3 through Table 10. Screening levels used to evaluate the groundwater condition at the Bloomfield facility are reflective of the same conservative screening levels currently used for evaluation of on-going RCRA Investigation activities. Sample results included in the analytical summary tables that exceed the respective regulatory screening levels are bolded and highlighted in yellow. A copy of the respective analytical reports and Laboratory Quality Assurance Plan is included in Appendix B and Appendix C, respectively.

3.1.1 Groundwater Measurements

Depth-to-groundwater and depth-to-product measurements were collected at all refinery monitoring wells, recovery wells, observation wells, and collection wells in April and August 2014, with the exception of CW 25+95 the reason being it continually pumps to protect the ground water from moving around the end of the slurry wall and continuing to the river. Additional fluid measurements were collected at the sump wells periodically throughout the year to monitor fluid levels along the north side of the facility. The fluid pumping wells were turned off and the groundwater was allowed to stabilize for a minimum of 48-hours prior to the collection of fluid levels within the Refinery Complex during both the April and August sampling events. Figure 2 shows the location of the wells within the facility.

Using the fluid level measurements collected in April and August 2014, groundwater surface elevations were calculated. The groundwater elevation data was used to develop groundwater potentiometric surface maps which show the general direction of groundwater flow within the Refinery Complex area. Table 1 provides a summary of the fluid level measurements collected in 2014. Figure 4 and Figure 5 represent the groundwater contours developed from data collected in April 2014 and August 2014, respectively. The groundwater contours show that groundwater flows in the general northwest direction. A discussion of the SPH data collected is provided in Section 3.2 of this report.

3.1.2 Groundwater Field Measurements

Prior to collecting groundwater samples, each well was purged a minimum of three well volumes using a disposable bailer. Groundwater field parameters (temperature, pH, conductivity, dissolved oxygen (DO), oxidation-reduction potential (ORP), and total dissolved solids (TDS)) were collected every two gallons or after purging one well volume, whichever was less. The

total volume purged at each well was determined once the pH, temperature, and conductivity field parameters stabilized to within 10 percent for three measurements. The field parameters were collected using a YSI Professional Plus instrument. Field equipment calibration procedures performed prior to each sampling event are summarized in Appendix A. Table 2 provides a summary of the groundwater field parameters collected during the April 2014 and August 2014 sampling events. Field parameters were also collected from water samples collected at the East Outfalls, Seeps, and the San Juan River locations.

3.1.3 Refinery Complex Sampling

Refinery Wells

Volatile organic compounds detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- 1, 2, 4-Trimethylbenzene was detected above the respective screening level of 15 ug/l at, MW-30, and MW-31. The detected concentrations were 3400 ug/l and 1200 ug/l, respectively. The highest concentration was detected at MW-30 in August 2014.
- 1,3,5-Trimethylbenzene was detected above the respective screening level of 12 ug/l at RW-15, MW-30, and MW-31. The detected concentrations ranged between 840 ug/l and 100 with highest concentration detected at MW-30 in August 2014.
- 2- Methylnaphthalene was detected above the respective screening level of 150 ug/l at RW-15 with a concentration of 210 ug/l.
- Benzene was detected above the respective screening level of 5 ug/l at MW-4, RW-15, MW-30, and MW31. The detected concentrations ranged between 27 ug/l and 4600 ug/l, with the highest concentration detected at MW-30 in April 2014.
- Ethylbenzene was detected above the respective screening level of 700 ug/l at RW-15, MW-30 and MW-31. The detected concentrations ranged between 770 ug/l and 3900 ug/l, with the highest concentration detected at MW-30 in August 2014.
- Methyl tert-butyl ether (MTBE) was detected above the respective screening level of 143 ug/l at RW-15 with a concentration of 150 ug/l
- Naphthalene was detected above the respective screening level of 1.65 ug/l at MW-4, RW-15, MW-30, and MW-31. The detected concentrations ranged between 55 ug/l and 860 ug/l, with the highest concentration detected at MW-30 in August 2014.
- Toluene was detected above the respective screening level of 750 ug/l at MW-30. The detected concentration was 2200 ug/l in August 2014.
- Xylenes were detected above the respective screening level of 620 ug/l at RW-15, MW-30, and MW-31. The detected concentrations ranged between 1400 ug/l and 14,000 ug/l, with the highest concentration detected at MW-30 in April 2014.

General chemistry parameters detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Chloride was detected above the respective screening level of 250 mg/l at, RW-15, MW-30 and MW-31. The detected concentrations ranged between 270 ug/l and 410 ug/l, with the highest concentration detected at RW-15 in August 2014.

- Sulfate was detected above the respective screening level of 600 mg/l at MW-44 with the detected concentration of 3200 mg/l in August 2014.

Total metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Barium was detected above the respective screening level of 1.0 mg/l at MW-4 and RW-15. The detected concentrations were 2.6 mg/l and 1.6 mg/l, respectively.

Dissolved metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Barium was detected above the respective screening level of 1.0 mg/l at MW-4, and RW-15. The detected concentrations were mg/l 2.1 and 1.4 mg/l, respectively. The highest concentration detected in August 2014.
- Iron was detected above the respective screening level of 1.0 mg/l at MW-4 and RW-15. The detected concentrations were 12 mg/l and 6.8 mg/l, respectively. The highest concentration detected in August 2014.
- Manganese was detected above the respective screening level of 0.2 mg/l at MW-4, RW-15, MW-29, MW-30, MW-31 and MW-44. The detected concentrations ranged between 0.47 mg/l and 3.6 mg/l, with the highest concentration detected at RW-15 in August 2014.

Total petroleum hydrocarbons detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Diesel range organics were detected above the respective screening level of 0.2 mg/l at MW-4, RW-15, MW-30 and MW-31. The detected concentrations ranged between 0.84 mg/l and 9.4 mg/l, with the highest concentration detected at MW-30 in August 2014.

A summary of the analytical results for samples collected at the Refinery Complex Wells is provided in Table 3.

Cross-Gradient Wells

Volatile organic compounds detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014.

General chemistry parameters detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Chloride was detected above the respective screening level of 250 mg/l at MW-27, MW-32, and MW-33. The detected concentrations ranged between 340 mg/l and 690 mg/l, with the highest concentration detected at MW-27 in August 2014.
- Nitrate was detected above the respective screening level of 10 mg/l at MW-32, and MW-33. The detected concentrations were 39 mg/l and 24 mg/l, respectively. The highest concentration detected in August 2014.
- Sulfate was detected above the respective screening level of 600 mg/l at MW-13, MW-27, MW-32, and MW-33. The detected concentrations ranged between 1,200 mg/l and 3,100 mg/l, with the highest concentration detected at MW-27 in August 2014.

Total metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014.

Dissolved metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Manganese was detected above the respective screening level of 0.2 mg/l at MW-13 and MW-27. The detected concentrations were 1.4 mg/l and 0.8 mg/l, respectively. The highest concentration detected in August 2014.
- Selenium was detected above the respective screening level of 0.05 mg/l at MW-27 and MW-32. The detected concentrations were 0.054 mg/l and 0.057 mg/l, respectively. The highest concentration detected in August 2014.

Total petroleum hydrocarbons detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Diesel was detected above the respective screening level of 0.2 ug/l at MW-27 with the concentration detected at 0.34 ug/l in August 2014.

A summary of the analytical results for samples collected at the Cross-Gradient Wells is provided in Table 4.

Downgradient Wells

Volatile organic compounds detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- 1,2,4-Trimethylbenzene was detected above the respective screening level of 15 ug/l at MW-11, MW-34 and MW-35. The detected concentration ranged between 51 ug/l and 230 ug/l with the highest concentration detected at MW-11.
- Naphthalene was detected above the respective screening level of 1.43 ug/l at MW-11 and MW-34. The detected concentration was 59 ug/l and 4.2 ug/l respectively.

Semi-Volatile organic compounds detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014.

- 1-Methylnaphthalene was detected above the respective screening level of 2.3 mg/l at MW-11 with a concentration of 16 mg/l in August 2014.
- Naphthalene was detected above the respective screening level of 1.65mg/l at MW-11 with a concentration of 23 mg/l in August 2014.

General chemistry parameters detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014.

Total metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Chromium was detected above the respective screening level of 0.05 mg/l at MW-12 at a concentration of 0.82 mg/l in August 2014.
- Lead was detected above the respective screening level of 0.015 mg/l at MW-11 at a concentration of 0.019 mg/l in August 2014.

Dissolved metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Iron was detected above the respective screening level of 1.0 mg/l at MW-11, MW-34, and MW-35. The detected concentrations ranged between 1.5 mg/l and 8 mg/l, with the highest concentration detected at MW-11 in August 2014.
- Manganese was detected above the respective screening level of 0.2 mg/l at MW-11, MW-12, MW-34, MW-35, MW-37, and MW-38. The detected concentrations ranged between 0.25 mg/l and 2.9 mg/l, with the highest concentration detected at MW-34 in August 2014.

Total petroleum hydrocarbons detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Diesel range organics were detected above the respective screening level of 0.2 mg/l at MW-11, MW-34, MW-35 and MW-37. The detected concentrations ranged between 0.55 mg/l and 2.6 mg/l, with the highest concentration detected at MW-34.

A summary of the analytical results for samples collected at the Downgradient Wells is provided in Table 5.

RCRA Wells

Volatile organic compounds detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- 1,2,4-Trimethylbenzene was detected above the respective screening level of 15 ug/l at MW-65, with a concentration of 1400 ug/l detected in August 2014.
- 1,2-Dichloroethane was detected above the respective screening level of 5 ug/l at MW-59 and MW-65, The detection concentration was 10 ug/l and 140 ug/l, respectively.
- 1,3,5-Trimethylbenzene was detected above the respective screening level of 12 ug/l at MW-65, with a concentration detected of 17 ug/l in August 2014.
- 1-Methylnaphthalene was detected above the respective screening level of 2.3 ug/l at MW-59 with a concentration detected of 110 ug/l in August 2014.
- 2-Methylnaphthalene was detected above the respective screening level of 150 ug/l at MW-65, with a detected concentration of 50 ug/l.
- Benzene was detected above the respective screening level of 5 ug/l at MW-59 and MW-65. The detection concentration was 13 ug/l and 5100 ug/l, respectively. The highest detected concentrations at MW-65 in August 2014.
- Ethylbenzene was detected above the respective screening level of 700 ug/l at MW-65, with a concentration detected of 1,400 ug/l in August 2014.
- MTBE was detected above the respective screening level of 125 ug/l at MW-59, and MW-65. The detected concentration was 750 ug/l and 480 ug/l respectively.
- Naphthalene was detected above the respective screening level of 1.43 ug/l at MW-59 and MW-65. The detected concentration was 3.6 ug/l and 240 ug/l respectively.

Semi-volatile organic compounds detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- 1-Methylnaphthalene was detected above the respective screening level of 2.3 ug/l at MW-65, with a detected concentration of 150 ug/l.

- Naphthalene was detected above the respective screening level of 1.43 ug/l at MW-65 with the detected concentration at 430 ug/l in August 2014.

General chemistry parameters detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Chloride was detected above the respective screening level of 250 mg/l at MW-52, MW-53, MW-63, MW-64 and MW-65. The detected concentrations were 290 mg/l and 1100 mg/l respectively. The highest concentration detected at MW-64.
- Nitrate was detected above the respective screening level of 10 mg/l at MW-52, MW-53, MW-63, and MW-64. The detected concentrations were 6.8 mg/l and 170 mg/l respectively. The highest concentration detected at MW-63.
- Sulfate was detected above the respective screening level of 600 mg/l at MW-52, MW-53, MW-59, MW-62, MW-63, and MW-64. The detected concentrations ranged between 830 mg/l and 2400 mg/l, with the highest concentration detected at MW-63.

Dissolved metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Iron was detected above the respective screening level of 1.0 mg/l at MW-52, MW-59, MW-65, and MW-70. The detected concentrations ranged between 3.4 mg/l and 18 mg/l with the highest concentration at MW-70.
- Manganese was detected above the respective screening level of 0.2 mg/l at MW-51, MW-52, MW-59, MW-62, MW-63, and MW-65. The detected concentrations ranged between 0.49 mg/l and 8.8 mg/l, with the highest concentration detected at MW-52.

Total petroleum hydrocarbons detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Diesel range organics were detected above the respective screening level of 0.2 mg/l at MW-59, and MW-65. The detected concentration of 0.62 mg/l and 7.4 respectively.

A summary of the analytical results for samples collected at the RCRA Wells is provided in Table 6.

3.1.4 North Boundary Barrier Sampling

Collection Wells

Volatile organic compounds detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Benzene was detected above the respective screening level of 0.005 mg/l at CW 0+60 and CW 25+95. The detected concentrations ranged between 0.0056 mg/l and 0.33 mg/l, with the highest concentration detected at CW 25+95 in August 2014.

Total petroleum hydrocarbons detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Diesel range organics were detected above the respective screening level of 0.2 mg/l at CW 0+60 and CW 25+95. The detected concentrations ranged between 0.24 mg/l and 1.7 mg/l. The highest concentration was detected at CW 0+60 in April 2014.

A summary of the analytical results for samples collected at the collection Wells in 2014 is provided in Table 7.

Observation Wells

Volatile organic compounds detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- MTBE was detected above the respective screening level of 0.012 mg/l at OW 11+15 and OW 16+60. The detected concentrations were 0.87 mg/l and 0.660 mg/l respectively.

Total petroleum hydrocarbons detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Diesel range organics were detected above the respective screening level of 0.2 mg/l at OW 3+85, OW 11+15, OW 16+60, and OW 23+10. The detected concentration ranged between 1.0 mg/l and 110 mg/l with the highest detection concentration at OW 3+85 in April 2014.

A summary of the analytical results for samples collected at the observation wells in 2014 is provided in Table 7.

3.1.5 San Juan River Bluff Sampling

Outfalls

Samples were collected from East Outfall #2 and East Outfall #3 in April and August 2014. A summary of the analytical results for samples collected at East Outfall #2 and East Outfall #3 in 2014 is provided in Table 8.

Volatile organic compounds detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014.

General chemistry parameters detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014.

Total metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014.

Dissolved metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014.

Seeps

Samples were collected from Seep 1, Seep 3, Seep 6 and Seep 9 in 2014. The remaining seeps were not sampled due to lack of water for sample collection.

Volatile organic compounds detected above laboratory detection limit were below their respective screening levels in samples collected for 2014.

General chemistry parameters detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Chloride was detected above the respective screening level of 250 mg/l at Seep 6, and Seep 9. The detected concentrations ranged between 550 mg/l and 1600 mg/l, with the highest concentration detected at Seep 6 in April 2014.
- Sulfate was detected above the respective screening level of 600 mg/l at Seep 1, Seep 6, and Seep 9. The detected concentrations ranged between 1,200 mg/l and 2,000 mg/l, with the highest concentration detected at Seep 6 in August 2014.

A summary of the analytical results for samples collected at the Seeps in 2014 is provided in Table 9.

3.1.6 San Juan River Terrace Sampling

Sample locations related to the bioventing system are reporting in a separate report, and therefore are not included in this submittal. However, samples were collected at four locations along the San Juan River in 2014. Samples were collected in April 2014 and August 2014 upstream of the refinery, north of MW-46, North of MW-45, and downstream of the refinery.

A summary of the analytical results for samples collected at North of MW-46, North of MW-45, Upstream, and downstream in 2014 is provided in Table 10.

Volatile organic compounds detected above laboratory detection limit were below their respective screening levels in samples collected for 2014.

Total Petroleum Hydrocarbon detected above laboratory detection limit was below their respective screening levels in samples collected for 2014.

General chemistry parameters detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014.

Total Metal constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014.

Dissolved Metal constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2014, with the following exceptions:

- Manganese was detected above the respective screening level of 0.2 mg/l at North of MW-45 with a detected concentration of 0.022 in April of 2014.

Figure 3 shows the location of the San Juan River samples in relation to the Bloomfield Refinery.

3.1.7 Outfall and Seep Inspections

Bi-monthly visual inspections of Seeps 1 through 9 and along the San Juan River Bluff, including the East Fork area, were conducted in 2014. Inspections of the draws north of the barrier wall and analysis of samples of water collected in the seeps indicate that the barrier wall is preventing migration of contaminated groundwater toward the San Juan River. Fluids that contain concentrations above drinking water standards at the seep locations are pumped out completely to ensure such water does not impact the river.

Visual inspection of the East Fork area indicates that the flow rate at this seep location has remained constant at approximately 1 gallon/minute. The flow rate at this location does not appear to be impacted by the operation of the Hammond Ditch. Figure 3 shows the location of the outfalls and seeps in relation to the Bloomfield Refinery.

3.2 Separate-Phase Hydrocarbons

Field measurements collected in April and August 2014 were also used to determine product thickness in areas where SPH was detected. In April 2014, SPH was identified in 20 wells. The product thickness detected ranged between 0.01 feet and 1.95 feet, with the most product detected at recovery well CW 11+15. In August 2014, SPH was identified in 24 wells. The product thickness ranged between 0.02 feet and 1.94 feet, with the most product detected at CW 11+15. Figure 6 and Figure 7 show a summary of the product thickness detected in April 2014 and August 2014, respectively.

Product has been detected in the groundwater prior to suspension of refining operations in November 2009. Review of the past seven years of data collected shows SPH to be present in four general areas of the facility; the Terminals Area, the Tank Farm Area, the former Refinery Process Area, and the North Boundary Barrier Area. The following is a brief summary of the SPH trends observed as reported each year. A review of the historic SPH measurements collected are included in the Facility-Wide Groundwater Monitoring Plan dated December 2007 and in subsequent Annual Groundwater Remediation & Monitoring Reports submitted in April of each year.

Terminals Area

The Terminals area is located south of County Road 4990. Primary operations in this area include product loading and unloading, crude unloading, and product storage. At the Terminal Area, SPH has been localized to two wells (MW-61 and MW-66). These wells were installed in 2009 as part of the on-going RCRA investigation activities. Over the past three years, SPH has been detected at MW-61, which is located just east of the Terminal office building. The SPH thickness at MW-61 has fluctuated between 0.35 feet and 0.98 feet. At MW-66, located west of Tank 45, the amount of SPH has fluctuated between 0.05 feet and 0.32 feet.

Tank Farm Area

The Tank Farm Area is located in the eastern portion of the facility, north of County Road 4990. This area is equipped with four total fluids recovery wells located along the center dike area (RW-14, RW-15, RW-16, and RW-17). Each well is equipped with a dedicated pneumatic pump that operates on a timer. All fluids pumped from these wells are routed to the on-site WWTP for product recovery and treatment.

Former Refinery Process Area

In 2005, a 2,700-foot long bentonite slurry wall was installed along the western and northern boundary of the former process area. This north boundary barrier provides hydraulic control for product and groundwater that exists at the Bloomfield facility. Several monitoring wells located

within the vicinity of the former refinery process area have shown detectable amounts of SPH prior to the suspension of refinery operations in November 2009. Total fluids recovery wells, as well as the French drain fluids collection system located below the Hammond Ditch in this area provides hydraulic relieve and enhance product recovery efforts.

Two wells within the warehouse area have shown detectable SPH. Monitoring well MW-54, which was installed in 2008, has shown decreasing levels of SPH since 2010. In August 2014, MW-54 contained approximately 0.14 feet of SPH. Recovery well RW-1 is an active total fluids recovery well. This well operates at a constant flowrate of approximately 2 gpm. The amount of SPH at RW-1 has fluctuated since 2008.

Two active recovery wells (RW-2 and RW-3) are located along the southern property boundary and are equipped with dedicated pneumatic total fluids pumps. In August 2014, RW-2 contained approximately 0.10 feet of SPH. RW-3 has shown traces of SPH prior to returning to operation in 2012, with SPH detected at 0.05 feet or less.

Monitoring well MW-41, located adjacent to the former crude process unit, has shown fluctuating levels of SPH over the years. The range of SPH detected has been between 0.01 feet and 1.18 feet since 2007. As of August 2014, MW-41 contained 0.74 feet of SPH.

The SPH level at RW-42, an active recovery well located upstream of MW-41, has also fluctuated over time. The amount of SPH has ranged between 0.00 feet and 0.90 feet since 2007. In August 2014, the amount of SPH detected was 0.34 feet.

In the area near the WWTP and north of the former process units there are several wells in which SPH has been detected over the years. It is expected to see SPH levels fluctuate in this area due the numerous active fluids pumping wells, as well as the existence of the north boundary barrier providing that hydraulic control all groundwater beneath the former process areas. To further enhance the product recovery efforts in this area, work has been done to equipped five existing monitoring wells with dedicated pneumatic pumps for total fluids recovery. Monitoring wells MW-55, MW-56, MW-57, MW-58, and MW-20 have been converted to recovery wells. These wells are located in the area where SPH is currently most prevalent. The wells have been operational as of 2013 and continued to operate well through 2014.

North Boundary Barrier Area

In 2005, a 2,700-foot long bentonite slurry wall was installed along the western and northern boundary of the former process area. This north boundary barrier provides hydraulic control for product and groundwater within the Bloomfield facility. Monitoring wells and observation wells located along the river-side of the slurry wall have shown intermittent detections of SPH. The amount of groundwater detected in these wells is significantly less than the wells located on the refinery-side of the wall, giving proof that the hydraulic barrier is effective. The intermediate detections of SPH are believed to be the residual effect SPH in the area that existed. Absorbent socks are placed in observation and monitoring wells located along the river-side of the slurry wall to remove the residual SPH in the area.

3.3 Total Fluids Recovery Systems

3.3.1 Groundwater Recovery System

In 2013, 18 wells operated as total fluids recovery wells. The wells used for total fluids recovery were RW-1, RW-2, RW-3, RW-9, RW-14, RW-15, RW-16, RW-17, MW-20, RW-22, RW-23, RW-28, RW-42, RW-43, MW-55, MW-56, MW-57 and MW-58. The estimated total gallons pumped (SPH and groundwater) from the recover wells in 2014 was approximately 1,576,800 gallons. The recovery wells are not equipped with individual flow meters. Most wells are equipped with pneumatic pumps that run on a timer system. Based on the timer setting and field verified flow rates, the total gallons pumps per well over time is calculated. The calculated total is based on 360 days of operation. This time period takes into account the five days the wells were off when groundwater measurements were collected prior to each monitoring event, and time when the wells were maintenance.

RW-18 did not pump during 2014. The well was removed from service during the demolition of the refinery process units in 2014. It resides in the middle of the former Distillate Hydrotreater Unit and the air supply was removed to the pump. RW-18 has also been in need of major rework and there is not access to bring in a drill rig to do so. A monitoring well has recently been installed in close proximity to RW-18 during the Group 9 RCRA Investigation of the refinery process units and may serve as a viable replacement recovery well for well for RW-18.

3.3.2 North Boundary Barrier Wall Collection System

Depth-to-groundwater measurements collected in April 2014 and August 2014 indicate that the barrier wall continues to provide a hydraulic barrier for groundwater below the facility. Based on the data collected in 2014, seven of the fourteen observation wells contain little to no fluid (i.e. measuring less than 0.5 ft of fluid in the well at any one time).

Table 1 provides a summary of the fluids level measurements collected from the wells along the north boundary barrier wall.

3.3.3 Hammond Ditch Recovery System

The Hammond Ditch Recovery System serves as a hydraulic relief system for groundwater accumulating within the western portion of the Refinery. All recovered water through the Hammond Ditch French drain west of pipeline easement discharges to Tank 37, which is then transferred to the API separator for product recovery. The location of Tank 37 is shown on Figure 3. Refinery Operators inspects that operation of Tank 37 daily and records the amount of water recovered by the tank using the flow meter located on the discharge end of the Tank 37 transfer pump. In 2014, the total volume of fluids recovered at Tank 37 was approximately 2,883,628 gallons.

3.3.4 East Outfall Recovery System

Total fluids from Outfall 1 is recovered via Tank 38 and transferred to the WWTS for treatment prior to disposal through the on-site injection well. Figure 3 shows the location of Tank 38.

Tank 38 piping is equipped with a flow meter to measure the total gallons transferred to the WWTP. In 2014, the total fluid volume recovered at Tank 38 was approximately 10,207,340 gallons.

3.4 Below-Grade Testing and Inspections

Pursuant to conditions of approval stated in Discharge Permit GW-001 (regulated by the Oil Conservation Division), Bloomfield Refinery personnel conducted annual below-grade sump testing and underground process/wastewater line testing. In 2014 all sumps within the facility were cleaned out with a vacuum truck, visually inspected, and hydrostatically tested, for a minimum of 60 minutes if required to insure integrity. Fourteen of the sewer boxes were removed from service and 4 remain in service since the refinery shutdown in 2009 and demolition of the Refinery which began in 2014. All sumps tested in 2014 passed and were returned to normal service. Double-walled steel (DW Steel) sumps were also inspected through the leak detection port. No evidence of moisture was observed.

In addition, approximately 6217 feet of underground piping was hydrostatically tested at Bloomfield Terminal in 2014. Testing of underground process piping includes pressuring-up the piping to a set-point of approximately 150% of the normal operating pressure. The test piping remains pressured for a minimum of 30 minutes, at the end of which the piping pressure is compared to the original set pressure. Piping that did not lose pressure over the testing period was considered acceptable for service. One issue was identified during underground piping testing in 2014. Line # 2 in Appendix D, which runs from Pump 671 to the evaporation pond outlet, failed during the hydrotesting process. The Line has been taken out of service and is scheduled for repair. Appendix D summarizes the underground piping testing and up-dated tank inspection schedule.

3.5 Waste Disposal

Western Refining indefinitely suspended refining operations at the Bloomfield Facility on November 23, 2009. The crude unloading and product loading racks, storage tanks and other supporting equipment remain in operation. Recovered water from on-site remediation activities and facility operations is treated through the on-site Wastewater Treatment System (WWTS). Treated water is then disposed of through the on-site Class I injection well.

Significantly less waste is routinely generated since the suspension of refining operations in November 2009. The on-site landfill is no longer operational, and therefore all operational waste generated is properly characterized and disposed of off-site. A summary of such wastes, including a water balance sheet for 2014 is provided in Appendix E.

SECTION 4.0

CONCLUSIONS

The following is a summary of conclusions based on monitoring and inspection data collected in 2014.

4.1 Groundwater Monitoring

Western has in-place a Facility-Wide Groundwater Monitoring Program that is up-dated annually as required under the 2007 Consent Order issued by NMED-HWB. Up-dates to this program include incorporation of additional wells installed as part of on-going completed RCRA Investigation activities. Such up-dates are proposed for agency approval in June of each year. Screening levels used to evaluate the groundwater condition at the Bloomfield refinery are reflective of the same conservative screening levels currently used for evaluation of on-going RCRA Investigation activities. Tables 3 through 10 include the most conservative screening level for each respective analyte. Sample results included in the analytical summary tables that exceed the respective sample results are bolded and highlighted in yellow. Figure 8 and Figure 9 shows a summary of the BTEX and MTBE concentrations detected site-wide during the April 2014 and August 2014 sampling events, respectively.

Depth-to-groundwater and depth-to-product measurements were collected at all refinery monitoring wells, recovery wells, observation wells, collection wells and sump wells in 2014, with the exception of CW 25+95. Groundwater elevation contours show that groundwater flows in the general northwest direction, with the groundwater under the process areas flowing towards the north boundary barrier wall and Hammond Ditch Collection System.

Groundwater Quality

Based on the analytical results for groundwater monitoring collected in 2014, the following constituents were detected at concentrations in groundwater above the respective most conservative screening levels.

Organic Compounds:

1,2,4-Trimethylbenzene
1,2-Dichlorethane
1,3,5-trimethylbenzene
1-Methylnaphthalene
2-Methylnaphthalene
Benzene
Ethylbenzene
MTBE
Toluene
Xylenes
Naphthalene

General Chemistry:

Chloride
Sulfate
Nitrate

Total Metals:

Barium
Chromium
Lead

Dissolved Metals:

Barium
Iron
Manganese
Selenium

Total Petroleum Hydrocarbons:

Diesel Range Organics

Naturally occurring background concentrations in groundwater are currently being evaluated through the Background Investigation activities conducted as part of the July 2007 Consent Order issued by NMED-HWB.

4.2 Outfall and Seep Inspections

Bi-monthly visual inspections of Seeps 1 through 9, and along the San Juan River Bluff, which includes the East Fork Area, were conducted in 2014. No visual sheens or odors were identified during the inspection. Fluid in the Seeps is most often prevalent during the spring, corresponding with the times of higher precipitation. Fluids containing constituents higher than water quality standards are completely removed using portable pumps to ensure there are no impacts to the river.

4.3 Total Fluids Recovery Systems

The Bloomfield Refinery operates and monitors several fluid recovery systems within the facility, which include:

- Groundwater Recovery System using recovery wells within the Refinery Complex;
- North Boundary Barrier Collection System;
- Hammond Ditch Recovery System;
- River Terrace Remediation system; and
- East Outfall Recovery System.

All fluids recovered from these systems, with the exception of the effluent from the River Terrace Remediation System, are pumped to the on-site Waste Water Treatment Plant for treatment prior to disposal through the on-site injection well. Water from the River Terrace is treated separately and is re-used as Plant Water for facility operations.

For wells located along the river-side of the slurry wall in areas in which groundwater is limited and therefore not suited for pumping, absorbent socks are placed in each individual well where SPH is detected for product recovery. The socks are replaced periodically, and the used socks are managed as Special Waste.

4.4 Below-Grade Testing and Tank Inspections

In compliance with the Facility's Discharge Permit dated July 2010, underground process piping and sumps were inspected to determine their integrity for service. All piping and sumps tested in 2014 passed inspections and were returned to normal service following completion of testing activities. In addition, petroleum storage tanks continue to be inspected at a frequency that is in compliance with API 650 and 653 guidelines.

SECTION 5.0

REFERENCES

Groundwater Technology, Inc., 1994, RCRA Facility Investigation/Corrective Measures Study Report Bloomfield Refining Company #50 County Road 4990 Bloomfield, New Mexico.

NMED, 2007, State of New Mexico Environment Department v. San Juan Refining Company and Giant Industries, Inc.; Order July 27, 2007.

NMOCD, 2010, New Mexico Oil Conservation Division, Discharge Permit Renewal (GW-001) Bloomfield Refinery, July 7, 2010.

Tables

TABLE 1
Fluid Level Measurements Summary
2014 Groundwater Remediation Monitoring Annual Report

Well ID	Date	Measuring Point Elevation (ft amsl)	Total Well Depth (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
MW-01	08/18/14	5519.21	21.56	NPP	17.14	5502.07	NPP
	04/02/14	5519.21	21.56	NPP	17.60	5501.61	NPP
	08/05/13	5519.21	21.56	NPP	17.18	5502.03	NPP
	04/08/13	5519.21	21.56	NPP	17.51	5501.70	NPP
	08/06/12	5519.21	21.56	NPP	17.11	5502.10	NPP
	04/02/12	5519.21	21.56	NPP	17.56	5501.65	NPP
	08/16/11	5519.21	21.56	NPP	16.99	5502.22	NPP
	04/11/11	5519.21	21.56	NPP	17.47	5501.74	NPP
MW-03	08/18/14	5539.27	36.75	NPP	36.49	5502.78	NPP
	04/02/14	5539.27	36.75	NPP	NWP	NWP	NPP
	08/05/13	5539.27	36.75	NPP	NWP	NWP	NPP
	04/08/13	5539.27	36.75	NPP	NWP	NWP	NPP
	08/06/12	5539.27	36.75	NPP	36.42	5502.85	NPP
	04/02/12	5539.27	36.75	NPP	NWP	NWP	NPP
	08/16/11	5539.27	36.75	NPP	36.43	5502.84	NPP
	04/11/11	5539.27	36.75	NPP	36.53	5502.74	NPP
MW-04	08/18/14	5527.78	30.48	NPP	27.47	5500.31	NPP
	04/02/14	5527.78	30.48	NPP	27.45	5500.33	NPP
	08/05/13	5527.78	30.48	NPP	27.45	5500.33	NPP
	04/08/13	5527.78	30.48	NPP	27.41	5500.37	NPP
	08/06/12	5527.78	30.48	NPP	27.40	5500.38	NPP
	04/02/12	5527.78	30.48	NPP	27.43	5500.35	NPP
	08/17/11	5527.78	30.48	NPP	27.27	5500.51	NPP
	04/11/11	5527.78	30.48	NPP	27.23	5500.55	NPP
MW-05	08/18/14	5548.56	37.20	NPP	NWP	NWP	NPP
	04/02/14	5548.56	37.20	NPP	NWP	NWP	NPP
	08/05/13	5548.56	37.20	NPP	NWP	NWP	NPP
	04/08/13	5548.56	37.20	NPP	NWP	NWP	NPP
	08/06/12	5548.56	37.20	NPP	NWP	NWP	NPP
	04/02/12	5548.56	37.20	NPP	NWP	NWP	NPP
	08/17/11	5548.56	37.20	NPP	NWP	NWP	NPP
	04/11/11	5548.56	37.20	NPP	NWP	NWP	NPP
MW-06	08/18/14	5554.61	48.00	NPP	NWP	NWP	NPP
	04/02/14	5554.61	48.00	NPP	NWP	NWP	NPP
	08/05/13	5554.61	48.00	NPP	NWP	NWP	NPP
	04/08/13	5554.61	48.00	NPP	NWP	NWP	NPP
	08/06/12	5554.61	48.00	NPP	NWP	NWP	NPP
	04/02/12	5554.61	48.00	NPP	NWP	NWP	NPP
	08/17/11	5554.61	48.00	NPP	NWP	NWP	NPP
	04/11/11	5554.61	48.00	NPP	NWP	NWP	NPP
MW-07	08/18/14	5527.66	62.61	NPP	28.03	5499.63	NPP
	04/02/14	5527.66	62.61	NPP	27.58	5500.08	NPP
	08/05/13	5527.66	62.61	NPP	27.88	5499.78	NPP
	04/08/13	5527.66	62.61	NPP	27.45	5500.21	NPP
	08/06/12	5527.66	62.61	NPP	27.87	5499.79	NPP
	04/02/12	5527.66	62.61	NPP	27.40	5500.26	NPP
	08/17/11	5527.66	62.61	NPP	27.65	5500.01	NPP
	04/11/11	5527.66	62.61	NPP	27.25	5500.41	NPP
MW-08	08/18/14	5534.58	35.93	NPP	31.73	5502.85	NPP
	04/02/14	5534.58	35.93	NPP	32.11	5502.47	NPP
	08/05/13	5534.58	35.93	NPP	31.90	5502.68	NPP
	04/08/13	5534.58	35.93	NPP	31.82	5502.76	NPP
	08/06/12	5534.58	35.93	NPP	31.70	5502.88	NPP
	04/02/12	5534.58	35.93	NPP	31.94	5502.64	NPP
	08/17/11	5534.58	35.93	NPP	31.72	5502.86	NPP
	04/11/11	5534.58	35.93	NPP	31.94	5502.64	NPP

TABLE 1
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Well ID	Date	Measuring Point Elevation (ft amsl)	Total Well Depth (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
MW-11	08/18/14	5510.31	22.94	NPP	10.95	5499.36	NPP
	04/02/14	5510.31	22.94	NPP	11.85	5498.46	NPP
	08/05/13	5510.31	22.94	NPP	11.82	5498.49	NPP
	04/08/13	5510.31	22.94	NPP	11.91	5498.40	NPP
	08/06/12	5510.31	22.94	NPP	11.72	5498.59	NPP
	04/02/12	5510.31	22.94	NPP	11.90	5498.41	NPP
	08/16/11	5510.31	22.94	NPP	11.64	5498.67	NPP
	04/11/11	5510.31	22.94	NPP	11.76	5498.55	NPP
MW-12	08/18/14	5501.61	14.98	NPP	8.42	5501.89	NPP
	04/02/14	5501.61	14.98	NPP	10.20	5500.11	NPP
	08/05/13	5501.61	14.98	NPP	10.70	5499.61	NPP
	04/08/13	5501.61	14.98	NPP	10.58	5499.73	NPP
	08/06/12	5501.61	14.98	NPP	10.53	5491.08	NPP
	04/02/12	5501.61	14.98	NPP	10.54	5491.07	NPP
	08/16/11	5501.61	14.98	NPP	10.92	5490.69	NPP
	04/11/11	5501.61	14.98	NPP	10.48	5491.13	NPP
MW-13	08/18/14	5542.04	52.89	NPP	40.94	5501.10	NPP
	04/02/14	5542.04	52.89	NPP	40.90	5501.14	NPP
	08/05/13	5542.04	52.89	NPP	40.85	5501.19	NPP
	04/08/13	5542.04	52.89	NPP	40.80	5501.24	NPP
	08/06/12	5542.04	52.89	NPP	40.77	5501.27	NPP
	04/02/12	5542.04	52.89	NPP	40.72	5501.32	NPP
	08/16/11	5542.04	52.89	NPP	40.61	5501.43	NPP
	04/11/11	5542.04	52.89	NPP	40.55	5501.49	NPP
MW-20	08/18/14	5519.9	27.13	20.9	21.30	5498.92	0.40
	04/02/14	5519.9	27.13	20.77	21.80	5498.92	1.03
	08/05/13	5519.9	27.13	20.69	21.41	5499.07	0.72
	04/08/13	5519.9	27.13	20.81	21.65	5498.92	0.84
	08/06/12	5519.9	27.13	20.66	21.60	5499.05	0.94
	04/02/12	5519.9	27.13	20.72	21.67	5498.99	0.95
	08/18/11	5519.9	27.13	20.73	21.34	5499.05	0.61
	04/11/11	5519.9	27.13	20.71	21.33	5499.07	0.62
MW-21	08/18/14	5521.99	30.38	NPP	21.64	5500.35	NPP
	04/02/14	5521.99	30.38	NPP	22.00	5499.99	NPP
	08/05/13	5521.99	30.38	21.83	21.86	5500.15	0.03
	04/08/13	5521.99	30.38	21.82	21.87	5500.16	0.05
	08/06/12	5521.99	30.38	21.75	21.80	5500.23	0.05
	04/02/12	5521.99	30.38	21.96	21.98	5500.03	0.02
	08/18/11	5521.99	30.38	21.84	21.87	5500.14	0.03
	04/11/11	5521.99	30.38	21.80	21.86	5500.18	0.06
MW-25	08/18/14	5533.99	41.20	NPP	33.25	5500.74	NPP
	04/02/14	5533.99	41.20	NPP	33.24	5500.75	NPP
	08/05/13	5533.99	41.20	33.18	33.20	5500.81	0.02
	04/08/13	5533.99	41.20	33.14	33.15	5500.85	0.01
	08/06/12	5533.99	41.20	33.12	33.15	5500.86	0.03
	04/02/12	5533.99	41.20	33.11	33.12	5500.88	0.01
	08/17/11	5533.99	41.20	NPP	32.97	5501.02	NPP
	04/11/11	5533.99	41.20	32.85	33.01	5501.11	0.16

TABLE 1
Fluid Level Measurements Summary
2014 Groundwater Remediation Monitoring Annual Report

Well ID	Date	Measuring Point Elevation (ft amsl)	Total Well Depth (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
MW-26	08/18/14	5517.88	25.11	17.7	17.95	5500.13	0.25
	04/02/14	5517.88	25.11	17.78	17.82	5500.09	0.04
	08/05/13	5517.88	25.11	17.73	18.01	5500.09	0.28
	04/08/13	5517.88	25.11	17.72	17.83	5500.14	0.11
	08/06/12	5517.88	25.11	NPP	17.71	5500.17	NPP
	04/02/12	5517.88	25.11	NPP	17.68	5500.20	NPP
	08/16/11	5517.88	25.11	NPP	17.58	5500.30	NPP
	04/11/11	5517.88	25.11	NPP	17.50	5500.38	NPP
MW-27	08/18/14	5518.67	24.42	NPP	22.38	5496.29	NPP
	04/02/14	5518.67	24.42	NPP	21.65	5497.02	NPP
	08/05/13	5518.67	24.42	NPP	22.43	5496.24	NPP
	04/08/13	5518.67	24.42	NPP	21.56	5497.11	NPP
	08/06/12	5518.67	24.42	NPP	20.89	5497.78	NPP
	04/02/12	5518.67	24.42	NPP	19.61	5499.06	NPP
	08/16/11	5518.67	24.42	NPP	20.26	5498.41	NPP
	04/11/11	5518.67	24.42	NPP	18.89	5499.78	NPP
MW-29	08/18/14	5524.97	28.62	NPP	23.00	5501.97	NPP
	04/02/14	5524.97	28.62	NPP	23.42	5501.55	NPP
	08/05/13	5524.97	28.62	NPP	23.13	5501.84	NPP
	04/08/13	5524.97	28.62	NPP	23.25	5501.72	NPP
	08/06/12	5524.97	28.62	NPP	23.06	5501.91	NPP
	04/02/12	5524.97	28.62	NPP	23.34	5501.63	NPP
	08/17/11	5524.97	28.62	NPP	23.04	5501.93	NPP
	04/11/11	5524.97	28.62	NPP	23.23	5501.74	NPP
MW-30	08/18/14	5536.83	40.13	NPP	34.09	5502.74	NPP
	04/02/14	5536.83	40.13	34.39	34.40	5502.44	0.01
	08/05/13	5536.83	40.13	NPP	34.21	5502.62	NPP
	04/08/13	5536.83	40.13	NPP	34.16	5502.67	NPP
	08/06/12	5536.83	40.13	NPP	34.02	5502.81	NPP
	04/02/12	5536.83	40.13	NPP	34.22	5502.61	NPP
	08/17/11	5536.83	40.13	NPP	34.03	5502.80	NPP
	04/11/11	5536.83	40.13	NPP	34.42	5502.41	NPP
MW-31	08/18/14	5536.24	39.16	NPP	34.55	5501.69	NPP
	04/02/14	5536.24	39.16	NPP	34.55	5502.28	NPP
	08/05/13	5536.24	39.16	NPP	34.49	5501.75	NPP
	04/08/13	5536.24	39.16	NPP	34.37	5501.87	NPP
	08/06/12	5536.24	39.16	NPP	34.40	5501.84	NPP
	04/02/12	5536.24	39.16	NPP	34.35	5501.89	NPP
	08/16/11	5536.24	39.16	NPP	34.30	5501.94	NPP
	04/11/11	5536.24	39.16	NPP	34.24	5502.00	NPP
MW-32	08/18/14	5525.64	27.51	NPP	25.52	5500.12	NPP
	04/02/14	5525.64	27.51	NPP	25.55	5500.09	NPP
	08/05/13	5525.64	27.51	NPP	25.47	5500.17	NPP
	04/08/13	5525.64	27.51	NPP	25.45	5500.19	NPP
	08/06/12	5525.64	27.51	NPP	25.42	5500.22	NPP
	04/02/12	5525.64	27.51	NPP	25.38	5500.26	NPP
	08/16/11	5525.64	27.51	NPP	25.27	5500.37	NPP
	04/11/11	5525.64	27.51	NPP	25.23	5500.41	NPP

TABLE 1
Fluid Level Measurements Summary
2014 Groundwater Remediation Monitoring Annual Report

Well ID	Date	Measuring Point Elevation (ft amsl)	Total Well Depth (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
MW-33	08/18/14	5521.79	25.51	NPP	23.26	5498.53	NPP
	04/02/14	5521.79	25.51	NPP	23.45	5498.34	NPP
	08/05/13	5521.79	25.51	NPP	23.86	5497.93	NPP
	04/08/13	5521.79	25.51	NPP	23.56	5498.23	NPP
	08/06/12	5521.79	25.51	NPP	23.36	5498.43	NPP
	04/02/12	5521.79	25.51	NPP	22.73	5499.06	NPP
	08/16/11	5521.79	25.51	NPP	22.81	5498.98	NPP
	04/11/11	5521.79	25.51	NPP	22.52	5499.27	NPP
MW-34	08/18/14	5511.63	20.96	NPP	14.01	5497.62	NPP
	04/02/14	5511.63	20.96	NPP	14.77	5496.86	NPP
	08/05/13	5511.63	20.96	NPP	14.63	5497.00	NPP
	04/08/13	5511.63	20.96	NPP	14.70	5496.93	NPP
	08/06/12	5511.63	20.96	NPP	14.33	5497.30	NPP
	04/02/12	5511.63	20.96	NPP	14.37	5497.26	NPP
	08/16/11	5511.63	20.96	NPP	14.43	5497.20	NPP
	04/11/11	5511.63	20.96	NPP	14.47	5497.16	NPP
MW-35	08/18/14	5518.95	26.45	NPP	22.34	5496.61	NPP
	04/02/14	5518.95	26.45	NPP	22.69	5496.26	NPP
	08/05/13	5518.95	26.45	NPP	22.54	5496.41	NPP
	04/08/13	5518.95	26.45	NPP	22.57	5496.38	NPP
	08/06/12	5518.95	26.45	NPP	22.29	5496.66	NPP
	04/02/12	5518.95	26.45	NPP	22.30	5496.65	NPP
	04/11/11	5518.95	26.45	NPP	22.38	5496.57	NPP
	08/16/14	5518.95	26.45	NPP	22.41	5496.54	NPP
MW-36	08/18/14	5516.95	23.26	NPP	19.64	5497.31	NPP
	04/02/14	5516.95	23.26	NPP	21.12	5495.83	NPP
	08/05/13	5516.95	23.26	NPP	20.98	5495.97	NPP
	04/08/13	5516.95	23.26	NPP	21.10	5495.85	NPP
	08/06/12	5516.95	23.26	NPP	20.82	5496.13	NPP
	04/02/12	5516.95	23.26	NPP	21.02	5495.93	NPP
	08/17/11	5516.95	23.26	NPP	20.98	5495.97	NPP
	04/11/11	5516.95	23.26	NPP	21.02	5495.93	NPP
MW-37	08/18/14	5519.62	27.58	NPP	22.98	5496.64	NPP
	04/02/14	5519.62	27.58	NPP	23.72	5495.90	NPP
	08/05/13	5519.62	27.58	NPP	23.69	5495.93	NPP
	04/08/13	5519.62	27.58	NPP	23.72	5495.90	NPP
	08/06/12	5519.62	27.58	NPP	23.51	5496.11	NPP
	04/02/12	5519.62	27.58	NPP	23.58	5496.04	NPP
	08/16/11	5519.62	27.58	NPP	23.63	5495.99	NPP
	04/11/11	5519.62	27.58	NPP	23.60	5496.02	NPP
MW-38	08/18/14	5519.19	26.82	NPP	22.45	5496.74	NPP
	04/02/14	5519.19	26.82	NPP	23.83	5495.36	NPP
	08/05/13	5519.19	26.82	NPP	23.91	5495.28	NPP
	04/08/13	5519.19	26.82	NPP	23.87	5495.32	NPP
	08/06/12	5519.19	26.82	NPP	23.78	5495.41	NPP
	04/02/12	5519.19	26.82	NPP	23.80	5495.39	NPP
	08/16/11	5519.19	26.82	NPP	23.96	5495.23	NPP
	04/11/11	5519.19	26.82	NPP	23.85	5495.34	NPP

TABLE 1
Fluid Level Measurements Summary
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Well ID	Date	Measuring Point Elevation (ft amsl)	Total Well Depth (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
MW-39	08/18/14	5520.83	38.34	NPP	25.94	5494.89	NPP
	04/02/14	5520.83	38.34	NPP	25.70	5495.13	NPP
	08/05/13	5520.83	38.34	NPP	25.95	5494.88	NPP
	04/08/13	5520.83	38.34	NPP	25.70	5495.13	NPP
	08/06/12	5520.83	38.34	NPP	26.05	5494.78	NPP
	04/02/12	5520.83	38.34	NPP	25.76	5495.07	NPP
	08/08/11	5520.83	38.34	NPP	25.88	5494.95	NPP
	04/11/11	5520.83	38.34	NPP	25.80	5495.03	NPP
MW-40	08/18/14	5527.31	30.07	28.59	28.65	5498.71	0.06
	04/02/14	5527.31	30.07	28.55	29.10	5498.65	0.55
	08/05/13	5527.31	30.07	28.42	28.81	5498.81	0.39
	04/08/13	5527.31	30.07	28.48	28.77	5498.77	0.29
	08/06/12	5527.31	30.07	28.44	28.72	5498.81	0.28
	04/02/12	5527.31	30.07	NPP	28.57	5498.74	NPP
	08/17/11	5527.31	30.07	NPP	28.37	5498.94	NPP
	04/11/11	5527.31	30.07	NPP	28.38	5498.93	NPP
MW-41	08/18/14	5526.41	31.62	26.96	27.70	5499.30	0.74
	04/02/14	5526.41	31.62	26.96	27.99	5499.24	1.03
	08/05/13	5526.41	31.62	26.83	27.75	5499.40	0.92
	04/08/13	5526.41	31.62	26.85	27.78	5499.37	0.93
	08/06/12	5526.41	31.62	26.86	27.94	5499.33	1.08
	04/02/12	5526.41	31.62	26.89	28.07	5499.28	1.18
	08/08/11	5526.41	31.62	26.95	27.55	5499.34	0.60
	04/11/11	5526.41	31.62	26.71	27.30	5499.58	0.59
MW-44	08/18/14	5535.44	50.91	NPP	34.57	5500.87	NPP
	04/02/14	5535.44	50.91	NPP	34.30	5501.14	NPP
	08/05/13	5535.44	50.91	NPP	34.46	5500.98	NPP
	04/08/13	5535.44	50.91	NPP	34.04	5501.40	NPP
	08/06/12	5535.44	50.91	NPP	34.42	5501.02	NPP
	04/02/12	5535.44	50.91	NPP	33.93	5501.51	NPP
	08/17/11	5535.44	50.91	NPP	34.22	5501.22	NPP
	04/11/11	5535.44	50.91	NPP	34.00	5501.44	NPP
MW-45	08/18/14	5506.36	16.92	NPP	11.85	5494.51	NPP
	04/02/14	5506.36	16.92	12.07	12.15	5494.27	0.08
	08/05/13	5506.36	16.92	11.88	11.89	5494.48	0.01
	04/08/13	5506.36	16.92	11.98	12.05	5494.37	0.07
	08/06/12	5506.36	16.92	11.97	12.10	5494.36	0.13
	04/02/12	5506.36	16.92	11.95	12.08	5494.38	0.13
	08/08/11	5506.36	16.92	NPP	11.89	5494.47	NPP
	04/11/11	5506.36	16.92	11.98	12.13	5494.35	0.15
MW-46	08/18/14	5504.65	10.39	NPP	NWP	NWP	NPP
	04/02/14	5504.65	10.39	NPP	NWP	NWP	NPP
	08/05/13	5504.65	10.39	NPP	NWP	NWP	NPP
	04/08/13	5504.65	10.39	NPP	NWP	NWP	NPP
	08/06/12	5504.65	10.39	NPP	NWP	NWP	NPP
	04/02/12	5504.65	10.39	NPP	NWP	NWP	NPP
	08/08/11	5504.65	10.39	NPP	NWP	NWP	NPP
	04/11/11	5504.65	10.39	NPP	NWP	NWP	NPP

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Fluid Level Measurements Summary
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Well ID	Date	Measuring Point Elevation (ft amsl)	Total Well Depth (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
MW-47	08/18/14	5506.77	14.28	NPP	13.30	5493.47	NPP
	04/02/14	5506.77	14.28	NPP	13.80	5492.97	NPP
	08/05/13	5506.77	14.28	NPP	12.97	5493.80	NPP
	04/08/13	5506.77	14.28	NPP	12.84	5493.93	NPP
	08/06/12	5506.77	14.28	13.22	13.27	5493.54	0.05
	04/02/12	5506.77	14.28	12.85	13.17	5493.86	0.32
	08/08/11	5506.77	14.28	13.47	13.48	5493.30	0.01
	04/11/11	5506.77	14.28	12.85	13.28	5493.83	0.43
MW-50	08/18/14	5518.79	20.00	NPP	16.78	5502.01	NPP
	04/02/14	5518.79	20.00	NPP	17.28	5501.51	NPP
	08/05/13	5518.79	20.00	NPP	16.76	5502.03	NPP
	04/08/13	5518.79	20.00	NPP	17.21	5501.58	NPP
	08/06/12	5518.79	20.00	NPP	16.88	5501.91	NPP
	04/02/12	5518.79	20.00	NPP	17.22	5501.57	NPP
	08/22/11	5518.79	20.00	NPP	16.69	5502.10	NPP
	04/11/11	5518.79	20.00	NPP	17.10	5501.69	NPP
MW-51	08/18/14	5515.58	20.00	NPP	14.48	5501.10	NPP
	04/02/14	5515.58	20.00	NPP	14.98	5500.60	NPP
	08/05/13	5515.58	20.00	NPP	14.54	5501.04	NPP
	04/08/13	5515.58	20.00	NPP	14.95	5500.63	NPP
	08/06/12	5515.58	20.00	NPP	14.65	5500.93	NPP
	04/02/12	5515.58	20.00	NPP	15.00	5500.58	NPP
	08/22/11	5515.58	20.00	NPP	14.55	5501.03	NPP
	04/11/11	5515.58	20.00	NPP	14.94	5500.64	NPP
MW-52	08/18/14	5538.63	41.00	NPP	36.31	5502.32	NPP
	04/02/14	5538.63	41.00	NPP	36.69	5501.94	NPP
	08/05/13	5538.63	41.00	NPP	36.47	5502.16	NPP
	04/08/13	5538.63	41.00	NPP	36.41	5502.22	NPP
	08/06/12	5538.63	41.00	NPP	36.28	5502.35	NPP
	04/02/12	5538.63	41.00	NPP	36.50	5502.13	NPP
	08/22/11	5538.63	41.00	NPP	36.31	5502.32	NPP
	04/11/11	5538.63	41.00	NPP	36.47	5502.16	NPP
MW-53	08/18/14	5541.32	41.50	NPP	39.05	5502.27	NPP
	04/02/14	5541.32	41.50	NPP	39.32	5502.00	NPP
	08/05/13	5541.32	41.50	NPP	39.16	5502.16	NPP
	04/08/13	5541.32	41.50	NPP	39.04	5502.28	NPP
	08/06/12	5541.32	41.50	NPP	38.93	5502.39	NPP
	04/02/12	5541.32	41.50	NPP	39.10	5502.22	NPP
	08/22/11	5541.32	41.50	NPP	38.97	5502.35	NPP
	04/11/11	5541.32	41.50	NPP	39.05	5502.27	NPP
MW-54	08/18/14	5530.08	38.00	32.38	32.52	5497.67	0.14
	04/02/14	5530.08	38.00	32.75	32.95	5497.29	0.20
	08/05/13	5530.08	38.00	32.45	32.64	5497.59	0.19
	04/08/13	5530.08	38.00	32.71	32.93	5497.33	0.22
	08/06/12	5530.08	38.00	32.40	32.61	5497.64	0.21
	04/02/12	5530.08	38.00	32.75	33.09	5497.26	0.34
	08/22/11	5530.08	38.00	32.84	33.23	5497.16	0.39
	04/11/11	5530.08	38.00	32.90	33.31	5497.10	0.41

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Fluid Level Measurements Summary
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MW-55	08/18/14	5519.84	27.25	21.84	21.86	5498.00	0.02
	04/02/14	5519.84	27.25	21.95	22.01	5497.88	0.06
	08/05/13	5519.84	27.25	21.74	22.58	5497.93	0.84
	04/08/13	5519.84	27.25	21.05	21.95	5498.61	0.90
	08/06/12	5519.84	27.25	21.81	22.53	5497.89	0.72
	04/02/12	5519.84	27.25	NPP	22.07	5497.77	NPP
	08/22/11	5519.84	27.25	NPP	21.27	5498.57	NPP
	04/11/11	5519.84	27.25	NPP	22.04	5497.80	NPP
MW-56	08/18/14	5519.31	23.75	18.10	18.25	5501.18	0.15
	04/02/14	5519.31	23.75	18.26	19.10	5500.88	0.84
	08/05/13	5519.31	23.75	18.11	18.87	5501.05	0.76
	04/08/13	5519.31	23.75	18.25	19.33	5500.84	1.08
	08/06/12	5519.31	23.75	19.76	20.69	5499.36	0.93
	04/02/12	5519.31	23.75	19.86	21.00	5499.22	1.14
	08/22/11	5519.31	23.75	19.74	20.83	5499.35	1.09
	04/11/11	5519.31	23.75	19.50	20.45	5499.62	0.95
MW-57	08/18/14	5521.17	24.25	19.60	19.75	5501.54	0.15
	04/02/14	5521.17	24.25	19.78	20.36	5501.27	0.58
	08/05/13	5521.17	24.25	19.60	20.30	5501.43	0.70
	04/08/13	5521.17	24.25	19.66	20.35	5501.37	0.69
	08/06/12	5521.17	24.25	21.44	22.37	5499.54	0.93
	04/02/12	5521.17	24.25	21.50	22.79	5499.41	1.29
	08/22/11	5521.17	24.25	21.30	22.78	5499.57	1.48
	04/11/11	5521.17	24.25	21.27	22.85	5499.58	1.58
MW-58	08/18/14	5520.29	27.00	21.08	21.87	5499.05	0.79
	04/02/14	5520.29	27.00	21.25	22.90	5498.71	1.65
	08/05/13	5520.29	27.00	21.10	22.17	5498.98	1.07
	04/08/13	5520.29	27.00	21.25	22.35	5498.82	1.10
	08/06/12	5520.29	27.00	20.98	22.05	5499.10	1.07
	04/02/12	5520.29	27.00	20.98	22.13	5499.08	1.15
	08/22/11	5520.29	27.00	20.90	21.99	5499.17	1.09
	04/11/11	5520.29	27.00	21.03	21.09	5499.25	0.06
MW-59	08/18/14	5545.20	44.25	NPP	43.75	5501.45	NPP
	04/02/14	5545.20	44.25	NPP	43.73	5501.47	NPP
	08/05/13	5545.20	44.25	NPP	43.67	5501.53	NPP
	04/08/13	5545.20	44.25	NPP	43.56	5501.64	NPP
	08/06/12	5545.20	44.25	NPP	43.57	5501.63	NPP
	04/02/12	5545.20	44.25	NPP	43.54	5501.66	NPP
	08/25/11	5545.20	44.25	NPP	43.49	5501.71	NPP
	04/11/11	5545.20	44.25	NPP	43.43	5501.77	NPP
MW-60	08/18/14	5543.71	43.33	NPP	43.15	5500.56	NPP
	04/02/14	5543.71	43.33	NPP	43.20	5500.51	NPP
	08/05/13	5543.71	43.33	NPP	42.90	5500.81	NPP
	04/08/13	5543.71	43.33	NPP	42.85	5500.86	NPP
	08/06/12	5543.71	43.33	NPP	42.84	5500.87	NPP
	04/02/12	5543.71	43.33	NPP	42.79	5500.92	NPP
	08/25/11	5543.71	45.50	NPP	42.67	5501.04	NPP
	04/11/11	5543.71	45.50	NPP	42.58	5501.13	NPP

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MW-61	08/18/14	5539.41	10.25	36.8	37.40	5502.49	0.60
	04/02/14	5539.41	10.25	36.88	37.86	5502.33	0.98
	08/05/13	5539.41	10.25	36.80	37.70	5502.43	0.90
	04/08/13	5539.41	10.25	36.71	37.40	5502.56	0.69
	08/06/12	5539.41	10.25	36.67	37.25	5502.62	0.58
	04/02/12	5539.41	10.25	36.72	37.48	5502.54	0.76
	08/08/11	5539.41	10.25	36.67	37.25	5502.62	0.58
	04/11/11	5539.41	10.25	36.65	37.00	5502.69	0.35
MW-62	08/18/14	5561.32	58.25	NPP	56.28	5505.04	NPP
	04/02/14	5561.32	58.25	NPP	56.05	5505.27	NPP
	08/05/13	5561.32	58.25	NPP	56.36	5504.96	NPP
	04/08/13	5561.32	58.25	NPP	55.93	5505.39	NPP
	08/06/12	5561.32	58.25	NPP	56.45	5504.87	NPP
	04/02/12	5561.32	58.25	NPP	55.85	5505.47	NPP
	08/23/11	5561.32	58.25	NPP	56.26	5505.06	NPP
	04/11/11	5561.32	58.25	NPP	55.38	5505.94	NPP
MW-63	08/18/14	5547.26	46.00	NPP	45.23	5502.03	NPP
	04/02/14	5547.26	46.00	NPP	45.27	5501.99	NPP
	08/05/13	5547.26	46.00	NPP	45.20	5502.06	NPP
	04/08/13	5547.26	46.00	NPP	45.09	5502.17	NPP
	08/06/12	5547.26	46.00	NPP	45.07	5502.19	NPP
	04/02/12	5547.26	46.00	NPP	45.07	5502.19	NPP
	08/24/11	5547.26	46.00	NPP	45.00	5502.26	NPP
	04/11/11	5547.26	46.00	NPP	44.93	5502.33	NPP
MW-64	08/18/14	5552.29	52.25	NPP	50.46	5501.83	NPP
	04/02/14	5552.29	52.25	NPP	50.45	5501.84	NPP
	08/05/13	5552.29	52.25	NPP	50.37	5501.92	NPP
	04/08/13	5552.29	52.25	NPP	50.32	5501.97	NPP
	08/06/12	5552.29	52.25	NPP	50.29	5502.00	NPP
	04/02/12	5552.29	52.25	NPP	50.29	5502.00	NPP
	08/24/11	5552.29	52.25	NPP	50.22	5502.07	NPP
	04/11/11	5552.29	52.25	NPP	50.16	5502.13	NPP
MW-65	08/18/14	5539.62	44.25	NPP	37.15	5502.47	NPP
	04/02/14	5539.62	44.25	NPP	37.38	5502.24	NPP
	08/05/13	5539.62	44.25	NPP	37.24	5502.38	NPP
	04/08/13	5539.62	44.25	NPP	37.13	5502.49	NPP
	08/06/12	5539.62	44.25	NPP	37.04	5502.58	NPP
	04/02/12	5539.62	44.25	NPP	37.19	5502.43	NPP
	08/22/11	5539.62	44.25	NPP	37.06	5502.56	NPP
	04/11/11	5539.62	44.25	NPP	37.05	5502.57	NPP
MW-66	08/18/14	5544.62	43.25	42.01	42.13	5502.59	0.12
	04/02/14	5544.62	43.25	42.13	42.45	5502.43	0.32
	08/05/13	5544.62	43.25	42.01	42.28	5502.56	0.27
	04/08/13	5544.62	43.25	42.04	42.20	5502.55	0.16
	08/06/12	5544.62	43.25	41.95	42.13	5502.63	0.18
	04/02/12	5544.62	43.25	42.03	42.20	5502.56	0.17
	08/08/11	5544.62	43.25	41.87	41.92	5502.74	0.05
	04/11/11	5544.62	43.25	41.83	41.92	5502.77	0.09

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2014 Groundwater Remediation Monitoring Annual Report

Well ID	Date	Measuring Point Elevation (ft amsl)	Total Well Depth (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
MW-67	08/18/14	5523.31	25.14	NPP	21.42	5501.89	NPP
	04/02/14	5523.31	25.14	NPP	21.54	5501.77	NPP
	08/05/13	5523.31	25.14	NPP	21.24	5502.07	NPP
	04/08/13	5523.31	25.14	NPP	21.47	5501.84	NPP
	08/06/12	5523.31	25.14	NPP	20.93	5502.38	NPP
	04/02/12	5523.31	25.14	NPP	21.53	5501.78	NPP
	08/22/11	5523.31	25.14	NPP	21.01	5502.30	NPP
	04/11/11	5523.31	25.14	NPP	21.44	5501.87	NPP
MW-68	08/18/14	5517.37	20.58	NPP	16.50	5500.87	NPP
	04/02/14	5517.37	20.58	NPP	16.94	5500.43	NPP
	08/05/13	5517.37	20.58	NPP	16.57	5500.80	NPP
	04/08/13	5517.37	20.58	NPP	16.84	5500.53	NPP
	08/06/12	5517.37	20.58	NPP	16.63	5500.74	NPP
	04/02/12	5517.37	20.58	NPP	16.40	5500.97	NPP
	08/22/11	5517.37	20.58	NPP	16.58	5500.79	NPP
	04/11/11	5517.37	20.58	NPP	16.84	5500.53	NPP
MW-69	08/18/14	5508.51	12.08	NPP	11.96	5496.55	NPP
	04/02/14	5508.51	12.08	NPP	11.96	5496.55	NPP
	08/05/13	5508.51	12.08	NPP	11.90	5496.61	NPP
	04/08/13	5508.51	12.08	NPP	11.91	5496.60	NPP
	08/06/12	5508.51	12.08	NPP	11.93	5496.58	NPP
	04/02/12	5508.51	12.08	NPP	11.92	5496.59	NPP
	08/22/11	5508.51	12.08	NPP	11.91	5496.60	NPP
	04/11/11	5508.51	12.08	NPP	NWP	NWP	NPP
MW-70	08/18/14	5527.96	26.25	NPP	25.56	5502.40	NPP
	04/02/14	5527.96	26.25	NPP	26.05	5501.91	NPP
	08/05/13	5527.96	26.25	NPP	25.85	5502.11	NPP
P-03	08/18/14	5510.77	22.73	NPP	10.27	5500.50	NPP
	04/02/14	5510.77	22.73	NPP	11.27	5499.50	NPP
	08/05/13	5510.77	22.73	NPP	11.04	5499.73	NPP
	04/08/13	5510.77	22.73	NPP	11.62	5499.15	NPP
	08/06/12	5510.77	22.73	NPP	10.91	5499.86	NPP
	04/02/12	5510.77	22.73	NPP	11.80	5498.97	NPP
	08/08/11	5510.77	22.73	NPP	11.26	5499.51	NPP
	04/11/11	5510.77	22.73	NPP	11.25	5499.52	NPP

TABLE 1
Fluid Level Measurements Summary
2014 Groundwater Remediation Monitoring Annual Report

Well ID	Date	Measuring Point Elevation (ft amsl)	Total Well Depth (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
RW-01	08/18/14	5529.34	40.80	NPP	31.15	5498.19	NPP
	04/02/14	5529.34	40.80	NPP	31.62	5497.72	NPP
	08/05/13	5529.34	40.80	31.29	31.30	5498.05	0.01
	04/08/13	5529.34	40.80	NPP	31.57	5497.77	NPP
	08/06/12	5529.34	40.80	NPP	31.24	5498.10	NPP
	04/02/12	5529.34	40.80	31.64	31.65	5497.70	0.01
	08/08/11	5529.34	40.80	31.00	31.62	5498.22	0.62
	04/11/11	5529.34	40.80	32.60	32.97	5496.67	0.37
RW-02	08/18/14	5526.94	35.86	26.69	26.79	5500.23	0.10
	04/02/14	5526.94	35.86	NPP	26.67	5500.27	NPP
	08/05/13	5526.94	35.86	NPP	26.70	5500.24	NPP
	04/08/13	5526.94	35.86	NPP	26.65	5500.29	NPP
	08/06/12	5526.94	35.86	NPP	26.65	5500.29	NPP
	04/02/12	5526.94	35.86	NPP	26.70	5500.24	NPP
	08/08/11	5526.94	35.86	NPP	26.59	5500.35	NPP
	04/11/11	5526.94	35.86	NPP	28.10	5498.84	NPP
RW-03	08/18/14	5520.35	34.57	NPP	21.53	5498.82	NPP
	04/02/14	5520.35	34.57	NPP	22.42	5497.93	NPP
	08/05/13	5520.35	34.57	NPP	22.10	5498.25	NPP
	04/08/13	5520.35	34.57	NPP	22.57	5497.78	NPP
	08/06/12	5520.35	34.57	Maintenance Being Conducted			
	04/02/12	5520.35	34.57	22.60	22.65	5497.74	0.05
	08/08/11	5520.35	34.57	21.95	21.97	5498.40	0.02
	04/11/11	5520.35	34.57	NPP	22.43	5497.92	NPP
RW-09	08/18/14	5523.21	34.04	24.75	25.09	5498.39	0.34
	04/02/14	5523.21	34.04	NPP	24.89	5498.32	NPP
	08/05/13	5523.21	34.04	24.61	24.95	5498.53	0.34
	04/08/13	5523.21	34.04	24.78	25.10	5498.37	0.32
	08/06/12	5523.21	34.04	NPP	25.05	5498.16	NPP
	04/02/12	5523.21	34.04	NPP	25.10	5498.11	NPP
	08/08/11	5523.21	34.04	24.00	24.01	5499.21	0.01
	04/11/11	5523.21	34.04	NPP	28.35	5494.86	NPP
RW-14	08/18/14	5537.5	41.94	35.94	36.05	5501.54	0.11
	04/02/14	5537.5	41.94	35.49	35.50	5502.01	0.01
	08/05/13	5537.5	41.94	NPP	35.29	5502.21	NPP
	04/08/13	5537.5	41.94	NPP	35.30	5502.20	NPP
	08/06/12	5537.5	41.94	35.13	35.18	5502.36	0.05
	04/02/12	5537.5	41.94	35.28	36.12	5502.05	0.84
	08/08/11	5537.5	41.94	35.02	36.14	5502.26	1.12
	04/11/11	5537.5	41.94	36.77	36.97	5500.69	0.20
RW-15	08/18/14	5536.83	43.43	NPP	35.95	5500.22	NPP
	04/02/14	5536.83	43.43	NPP	35.31	5501.52	NPP
	08/05/13	5536.83	43.43	NPP	35.12	5501.71	NPP
	04/08/13	5536.83	43.43	NPP	35.11	5501.72	NPP
	08/06/12	5536.83	43.43	NPP	34.98	5501.85	NPP
	04/02/12	5536.83	43.43	NPP	35.17	5501.66	NPP
	08/08/11	5536.83	43.43	NPP	34.95	5501.88	NPP
	04/11/11	5536.83	43.43	NPP	37.23	5499.60	NPP

TABLE 1
Fluid Level Measurements Summary
2014 Groundwater Remediation Monitoring Annual Report

Well ID	Date	Measuring Point Elevation (ft amsl)	Total Well Depth (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
RW-16	08/18/14	5535.45	41.48	34.21	34.49	5501.18	0.28
	04/02/14	5535.45	41.48	34.31	34.89	5501.02	0.58
	08/05/13	5535.45	41.48	34.30	34.62	5501.09	0.32
	04/08/13	5535.45	41.48	34.10	34.20	5501.33	0.10
	08/06/12	5535.45	41.48	34.02	34.18	5501.40	0.16
	04/02/12	5535.45	41.48	NPP	34.18	5501.27	NPP
	08/08/11	5535.45	41.48	34.01	34.32	5501.38	0.31
	04/11/11	5535.45	41.48	NPP	38.59	5496.86	NPP
RW-17	08/18/14	5533.84	41.89	NPP	33.27	5500.57	NPP
	04/02/14	5533.84	41.89	NPP	33.39	5500.45	NPP
	08/05/13	5533.84	41.89	NPP	33.32	5500.52	NPP
	04/08/13	5533.84	41.89	NPP	33.18	5500.66	NPP
	08/06/12	5533.84	41.89	NPP	33.20	5500.64	NPP
	04/02/12	5533.84	41.89	NPP	33.25	5500.59	NPP
	08/08/11	5533.84	41.89	NPP	33.06	5500.78	NPP
	04/11/11	5533.84	41.89	NPP	32.97	5500.87	NPP
RW-18	08/18/14	5529.38	37.58	30.32	32.02	5498.72	1.70
	04/02/14	5529.38	37.58	NPP	30.47	5498.91	NPP
	08/05/13	5529.38	37.58	NPP	31.64	5497.74	NPP
	04/08/13	5529.38	37.58	NPP	30.18	5499.20	NPP
	08/06/12	5529.38	37.58	NPP	30.69	5498.69	NPP
	04/02/12	5529.38	37.58	NPP	28.05	5501.33	NPP
	08/08/11	5529.38	37.58	NPP	35.43	5493.95	NPP
	04/11/11	5529.38	37.58	NPP	35.41	5493.97	NPP
RW-19	08/18/14	5530.51	36.64	30.3	30.75	5500.12	0.45
	04/02/14	5530.51	36.64	30.5	30.85	5499.94	0.35
	08/05/13	5530.51	36.64	NPP	30.50	5500.01	NPP
	04/08/13	5530.51	36.64	NPP	30.40	5500.11	NPP
	08/06/12	5530.51	36.64	NPP	30.40	5500.11	NPP
	04/02/12	5530.51	36.64	NPP	30.45	5500.06	NPP
	08/08/11	5530.51	36.64	NPP	30.29	5500.22	NPP
	04/11/11	5530.51	36.64	NPP	30.67	5499.84	NPP
RW-22	08/18/14	5524.44	35.60	25.73	26.17	5498.62	0.44
	04/02/14	5524.44	35.60	25.87	26.07	5498.53	0.20
	08/05/13	5524.44	35.60	NPP	25.62	5498.82	NPP
	04/08/13	5524.44	35.60	NPP	25.80	5498.64	NPP
	08/06/12	5524.44	35.60	NPP	26.03	5498.41	NPP
	04/02/12	5524.44	35.60	NPP	26.03	5498.41	NPP
	08/08/11	5524.44	35.60	NPP	26.01	5498.43	NPP
	04/11/11	5524.44	35.60	27.87	29.44	5496.26	1.57
RW-23	08/18/14	5521.38	35.53	23.05	23.08	5498.32	0.03
	04/02/14	5521.38	35.53	NPP	23.26	5498.12	NPP
	08/05/13	5521.38	35.53	NPP	23.15	5498.23	NPP
	04/08/13	5521.38	35.53	NPP	23.30	5498.08	NPP
	08/06/12	5521.38	35.53	23.17	23.20	5498.20	0.03
	04/02/12	5521.38	35.53	NPP	23.43	5497.95	NPP
	08/08/11	5521.38	35.53	23.34	23.35	5498.04	0.01
	04/11/11	5521.38	35.53	NPP	30.50	5490.88	NPP

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RW-28	08/18/14	5527.93	36.99	29.56	30.02	5498.28	0.46
	04/02/14	5527.93	36.99	29.55	30.45	5498.20	0.90
	08/05/13	5527.93	36.99	29.28	30.40	5498.43	1.12
	04/08/13	5527.93	36.99	29.35	30.50	5498.35	1.15
	08/06/12	5527.93	36.99	29.64	30.62	5498.09	0.98
	04/02/12	5527.93	36.99	29.74	29.87	5498.16	0.13
	08/08/11	5527.93	36.99	29.40	29.65	5498.48	0.25
	04/11/11	5527.93	36.99	29.30	29.55	5498.58	0.25
RW-42	08/18/14	5527.48	32.02	27.36	27.70	5500.05	0.34
	04/02/14	5527.48	32.02	27.59	28.00	5499.81	0.41
	08/05/13	5527.48	32.02	27.40	27.55	5500.05	0.15
	04/08/13	5527.48	32.02	27.37	27.79	5500.03	0.42
	08/06/12	5527.48	32.02	27.77	27.98	5499.67	0.21
	04/02/12	5527.48	32.02	27.35	28.20	5499.96	0.85
	08/08/11	5527.48	32.02	27.15	28.05	5500.15	0.90
	04/11/11	5527.48	32.02	27.05	27.70	5500.30	0.65
RW-43	08/18/14	5520.02	24.03	21.8	22.00	5498.18	0.20
	04/02/14	5520.02	24.03	21.76	22.25	5498.16	0.49
	08/05/13	5520.02	24.03	21.75	21.91	5498.24	0.16
	04/08/13	5520.02	24.03	21.87	22.03	5498.12	0.16
	08/06/12	5520.02	24.03	21.72	22.02	5498.24	0.30
	04/02/12	5520.02	24.03	21.00	21.87	5498.85	0.87
	08/08/11	5520.02	24.03	21.65	21.70	5498.36	0.05
	04/11/11	5520.02	24.03	20.61	20.68	5499.40	0.07
OW 0+60	08/18/14	5506.62	12.26	NPP	11.01	5495.61	NPP
	04/02/14	5506.62	12.26	NPP	11.91	5494.71	NPP
	08/05/13	5506.62	12.26	NPP	11.85	5494.77	NPP
	04/08/13	5506.62	12.26	NPP	12.07	5494.55	NPP
	08/06/12	5506.62	12.26	NPP	12.00	5494.62	NPP
	04/02/12	5506.62	12.26	NPP	NWP	NWP	NPP
	08/15/11	5506.62	12.26	NPP	12.03	5494.59	NPP
	04/11/11	5506.62	12.26	NPP	12.25	5494.37	NPP
OW 1+50	08/18/14	5508.03	14.36	NPP	13.17	5494.86	NPP
	04/02/14	5508.03	14.36	NPP	13.98	5494.05	NPP
	08/05/13	5508.03	14.36	14.02	14.03	5494.01	0.01
	04/08/13	5508.03	14.36	NPP	14.05	5493.98	NPP
	08/06/12	5508.03	14.36	14.16	14.36	5493.83	0.20
	04/02/12	5508.03	14.36	14.14	14.36	5493.85	0.22
	08/15/11	5508.03	14.36	14.28	14.36	5493.73	0.08
	04/11/11	5508.03	14.36	14.10	14.32	5493.89	0.22
OW 3+85	08/18/14	5507.31	15.06	NPP	12.95	5494.36	NPP
	04/02/14	5507.31	15.06	NPP	13.49	5493.82	NPP
	08/05/13	5507.31	15.06	13.56	13.57	5493.75	0.01
	04/08/13	5507.31	15.06	NPP	13.40	5493.91	NPP
	08/06/12	5507.31	15.06	13.84	13.85	5493.47	0.01
	04/02/12	5507.31	15.06	NPP	NWP	NWP	NPP
	08/15/11	5507.31	15.06	13.77	13.78	5493.54	0.01
	04/11/11	5507.31	15.06	13.68	13.69	5493.63	0.01

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OW 5+50	08/18/14	5507.59	13.67	NPP	13.50	5494.09	NPP
	04/02/14	5507.59	13.67	NPP	13.64	5493.95	NPP
	08/05/13	5507.59	13.67	NPP	13.51	5494.08	NPP
	04/08/13	5507.59	13.67	NPP	13.67	5493.92	NPP
	08/06/12	5507.59	13.67	NPP	13.64	5493.95	NPP
	04/02/12	5507.59	13.67	NPP	13.66	5493.93	NPP
	08/15/11	5507.59	13.67	NPP	13.63	5493.96	NPP
	04/11/11	5507.59	13.67	NPP	13.66	5493.93	NPP
OW 6+70	08/18/14	5504.78	14.67	NPP	NWP	NWP	NPP
	04/02/14	5504.78	14.67	NPP	NWP	NWP	NPP
	08/05/13	5504.78	14.67	NPP	NWP	NWP	NPP
	04/08/13	5504.78	14.67	NPP	NWP	NWP	NPP
	08/06/12	5504.78	14.67	NPP	NWP	NWP	NPP
	04/02/12	5504.78	14.67	NPP	NWP	NWP	NPP
	08/15/11	5504.78	14.67	NPP	NWP	NWP	NPP
	04/11/11	5504.78	14.67	NPP	NWP	NWP	NPP
OW 8+10	08/18/14	5506.53	15.99	NPP	NWP	NWP	NPP
	04/02/14	5506.53	15.99	NPP	NWP	NWP	NPP
	08/05/13	5506.53	15.99	NPP	NWP	NWP	NPP
	04/08/13	5506.53	15.99	NPP	NWP	NWP	NPP
	08/06/12	5506.53	15.99	NPP	NWP	NWP	NPP
	04/02/12	5506.53	15.99	NPP	NWP	NWP	NPP
	04/08/13	5506.53	15.99	NPP	NWP	NWP	NPP
	04/11/11	5506.53	15.99	NPP	NWP	NWP	NPP
OW 11+15	08/18/14	5506.70	16.59	NPP	12.55	5494.15	NPP
	04/02/14	5506.70	16.59	12.74	12.75	5493.96	0.01
	08/05/13	5506.70	16.59	12.56	12.57	5494.14	0.01
	04/08/13	5506.70	16.59	12.71	12.72	5493.99	0.01
	08/06/12	5506.70	16.59	12.66	12.67	5494.04	0.01
	04/02/12	5506.70	16.59	12.70	12.71	5494.00	0.01
	08/15/11	5506.70	16.59	NPP	12.55	5494.15	NPP
	04/11/11	5506.70	16.59	12.67	12.68	5494.03	0.01
OW 14+10	08/18/14	5508.14	12.96	NPP	NWP	NWP	NPP
	04/02/14	5508.14	12.96	NPP	NWP	NWP	NPP
	08/05/13	5508.14	12.96	NPP	NWP	NWP	NPP
	04/08/13	5508.14	12.96	NPP	NWP	NWP	NPP
	08/06/12	5508.14	12.96	NPP	NWP	NWP	NPP
	04/02/12	5508.14	12.96	NPP	NWP	NWP	NPP
	08/15/11	5508.14	12.96	NPP	NWP	NWP	NPP
	04/11/11	5508.14	12.96	NPP	NWP	NWP	NPP
OW 16+60	08/18/14	5508.43	15.21	NPP	13.25	5495.18	NPP
	04/02/14	5508.43	15.21	NPP	13.10	5495.33	NPP
	08/05/13	5508.43	15.21	NPP	13.95	5494.48	NPP
	04/08/13	5508.43	15.21	NPP	13.16	5495.27	NPP
	08/06/12	5508.43	15.21	NPP	13.12	5495.31	NPP
	04/02/12	5508.43	15.21	NPP	12.99	5495.44	NPP
	08/15/11	5508.43	15.21	NPP	13.14	5495.29	NPP
	04/11/11	5508.43	15.21	NPP	12.92	5495.51	NPP

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OW 19+50	08/18/14	5508.03	13.00	NPP	NWP	NWP	NPP
	04/02/14	5508.03	13.00	NPP	NWP	NWP	NPP
	08/05/13	5508.03	13.00	NPP	NWP	NWP	NPP
	04/08/13	5508.03	13.00	NPP	NWP	NWP	NPP
	08/06/12	5508.03	13.00	NPP	NWP	NWP	NPP
	04/02/12	5508.03	13.00	NPP	NWP	NWP	NPP
	08/15/11	5508.03	13.00	NPP	NWP	NWP	NPP
	04/11/11	5508.03	13.00	NPP	12.66	5495.37	NPP
OW 22+00	08/18/14	5506.91	14.16	NPP	12.74	5494.17	NPP
	04/02/14	5506.91	14.16	NPP	11.73	5495.18	NPP
	08/05/13	5506.91	14.16	NPP	13.04	5493.87	NPP
	04/08/13	5506.91	14.16	NPP	12.17	5494.74	NPP
	08/06/12	5506.91	14.16	NPP	13.41	5493.50	NPP
	04/02/12	5506.91	14.16	NPP	12.26	5494.65	NPP
	08/15/11	5506.91	14.16	NPP	13.06	5493.85	NPP
	04/11/11	5506.91	14.16	NPP	11.92	5494.99	NPP
OW 23+10	08/18/14	5514.12	18.34	NPP	16.50	5497.62	NPP
	04/02/14	5514.12	18.34	NPP	16.42	5497.70	NPP
	08/05/13	5514.12	18.34	NPP	16.46	5497.66	NPP
	04/08/13	5514.12	18.34	NPP	16.38	5497.74	NPP
	08/06/12	5514.12	18.34	NPP	16.58	5497.54	NPP
	04/02/12	5514.12	18.34	NPP	16.43	5497.69	NPP
	08/15/11	5514.12	18.34	NPP	16.41	5497.71	NPP
	04/11/11	5514.12	18.34	NPP	16.37	5497.75	NPP
OW 23+90	08/18/14	5515.18	18.01	NPP	17.33	5497.85	NPP
	04/02/14	5515.18	18.01	NPP	17.26	5497.92	NPP
	08/05/13	5515.18	18.01	NPP	17.29	5497.89	NPP
	04/08/13	5515.18	18.01	NPP	17.22	5497.96	NPP
	08/06/12	5515.18	18.01	NPP	17.41	5497.77	NPP
	04/02/12	5515.18	18.01	NPP	17.23	5497.95	NPP
	08/15/11	5515.18	18.01	NPP	17.21	5497.97	NPP
	04/11/11	5515.18	18.01	NPP	17.18	5498.00	NPP
OW 25+70	08/18/14	5509.00	13.98	NPP	10.96	5498.04	NPP
	04/02/14	5509.00	13.98	NPP	10.95	5498.05	NPP
	08/05/13	5509.00	13.98	NPP	10.93	5498.07	NPP
	04/08/13	5509.00	13.98	NPP	10.86	5498.14	NPP
	08/06/12	5509.00	13.98	NPP	11.03	5497.97	NPP
	04/02/12	5509.00	13.98	NPP	10.93	5498.07	NPP
	08/15/11	5509.00	13.98	NPP	10.87	5498.13	NPP
	04/11/11	5509.00	13.98	NPP	10.84	5498.16	NPP
CW 0+60	08/18/14	5506.68	14.09	NPP	8.19	5498.49	NPP
	04/02/14	5506.68	14.09	NPP	9.01	5497.67	NPP
	08/05/13	5506.68	14.09	NPP	8.53	5498.15	NPP
	04/08/13	5506.68	14.09	NPP	9.12	5497.56	NPP
	08/22/12	5506.68	14.09	NPP	8.57	5498.11	NPP
	04/02/12	5506.68	14.09	NPP	9.27	5497.41	NPP
	08/15/11	5506.68	14.09	NPP	8.54	5498.14	NPP
	04/11/11	5506.68	14.09	NPP	9.09	5497.59	NPP

TABLE 1
Fluid Level Measurements Summary
2014 Groundwater Remediation Monitoring Annual Report

Well ID	Date	Measuring Point Elevation (ft amsl)	Total Well Depth (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
CW 1+50	08/18/14	5505.13	13.74	NPP	6.92	5498.21	NPP
	04/02/14	5505.13	13.74	NPP	7.47	5497.66	NPP
	08/05/13	5505.13	13.74	NPP	7.13	5498.00	NPP
	04/08/13	5505.13	13.74	NPP	7.49	5497.64	NPP
	08/22/12	5505.13	13.74	NPP	6.88	5498.25	NPP
	04/02/12	5505.13	13.74	NPP	7.58	5497.55	NPP
	08/15/11	5505.13	13.74	NPP	7.08	5498.05	NPP
	04/11/11	5505.13	13.74	NPP	7.54	5497.59	NPP
CW 3+85	08/18/14	5503.87	13.11	NPP	5.85	5498.02	NPP
	04/02/14	5503.87	13.11	NPP	6.14	5497.73	NPP
	08/05/13	5503.87	13.11	NPP	5.98	5497.89	NPP
	04/08/13	5503.87	13.11	NPP	6.17	5497.70	NPP
	08/22/12	5503.87	13.11	NPP	5.75	5498.12	NPP
	04/02/12	5503.87	13.11	NPP	6.21	5497.66	NPP
	08/15/11	5503.87	13.11	NPP	5.95	5497.92	NPP
	04/11/11	5503.87	13.11	NPP	6.13	5497.74	NPP
CW 5+50	08/18/14	5503.76	12.27	NPP	6.58	5497.18	NPP
	04/02/14	5503.76	12.27	NPP	6.63	5497.13	NPP
	08/05/13	5503.76	12.27	NPP	6.50	5497.26	NPP
	04/08/13	5503.76	12.27	NPP	6.63	5497.13	NPP
	08/22/12	5503.76	12.27	NPP	6.47	5497.29	NPP
	04/02/12	5503.76	12.27	NPP	6.67	5497.09	NPP
	08/15/11	5503.76	12.27	NPP	6.53	5497.23	NPP
	04/11/11	5503.76	12.27	NPP	6.61	5497.15	NPP
CW 6+70	08/18/14	5503.84	11.45	NPP	6.70	5497.14	NPP
	04/02/14	5503.84	11.45	NPP	6.96	5496.88	NPP
	08/05/13	5503.84	11.45	NPP	6.87	5496.97	NPP
	04/08/13	5503.84	11.45	NPP	6.93	5496.83	NPP
	08/22/12	5503.84	11.45	NPP	6.85	5496.99	NPP
	04/02/12	5503.84	11.45	NPP	6.96	5496.88	NPP
	08/15/11	5503.84	11.45	NPP	6.90	5496.94	NPP
	04/11/11	5503.84	11.45	NPP	6.83	5497.01	NPP
CW 8+10	08/18/14	5504.02	11.63	NPP	7.43	5496.59	NPP
	04/02/14	5504.02	11.63	NPP	7.80	5496.22	NPP
	08/05/13	5504.02	11.63	NPP	7.60	5496.42	NPP
	04/08/13	5504.02	11.63	NPP	7.80	5496.22	NPP
	08/22/12	5504.02	11.63	NPP	7.68	5496.34	NPP
	04/02/12	5504.02	11.63	NPP	7.83	5496.19	NPP
	08/15/11	5504.02	11.63	NPP	7.68	5496.34	NPP
	04/11/11	5504.02	11.63	NPP	7.84	5496.18	NPP
CW 8+45	08/18/14	5503.80	12.60	NPP	7.58	5496.22	NPP
	04/02/14	5503.80	12.60	NPP	7.94	5495.86	NPP
	08/05/13	5503.80	12.60	NPP	7.74	5496.06	NPP
	04/08/13	5503.80	12.60	NPP	7.91	5495.89	NPP
	08/22/12	5503.80	12.60	NPP	7.76	5496.04	NPP
	04/02/12	5503.80	12.60	NPP	7.90	5495.90	NPP
	08/15/11	5503.80	12.60	NPP	7.80	5496.00	NPP
	04/11/11	5503.80	12.60	NPP	7.97	5495.83	NPP

TABLE 1
Fluid Level Measurements Summary
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Well ID	Date	Measuring Point Elevation (ft amsl)	Total Well Depth (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
CW 11+15	08/18/14	5503.95	12.27	5.99	7.93	5497.57	1.94
	04/02/14	5503.95	12.27	6.00	7.95	5497.56	1.95
	08/05/13	5503.95	12.27	NPP	6.31	5497.64	NPP
	04/08/13	5503.95	12.27	NPP	6.22	5497.73	NPP
	08/22/12	5503.95	12.27	NPP	6.30	5497.65	NPP
	04/02/12	5503.95	12.27	NPP	6.24	5497.71	NPP
	08/15/11	5503.95	12.27	NPP	6.18	5497.77	NPP
	04/11/11	5503.95	12.27	NPP	6.14	5497.81	NPP
CW 14+10	08/18/14	5504.39	13.05	NPP	6.25	5498.14	NPP
	04/02/14	5504.39	13.05	NPP	6.45	5497.94	NPP
	08/05/13	5504.39	13.05	NPP	6.24	5498.15	NPP
	04/08/13	5504.39	13.05	NPP	6.47	5497.92	NPP
	08/22/12	5504.39	13.05	NPP	6.30	5498.09	NPP
	04/02/12	5504.39	13.05	NPP	6.57	5497.82	NPP
	08/15/11	5504.39	13.05	NPP	6.32	5498.07	NPP
	04/11/11	5504.39	13.05	NPP	6.60	5497.79	NPP
CW 16+60	08/18/14	5504.32	12.86	NPP	6.11	5498.21	NPP
	04/02/14	5504.32	12.86	NPP	6.29	5498.03	NPP
	08/05/13	5504.32	12.86	NPP	5.98	5498.34	NPP
	04/08/13	5504.32	12.86	NPP	6.34	5497.98	NPP
	08/22/12	5504.32	12.86	NPP	6.18	5498.14	NPP
	04/02/12	5504.32	12.86	NPP	6.43	5497.89	NPP
	08/15/11	5504.32	12.86	NPP	6.12	5498.20	NPP
	04/11/11	5504.32	12.86	NPP	6.35	5497.97	NPP
CW 19+50	08/18/14	5504.52	9.99	NPP	6.21	5498.31	NPP
	04/02/14	5504.52	9.99	NPP	6.36	5498.16	NPP
	08/05/13	5504.52	9.99	NPP	6.20	5498.32	NPP
	04/08/13	5504.52	9.99	NPP	6.39	5498.13	NPP
	08/22/12	5504.52	9.99	NPP	6.12	5498.40	NPP
	04/02/12	5504.52	9.99	NPP	6.50	5498.02	NPP
	08/15/11	5504.52	9.99	NPP	6.51	5498.01	NPP
	04/11/11	5504.52	9.99	NPP	6.60	5497.92	NPP
CW 22+00	08/18/14	5508.04	12.34	NPP	8.73	5499.31	NPP
	04/02/14	5508.04	12.34	NPP	9.01	5499.03	NPP
	08/05/13	5508.04	12.34	NPP	8.84	5499.20	NPP
	04/08/13	5508.04	12.34	NPP	8.93	5499.11	NPP
	08/22/12	5508.04	12.34	NPP	8.89	5499.15	NPP
	04/02/12	5508.04	12.34	NPP	8.98	5499.06	NPP
	08/15/11	5508.04	12.34	NPP	8.90	5499.14	NPP
	04/11/11	5508.04	12.34	NPP	8.95	5499.09	NPP
CW 23+10	08/18/14	5510.04	14.65	NPP	10.32	5499.72	NPP
	04/02/14	5510.04	14.65	NPP	10.63	5499.41	NPP
	08/05/13	5510.04	14.65	NPP	10.45	5499.59	NPP
	04/08/13	5510.04	14.65	NPP	10.54	5499.50	NPP
	08/22/12	5510.04	14.65	NPP	10.52	5499.52	NPP
	04/02/12	5510.04	14.65	NPP	10.62	5499.42	NPP
	08/15/11	5510.04	14.65	NPP	10.55	5499.49	NPP
	04/11/11	5510.04	14.65	NPP	10.60	5499.44	NPP

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Well ID	Date	Measuring Point Elevation (ft amsl)	Total Well Depth (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
CW 23+90	08/18/14	5507.32	11.72	NPP	7.75	5499.57	NPP
	04/02/14	5507.32	11.72	NPP	8.05	5499.27	NPP
	08/05/13	5507.32	11.72	NPP	7.88	5499.44	NPP
	04/08/13	5507.32	11.72	NPP	7.99	5499.33	NPP
	08/22/12	5507.32	11.72	NPP	7.93	5499.39	NPP
	04/02/12	5507.32	11.72	NPP	8.05	5499.27	NPP
	08/15/11	5507.32	11.72	NPP	7.97	5499.35	NPP
	04/11/11	5507.32	11.72	NPP	8.10	5499.22	NPP
CW 25+95	08/18/14	5505.90	12.25	Active Recovery Well			
	04/02/14	5505.90	12.25	Active Recovery Well			
	08/05/13	5505.90	12.25	Active Recovery Well			
	04/08/13	5505.90	12.25	Active Recovery Well			
	08/22/12	5505.90	12.25	Active Recovery Well			
	04/02/12	5505.90	12.25	Active Recovery Well			
	08/15/11	5505.90	12.25	Active Recovery Well			
	04/11/11	5505.90	12.25	Active Recovery Well			
*SW1-0206	08/05/13	5508.27	53.08	NPP	52.58	5455.69	NPP
	04/24/13	5508.27	53.08	NPP	52.58	5455.69	NPP
	08/06/12	5508.27	53.08	NPP	52.59	5455.68	NPP
	06/21/12	5508.27	53.08	NPP	52.59	5455.68	NPP
	11/16/11	5508.27	53.08	NPP	52.58	5455.69	NPP
	09/19/11	5508.27	53.08	NPP	52.68	5455.59	NPP
	08/18/11	5508.27	53.08	NPP	52.61	5455.66	NPP
	02/17/11	5508.27	53.08	NPP	52.58	5455.69	NPP
	01/31/11	5508.27	53.08	NPP	52.57	5455.70	NPP
	01/17/11	5508.27	53.08	NPP	52.56	5455.71	NPP
*SW2-0206	01/04/11	5508.27	53.08	NPP	52.57	5455.70	NPP
	08/05/13	5507.75	27.69	NPP	25.62	5482.13	NPP
	04/24/13	5507.75	27.69	NPP	25.27	5482.48	NPP
	08/06/12	5507.75	27.69	NPP	25.50	5482.25	NPP
	06/21/12	5507.75	27.69	NPP	25.56	5482.19	NPP
	11/16/11	5507.75	27.69	NPP	25.37	5482.38	NPP
	09/19/11	5507.75	27.69	NPP	25.81	5481.94	NPP
	08/18/11	5507.75	27.69	NPP	25.76	5481.99	NPP
	02/17/11	5507.75	27.69	NPP	25.98	5481.77	NPP
	01/31/11	5507.75	27.69	NPP	25.99	5481.76	NPP
	01/17/11	5507.75	27.69	NPP	26.02	5481.73	NPP
	01/04/11	5507.75	27.69	NPP	26.05	5481.70	NPP
*SW3-0206	08/05/13	5505.29	52.56	NPP	26.69	5478.60	NPP
	04/24/13	5505.29	52.56	NPP	26.70	5478.59	NPP
	08/06/12	5505.29	52.56	NPP	26.65	5478.64	NPP
	06/21/12	5505.29	52.56	NPP	26.80	5478.49	NPP
	11/16/11	5505.29	52.56	NPP	25.90	5479.39	NPP
	09/19/11	5505.29	52.56	NPP	26.15	5479.14	NPP
	08/18/11	5505.29	52.56	NPP	26.46	5478.83	NPP
	02/17/11	5505.29	52.56	NPP	26.20	5479.09	NPP
	01/31/11	5505.29	52.56	NPP	26.09	5479.20	NPP
	01/17/11	5505.29	52.56	NPP	26.02	5479.27	NPP
*SW4-0206	01/04/11	5505.29	52.56	NPP	25.97	5479.32	NPP
	08/05/13	5504.45	42.34	NPP	33.01	5471.44	NPP
	04/24/13	5504.45	42.34	NPP	32.60	5471.85	NPP
	08/06/12	5504.45	42.34	NPP	33.09	5471.36	NPP
	06/21/12	5504.45	42.34	NPP	32.85	5471.60	NPP
	09/19/11	5504.45	42.34	NPP	33.10	5471.35	NPP
	08/18/11	5504.45	42.34	NPP	33.03	5471.42	NPP
	02/17/11	5504.45	42.34	NPP	32.56	5471.89	NPP
	01/31/11	5504.45	42.34	NPP	32.56	5471.89	NPP
	01/17/11	5504.45	42.34	NPP	32.61	5471.84	NPP
	01/04/11	5504.45	42.34	NPP	32.62	5471.83	NPP
	08/05/13	5514.34	52.24	NPP	34.93	5479.41	NPP

TABLE 1
Fluid Level Measurements Summary
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Well ID	Date	Measuring Point Elevation (ft amsl)	Total Well Depth (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
*SW5-0206	04/24/13	5514.34	52.24	NPP	34.27	5480.07	NPP
	08/06/12	5514.34	52.24	NPP	35.08	5479.26	NPP
	06/21/12	5514.34	52.24	NPP	35.01	5479.33	NPP
	11/16/11	5514.34	52.24	NPP	34.56	5479.78	NPP
	09/19/11	5514.34	52.24	NPP	35.05	5479.29	NPP
	08/18/11	5514.34	52.24	NPP	35.07	5479.27	NPP
	02/17/11	5514.34	52.24	NPP	34.37	5479.97	NPP
	01/31/11	5514.34	52.24	NPP	34.35	5479.99	NPP
	01/17/11	5514.34	52.24	NPP	34.35	5479.99	NPP
	01/04/11	5514.34	52.24	NPP	34.28	5480.06	NPP
*SW6-0206	08/05/13	5519.72	47.41	NPP	42.00	5477.72	NPP
	04/24/13	5519.72	47.41	NPP	40.91	5478.81	NPP
	08/06/12	5519.72	47.41	NPP	42.37	5477.35	NPP
	06/21/12	5519.72	47.41	NPP	41.97	5477.75	NPP
	11/16/11	5519.72	47.41	NPP	42.23	5477.49	NPP
	09/19/11	5519.72	47.41	NPP	42.83	5476.89	NPP
	08/18/11	5519.72	47.41	NPP	42.53	5477.19	NPP
	02/17/11	5519.72	47.41	NPP	41.20	5478.52	NPP
	01/31/11	5519.72	47.41	NPP	41.26	5478.46	NPP
	01/17/11	5519.72	47.41	NPP	41.36	5478.36	NPP
*SW7-0206	04/02/14	5517.63	32.95	NPP	20.15	5497.48	NPP
	08/05/13	5517.63	32.95	NPP	20.80	5496.83	NPP
	04/24/13	5517.63	32.95	NPP	20.67	5496.96	NPP
	08/06/12	5517.63	32.95	NPP	20.40	5497.23	NPP
	06/21/12	5517.63	32.95	NPP	20.32	5497.31	NPP
	11/16/11	5517.63	32.95	NPP	18.73	5498.90	NPP
	09/19/11	5517.63	32.95	NPP	19.20	5498.43	NPP
	08/18/11	5517.63	32.95	NPP	19.48	5498.15	NPP
	02/17/11	5517.63	32.95	NPP	18.33	5499.30	NPP
	01/31/11	5517.63	32.95	NPP	18.09	5499.54	NPP
	01/17/11	5517.63	32.95	NPP	18.03	5499.60	NPP
	01/04/11	5517.63	32.95	NPP	18.05	5499.58	NPP

Notes:

*SW Wells sampled during significant rain events only

NPP = No Product Present

NWP = No Water Present

TABLE 2
Groundwater Field Parameter Summary
2014 Groundwater Remediation Monitoring Annual Report

Location ID	Date	Electrical Conductivity (uS/cm)	Total Dissolved Solids (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)	pH	Temperature (° F)
Cross-Gradient Wells							
MW-1	08/20/14	800	520	3.35	-2.2	7.11	63.38
	04/12/14	843	546	3.37	95.1	7.02	54.14
	08/13/13	717	466	4.13	61.6	7.42	61.58
	04/24/13	725	470	30.17	153.4	7.12	53.00
	08/14/12	717	468	2.93	85.8	7.28	63.40
	04/04/12	687	590	2.47	46.1	7.32	54.05
	08/13/11	762	533	10.80	240.0	6.80	68.60
	04/23/11	766	541	4.08	241.0	6.77	52.20
	08/13/10	841	588	1.83	282.0	7.04	63.60
MW-13	08/20/14	4004	2602	3.43	54.6	6.90	64.28
	04/12/14	3932	2557	2.43	103.8	6.91	60.86
	08/13/13	3621	2353	2.52	98.7	7.03	63.08
	04/24/13	3340	2170	42.67	99.0	7.10	60.00
	08/14/12	4223	2745	2.27	82.7	7.19	65.10
	04/04/12	3491	2769	3.60	165.4	7.01	59.95
	08/13/11	3312	2590	1.87	252.0	6.80	61.90
	04/23/11	3958	3163	3.92	210.0	6.64	59.70
	08/13/10	3816	2977	1.13	255.0	6.97	62.90
MW-26	08/20/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	08/13/13	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/14/12	3071	1996	1.42	-81.0	7.00	65.70
	04/04/12	ns	ns	ns	ns	ns	ns
	08/13/11	2751	2077	1.55	230.0	6.90	63.30
	04/23/11	ns	ns	ns	ns	ns	ns
	08/13/10	2698	2046	1.32	300.0	6.83	64.40
MW-27	08/20/14	6950	4518	3.55	21.8	6.71	61.94
	04/12/14	ns	ns	ns	ns	ns	ns
	08/13/13	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/14/12	5087	3306	2.79	-23.8	7.27	64.50
	04/04/12	ns	ns	ns	ns	ns	ns
	08/13/11	3741	2908	0.95	289.0	6.90	60.80
	04/23/11	ns	ns	ns	ns	ns	ns
	08/13/10	2890	2211	1.42	262.0	6.95	61.70
MW-32	08/20/14	5047	3280	10.08	50.9	7.32	60.20
	04/12/14	ns	ns	ns	ns	ns	ns
	08/13/13	4833	3142	8.73	87.2	7.55	58.88
	04/24/13	ns	ns	ns	ns	ns	ns
	08/14/12	5245	3426	7.13	138.2	7.65	63.60
	04/04/12	ns	ns	ns	ns	ns	ns
	08/13/11	4901	3930	5.42	189.0	7.10	59.20
	04/23/11	ns	ns	ns	ns	ns	ns
	08/13/10	51	4148	6.43	274.0	6.99	61.30

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MW-33	08/20/14	5097	3313	8.81	48.8	7.38	62.42
	04/12/14	5040	3276	10.24	88.2	7.69	59.36
	08/13/13	5621	3655	5.39	90.1	7.13	60.56
	04/24/13	4990	3240	34.33	32.6	7.75	58.00
	08/14/12	5609	3647	5.87	152.0	7.73	64.00
	04/04/12	4615	3757	3.57	119.8	7.42	57.99
	08/13/11	4336	3468	0.78	244.0	7.00	60.80
	04/23/11	4017	3202	2.22	212.0	6.90	57.40
	08/13/10	3794	2973	4.37	292.0	7.01	60.90
Downgradient Wells							
MW-11	08/21/14	2098	1365	3.79	-120.7	6.63	66.14
	04/12/14	ns	ns	ns	ns	ns	ns
	08/12/13	2558	1664	9.08	-82.4	6.84	64.70
	04/24/13	ns	ns	ns	ns	ns	ns
	08/14/12	3135	2039	1.46	-93.2	6.99	66.10
	04/04/12	ns	ns	ns	ns	ns	ns
	08/13/11	2645	1986	1.41	209.0	6.90	60.30
	04/23/11	ns	ns	ns	ns	ns	ns
	08/13/10	2545	1906	1.98	254.0	7.03	66.40
MW-12	08/21/14	572	371	2.73	-30.2	7.15	68.18
	04/12/14	826	540	6.83	44.3	7.76	51.44
	08/12/13	569	370	4.98	24.7	7.45	63.68
	04/24/13	1089	710	43.92	172.4	7.47	49.00
	08/14/12	515	344	4.43	86.3	7.49	64.40
	04/04/12	533	488	4.66	24.4	7.65	49.82
	08/13/11	520	356	0.48	209.0	7.00	62.20
	04/23/11	1476	1077	2.58	245.0	6.94	51.10
	08/13/10	563	390	0.63	286.0	7.03	64.30
MW-34	08/21/14	1574	1023	2.40	-97.4	6.95	61.88
	04/12/14	ns	ns	ns	ns	ns	ns
	08/12/13	2270	1476	1.94	-89.3	7.03	62.12
	04/24/13	ns	ns	ns	ns	ns	ns
	08/14/12	2574	1672	1.54	-90.2	7.13	66.50
	04/04/12	ns	ns	ns	ns	ns	ns
	08/13/11	2073	1517	0.63	176.0	7.00	59.10
	04/23/11	ns	ns	ns	ns	ns	ns
	08/13/10	1772	1286	2.91	233.0	7.12	63.60
MW-35	08/21/14	2140	1391	4.82	-106.3	7.05	61.16
	04/12/14	2157	1404	2.33	-73.7	6.97	58.16
	08/12/13	1955	1270	2.82	-92.4	7.03	61.22
	04/24/13	2193	1430	35.10	-43.0	6.98	57.00
	08/14/12	2491	1591	2.08	-87.0	7.19	63.50
	04/04/12	1722	1427	1.80	-89.4	7.08	56.71
	08/13/11	1921	1396	1.09	154.0	7.10	60.40
	04/23/11	1787	1313	3.10	237.0	6.93	57.10
	08/13/10	1742	1268	1.35	246.0	7.05	62.30

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MW-37	08/21/14	2248	1460	4.60	-105.6	7.43	60.80
	04/12/14	2476	1608	3.83	-61.8	7.30	59.00
	08/12/13	2596	1686	5.09	-116.5	7.50	60.56
	04/24/13	1628	1060	35.95	-46.7	7.49	57.00
	08/14/12	2703	1760	3.37	-50.2	7.61	63.10
	04/04/12	2043	1677	2.88	-70.5	7.49	57.47
	08/13/11	2405	1785	0.59	209.0	7.10	60.30
	04/23/11	2236	1668	2.37	234.0	7.08	58.30
MW-38	08/13/10	2276	1686	0.90	275.0	6.97	63.30
	08/21/14	1237	804	2.97	-112.6	7.47	60.32
	04/12/14	1537	999	3.73	-100.9	7.29	58.58
	08/12/13	1332	865	4.61	-122.2	7.24	61.28
	04/24/13	1656	1070	34.56	-48.0	7.28	56.00
	08/14/12	1577	1025	2.77	14.3	7.34	63.70
	04/04/12	1332	1097	2.86	-83.8	7.29	57.20
	08/13/11	1335	954	0.56	223.0	7.00	59.90
North Boundary Barrier Wells	04/23/11	1447	1045	1.51	226.0	7.10	58.40
	08/13/10	1317	939	0.60	276.0	6.99	64.70
CW 0+60	08/27/14	750	488	2.41	-121.1	6.70	69.44
	04/12/14	926	602	6.30	-63.1	6.74	53.54
	8/7/2013	823	535	2.12	-73.6	6.88	66.62
	04/24/13	1098	70	60.05	17.8	6.82	50.00
	08/08/12	904	585	2.19	8.9	7.00	69.30
	04/03/12	852	771	1.75	-82.3	7.05	50.45
	08/15/11	1005	708	3.04	155.0	6.60	68.20
	04/13/11	1092	783	4.80	168.0	6.70	52.60
	08/07/10	1067	757	2.58	280.0	6.82	67.20
CW 25+95	04/07/10	1197	842	2.25	289.0	6.97	52.70
	08/27/14	1590	1034	1.54	-238.0	7.27	67.58
	04/12/14	1920	1248	13.42	-70.4	7.46	57.20
	8/7/2013	1147	745	2.00	-68.5	7.57	66.08
	04/24/13	1246	810	42.38	-118.2	7.44	53.00
	08/08/12	1614	1053	0.92	-254.1	7.43	65.50
	04/03/12	1236	1074	1.34	-200.9	7.21	53.38
	08/15/11	1271	902	1.21	138.0	7.00	69.90
	04/13/11	1559	1127	2.58	63.0	7.06	60.00
OW 0+60	08/07/10	1343	960	1.09	141.0	6.96	66.50
	04/07/10	965	675	1.32	255.0	6.95	52.20
	08/27/14	1056	687	2.00	-58.4	6.59	69.14
	04/12/14	ns	ns	ns	ns	ns	ns
	8/7/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/08/12	ns	ns	ns	ns	ns	ns
	04/03/12	ns	ns	ns	ns	ns	ns
	08/15/11	ns	ns	ns	ns	ns	ns
OW 0+60	04/13/11	ns	ns	ns	ns	ns	ns
	08/07/10	1469	1056	2.06	77.0	6.75	67.20
	04/07/10	1573	1122	ns	ns	6.93	54.90

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OW 1+50	08/27/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/7/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/08/12	ns	ns	ns	ns	ns	ns
	04/03/12	ns	ns	ns	ns	ns	ns
	08/15/11	ns	ns	ns	ns	ns	ns
	04/13/11	ns	ns	ns	ns	ns	ns
	08/07/10	ns	ns	ns	ns	ns	ns
	04/07/10	2720	2023	ns	ns	6.94	56.20
OW 3+85	08/27/14	ns	ns	ns	ns	ns	ns
	04/12/14	3030	1967	4.18	-143.6	6.93	54.74
	8/7/2013	ns	ns	ns	ns	ns	ns
	04/24/13	3021	1960	64.23	-112.5	7.15	52.00
	08/08/12	ns	ns	ns	ns	ns	ns
	04/03/12	ns	ns	ns	ns	ns	ns
	08/15/11	ns	ns	ns	ns	ns	ns
	04/13/11	ns	ns	ns	ns	ns	ns
	08/07/10	3224	2486	2.17	78.0	6.71	66.20
	04/07/10	3137	2371	ns	ns	6.94	54.70
OW 5+50	08/27/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/7/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/08/12	ns	ns	ns	ns	ns	ns
	04/03/12	ns	ns	ns	ns	ns	ns
	08/15/11	ns	ns	ns	ns	ns	ns
	04/13/11	ns	ns	ns	ns	ns	ns
	08/07/10	3577	2773	1.90	114.0	6.76	69.10
	04/07/10	ns	ns	ns	ns	ns	ns
OW 6+70	08/27/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/7/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/08/12	ns	ns	ns	ns	ns	ns
	04/03/12	ns	ns	ns	ns	ns	ns
	08/15/11	ns	ns	ns	ns	ns	ns
	04/13/11	ns	ns	ns	ns	ns	ns
	08/07/10	ns	ns	ns	ns	ns	ns
	04/07/10	ns	ns	ns	ns	ns	ns
OW 8+10	08/27/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/7/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/08/12	ns	ns	ns	ns	ns	ns
	04/03/12	ns	ns	ns	ns	ns	ns
	08/15/11	ns	ns	ns	ns	ns	ns
	04/13/11	ns	ns	ns	ns	ns	ns
	08/07/10	ns	ns	ns	ns	ns	ns
	04/07/10	ns	ns	ns	ns	ns	ns

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OW 11+15	08/27/14	2157	1402	1.73	-80.8	6.60	66.08
	04/12/14	ns	ns	ns	ns	ns	ns
	8/7/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/08/12	ns	ns	ns	ns	ns	ns
	04/03/12	ns	ns	ns	ns	ns	ns
	08/15/11	1857	1346	2.32	202.0	6.80	66.70
	04/13/11	ns	ns	ns	ns	ns	ns
	08/07/10	ns	ns	ns	ns	ns	ns
OW 14+10	04/07/10	1932	1394	ns	ns	6.94	55.80
	08/27/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/7/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/08/12	ns	ns	ns	ns	ns	ns
	04/03/12	ns	ns	ns	ns	ns	ns
	08/15/11	ns	ns	ns	ns	ns	ns
	04/13/11	ns	ns	ns	ns	ns	ns
OW 16+60	08/07/10	ns	ns	ns	ns	ns	ns
	04/07/10	ns	ns	ns	ns	ns	ns
	08/27/14	3239	2106	1.55	-172.9	6.83	68.72
	04/12/14	1529	995	4.24	-149.9	6.96	59.42
	8/7/2013	2497	1623	1.07	-74.8	6.91	67.04
	04/24/13	2770	1800	48.22	-13.1	7.01	56.00
	08/08/12	3345	2150	2.29	-146.6	7.18	67.70
	04/03/12	2389	1913	1.12	-65.9	7.03	59.18
	08/15/11	2746	2011	1.41	184.0	6.90	70.10
OW 19+50	04/13/11	2567	1943	5.53	200.0	6.78	58.30
	08/07/10	2631	1982	2.86	199.0	6.79	68.50
	04/07/10	2601	1921	ns	ns	6.90	58.30
	08/27/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/7/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/08/12	ns	ns	ns	ns	ns	ns
	04/03/12	ns	ns	ns	ns	ns	ns
OW 22+00	08/15/11	ns	ns	ns	ns	ns	ns
	04/13/11	ns	ns	ns	ns	ns	ns
	08/07/10	4496	3568	1.73	292.0	6.87	68.90
	04/07/10	4005	3129	ns	ns	6.92	54.70
	08/27/14	3213	2089	3.42	3.0	6.87	67.28
	04/12/14	2444	1588	10.62	21.9	7.27	54.32
	8/7/2013	2442	1588	5.11	43.3	7.08	65.42
	04/24/13	3056	1990	57.44	115.6	7.19	51.00
	08/08/12	4262	2769	2.77	-128.6	7.07	66.60
OW 22+00	04/03/12	3193	2770	3.22	74.1	6.97	53.42
	08/15/11	3739	2888	2.51	149.0	7.00	69.40
	04/13/11	3178	2468	2.81	250.0	6.90	54.30
	08/07/10	3804	2953	1.50	286.0	6.85	68.60
	04/07/10	3075	2326	ns	ns	6.84	52.40

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OW 23+10	08/27/14	1681	1092	2.20	-125.4	7.05	67.82
	04/12/14	1517	986	8.70	-39.4	7.36	57.92
	8/7/2013	1283	834	2.84	-19.8	7.13	66.68
	04/24/13	1498	1	46.47	83.8	7.11	55.00
	08/08/12	1995	1296	3.52	-3.2	7.04	68.30
	04/03/12	1134	933	1.74	13.9	7.19	57.25
	08/15/11	1503	1072	1.32	128.0	7.00	69.10
	08/13/11	1304	939	1.89	192.0	6.98	57.60
	08/07/10	1379	982	1.06	272.0	6.90	69.50
	04/07/10	1505	1070	ns	ns	6.85	55.70
OW 23+90	08/27/14	1522	990	2.53	-40.7	7.26	66.38
	04/12/14	1269	826	13.05	22.3	7.58	59.18
	8/7/2013	1036	674	5.11	4.3	7.50	66.20
	04/24/13	1047	1	40.99	147.3	7.39	55.00
	08/08/12	1479	960	4.88	-26.9	7.39	67.50
	04/03/12	882	731	3.64	40.3	7.56	56.62
	08/15/11	1228	869	1.77	151.0	7.00	69.00
	08/13/11	1193	855	2.73	203.0	7.03	58.40
	08/07/10	1159	822	2.05	238.0	6.97	67.80
	04/07/10	1203	845	ns	ns	6.90	56.10
OW 25+70	08/27/14	1531	997	2.21	-114.7	7.22	69.08
	04/12/14	1748	1138	6.29	-87.5	7.35	55.70
	8/7/2013	1309	852	2.44	-92.1	7.41	68.66
	04/24/13	1335	1	42.40	16.5	7.33	53.00
	08/08/12	1349	875	2.16	-116.2	7.48	69.40
	04/03/12	1254	1086	1.03	-56.2	7.44	53.54
	08/15/11	781	544	1.10	171.0	7.00	69.30
	04/13/11	1160	830	1.54	190.0	7.00	56.05
	08/07/10	1199	850	0.97	273.0	6.94	70.40
	04/07/10	1100	773	ns	ns	6.90	51.80
Refinery Wells							
MW-4	08/25/14	3133	2037	2.53	-131.2	7.07	65.06
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	2688	1746	1.84	-102.5	7.00	64.04
	04/24/13	ns	ns	ns	ns	ns	ns
	08/09/12	2615	1701	1.19	-83.6	6.86	68.30
	04/04/12	ns	ns	ns	ns	ns	ns
	08/13/11	2297	1712	1.37	226.0	6.90	58.80
	04/23/11	ns	ns	ns	ns	ns	ns
	08/13/10	2323	1725	1.49	266.0	6.94	64.70
MW-8	08/25/14	ns	ns	ns	ns	ns	ns
	04/12/14	2505	1627	4.89	205.9	4.73	59.06
	8/8/2013	2067	1346	3.33	94.9	5.91	58.58
	04/24/13	2292	1	34.64	387.3	3.74	56.00
	08/09/12	3986	2591	2.85	476.8	3.14	60.10
	04/04/12	2782	2219	2.61	424.7	2.97	59.58
	08/13/11	2306	1722	1.37	226.0	6.90	58.80
	04/23/11	2951	2289	5.30	251.0	4.79	55.00
	08/13/10	2258	1712	2.14	276.0	6.60	58.90

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MW-20	08/25/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/09/12	ns	ns	ns	ns	ns	ns
	04/04/12	ns	ns	ns	ns	ns	ns
	08/13/11	ns	ns	ns	ns	ns	ns
	04/23/11	ns	ns	ns	ns	ns	ns
MW-21	08/25/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/09/12	ns	ns	ns	ns	ns	ns
	04/04/12	ns	ns	ns	ns	ns	ns
	08/13/11	ns	ns	ns	ns	ns	ns
	04/23/11	ns	ns	ns	ns	ns	ns
MW-29	08/25/14	1162	754	2.44	-48.3	7.10	63.32
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	1396	906	1.74	60.0	7.08	61.52
	04/24/13	ns	ns	ns	ns	ns	ns
	08/09/12	1027	665	2.11	173.9	7.07	61.30
	04/04/12	ns	ns	ns	ns	ns	ns
	08/13/11	1116	797	2.35	226.0	7.00	60.10
	04/23/11	ns	ns	ns	ns	ns	ns
MW-30	08/13/10	1083	772	2.02	289.0	6.78	60.70
	08/25/14	3218	2093	3.01	-211.8	6.82	64.46
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	2666	1733	1.54	-93.3	6.96	61.94
	04/24/13	2178	1	27.80	-34.5	7.00	61.00
	08/09/12	2694	1751	1.92	-41.5	7.08	64.20
	04/04/12	3108	2395	2.06	-211.8	6.95	62.24
	08/13/11	2986	2293	1.08	151.0	6.90	62.20
MW-31	04/23/11	3119	2419	3.65	129.0	6.50	59.80
	08/13/10	3014	2309	1.24	206.0	6.82	62.50
	08/25/14	2996	1948	2.97	-159.1	6.94	63.80
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	1776	1155	4.79	-120.7	7.15	63.92
	04/24/13	ns	ns	ns	ns	ns	ns
	08/09/12	3518	2288	2.25	33.5	7.19	66.60
	04/04/12	ns	ns	ns	ns	ns	ns
	08/13/11	3359	2598	1.26	184.0	7.00	62.40
	04/23/11	ns	ns	ns	ns	ns	ns
	08/13/10	3681	2857	0.40	211.0	6.96	63.80

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Location ID	Date	Electrical Conductivity (uS/cm)	Total Dissolved Solids (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)	pH	Temperature (° F)
MW-40	08/25/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/09/12	ns	ns	ns	ns	ns	ns
	04/04/12	ns	ns	ns	ns	ns	ns
	08/13/11	2837	2129	1.51	167.0	7.10	66.50
	04/23/11	ns	ns	ns	ns	ns	ns
MW-44	08/13/10	2790	2106	1.00	281.0	7.00	68.80
	08/25/14	5662	3679	3.09	54.1	6.86	61.16
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	5484	3564	3.60	-4.3	7.07	60.98
	04/24/13	ns	ns	ns	ns	ns	ns
	08/09/12	5946	3865	5.19	29.3	7.26	64.20
	04/04/12	ns	ns	ns	ns	ns	ns
	08/13/11	4626	3682	2.15	231.0	7.00	60.50
RW-1	04/23/11	ns	ns	ns	ns	ns	ns
	08/13/10	5296	4306	2.57	320.0	6.78	60.60
	08/25/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/09/12	ns	ns	ns	ns	ns	ns
	04/04/12	ns	ns	ns	ns	ns	ns
RW-9	04/04/12	ns	ns	ns	ns	ns	ns
	04/11/11	ns	ns	ns	ns	ns	ns
	08/13/10	ns	ns	ns	ns	ns	ns
	08/25/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/09/12	3760	2442	0.98	-144.6	7.00	62.80
RW-15	04/04/12	ns	ns	ns	ns	ns	ns
	08/18/11	ns	ns	ns	ns	ns	ns
	04/11/11	ns	ns	ns	ns	ns	ns
	08/13/10	2925	2234	1.37	241.0	6.91	62.00
	08/25/14	3458	2249	3.65	-111.1	6.84	61.94
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	2213	1439	1.33	-115.1	6.94	62.24
	04/24/13	ns	ns	ns	ns	ns	ns
RW-15	08/09/12	3489	2269	0.86	-146.2	7.06	64.20
	04/04/12	ns	ns	ns	ns	ns	ns
	08/18/11	3130	2410	4.12	243.0	6.80	60.90
	04/11/11	ns	ns	ns	ns	ns	ns
	08/13/10	3295	2540	0.60	278.0	7.05	61.90

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Location ID	Date	Electrical Conductivity (uS/cm)	Total Dissolved Solids (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)	pH	Temperature (° F)
RW-18	08/25/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/09/12	ns	ns	ns	ns	ns	ns
	04/04/12	ns	ns	ns	ns	ns	ns
	08/18/11	5074	4098	3.40	229.0	6.80	63.80
	04/11/11	ns	ns	ns	ns	ns	ns
RW-23	08/13/10	5434	4451	2.28	132.0	6.94	65.80
	08/25/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/09/12	ns	ns	ns	ns	ns	ns
	04/04/12	ns	ns	ns	ns	ns	ns
	08/18/11	ns	ns	ns	ns	ns	ns
RW-28	04/11/11	ns	ns	ns	ns	ns	ns
	08/13/10	1911	1401	2.20	241.0	7.00	64.20
	08/25/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/09/12	ns	ns	ns	ns	ns	ns
	04/04/12	ns	ns	ns	ns	ns	ns
RW-42	08/17/11	ns	ns	ns	ns	ns	ns
	04/11/11	ns	ns	ns	ns	ns	ns
	08/13/10	ns	ns	ns	ns	ns	ns
	08/25/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/09/12	ns	ns	ns	ns	ns	ns
RW-43	04/04/12	ns	ns	ns	ns	ns	ns
	08/08/11	ns	ns	ns	ns	ns	ns
	04/11/11	ns	ns	ns	ns	ns	ns
	08/13/10	ns	ns	ns	ns	ns	ns
	08/25/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
RW-43	08/09/12	ns	ns	ns	ns	ns	ns
	04/04/12	ns	ns	ns	ns	ns	ns
	08/08/11	ns	ns	ns	ns	ns	ns
	04/11/11	ns	ns	ns	ns	ns	ns
	08/13/10	2647	1993	130 *	124.0	6.75	70.00

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Location ID	Date	Electrical Conductivity (uS/cm)	Total Dissolved Solids (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)	pH	Temperature (° F)
San Juan River Bluff							
Outfall No. 2	08/26/14	463	301	6.52	28.1	7.20	61.52
	04/12/14	742	481	7.53	88.6	7.36	48.92
	8/6/2013	782	507	6.48	57.1	7.51	63.68
	04/24/13	520	340	31.59	151.4	7.38	49.00
	08/07/12	324	211	4.42	159.9	7.49	69.90
	03/08/12	ns	ns	ns	ns	ns	ns
	08/11/11	299	204	ns	212.0	6.60	62.30
	04/12/11	826	588	ns	218.0	6.69	51.60
	08/13/10	388	271	ns	271.0	6.95	65.80
Outfall No. 3	08/26/14	307	200	10.63	55.3	7.84	56.72
	04/12/14	933	607	8.49	76.9	7.42	52.58
	8/6/2013	354	230	7.55	87.0	7.53	60.98
	04/24/13	622	400	28.88	120.5	7.27	53.00
	08/07/12	295	191	6.35	176.5	7.95	64.20
	03/08/12	ns	ns	ns	ns	ns	ns
	08/11/11	301	206	ns	238.0	6.60	60.40
	04/12/11	466	325	ns	197.0	6.66	52.70
	08/13/10	317	219	ns	274.0	6.94	64.90
Seep 1	08/26/14	3939	2559	5.62	51.4	7.40	61.04
	04/12/14	3507	2279	6.01	49.3	7.56	49.88
	8/6/2013	2472	1606	132.62	48.5	7.72	67.04
	04/24/13	3982	2590	90.94	228.5	7.36	46.00
	08/07/12	4503	2925	5.62	164.0	8.03	76.90
	03/18/12	ns	ns	ns	ns	ns	ns
Seep 2	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/6/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	03/18/12	ns	ns	ns	ns	ns	ns
Seep 3	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/6/2013	ns	ns	ns	ns	ns	ns
	04/24/13	4506	2930	99.98	217.0	7.76	44.00
	08/07/12	ns	ns	ns	ns	ns	ns
	03/18/12	3655	3215	7.95	127.0	7.89	52.38
Seep 4	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/6/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/07/12	ns	ns	ns	ns	ns	ns
	03/18/12	ns	ns	ns	ns	ns	ns
Seep 5	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/6/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/07/12	ns	ns	ns	ns	ns	ns
	03/18/12	ns	ns	ns	ns	ns	ns

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Location ID	Date	Electrical Conductivity (uS/cm)	Total Dissolved Solids (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)	pH	Temperature (° F)
Seep 6	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	8810	5727	13.46	105.2	7.24	44.84
	8/6/2013	28663	18631	90.40	153.6	6.68	66.26
	04/24/13	9510	6180	129.16	219.0	7.07	42.00
	08/07/12	ns	ns	ns	ns	ns	ns
	03/18/12	7291	6851	12.60	121.6	7.61	48.02
Seep 7	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/6/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/07/12	ns	ns	ns	ns	ns	ns
	03/18/12	ns	ns	ns	ns	ns	ns
Seep 8	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/6/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/07/12	ns	ns	ns	ns	ns	ns
	03/18/12	ns	ns	ns	ns	ns	ns
Seep 9	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	5271	3426	12.90	43.9	7.73	43.10
	8/6/2013	ns	ns	ns	ns	ns	ns
	04/24/13	5644	3670	136.90	214.3	7.35	35.00
	08/07/12	ns	ns	ns	ns	ns	ns
	03/18/12	3004	2841	7.62	139.4	7.64	47.48
Upstream	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	357	232	12.74	45.3	8.14	45.38
	8/6/2013	ns	ns	ns	ns	ns	ns
	04/24/13	370	240	21.89	168.2	8.20	49.00
	08/07/12	311	202	7.73	147.4	8.51	57.90
	03/10/12	236	218	10.50	65.4	8.27	49.28
Downstream	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	429	279	16.35	82.1	7.67	45.14
	8/6/2013	ns	ns	ns	ns	ns	ns
	04/24/13	419	270	20.80	193.9	8.20	51.00
	08/07/12	347	226	5.71	157.4	8.47	60.00
	03/11/12	323	273	10.12	61.2	8.41	55.40
North of MW-45	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	411	267	13.48	83.8	8.05	45.14
	8/6/2013	ns	ns	ns	ns	ns	ns
	04/24/13	360	230	20.40	214.3	8.39	50.00
	08/07/12	313	203	8.17	154.8	8.42	59.10
	03/11/12	243	220	9.85	75.1	8.42	50.54
North of MW-46	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	405	263	12.30	90.4	8.12	44.96
	8/6/2013	ns	ns	ns	ns	ns	ns
	04/24/13	368	240	20.90	213.5	8.40	51.00
	08/07/12	324	211	8.02	156.5	8.31	60.10
	03/10/12	242	220	10.20	65.2	8.37	50.18

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Location ID	Date	Electrical Conductivity (uS/cm)	Total Dissolved Solids (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)	pH	Temperature (° F)
Background Wells							
MW-3	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/04/12	ns	ns	ns	ns	ns	ns
	04/04/12	ns	ns	ns	ns	ns	ns
	08/13/11	ns	ns	ns	ns	ns	ns
	04/23/11	ns	ns	ns	ns	ns	ns
MW-5	08/13/10	ns	ns	ns	ns	ns	ns
	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/04/12	ns	ns	ns	ns	ns	ns
	04/04/12	ns	ns	ns	ns	ns	ns
	08/13/11	ns	ns	ns	ns	ns	ns
MW-6	04/23/11	ns	ns	ns	ns	ns	ns
	08/13/10	ns	ns	ns	ns	ns	ns
	08/26/14	ns	ns	ns	ns	ns	ns
	04/12/14	ns	ns	ns	ns	ns	ns
	8/8/2013	ns	ns	ns	ns	ns	ns
	04/24/13	ns	ns	ns	ns	ns	ns
	08/04/12	ns	ns	ns	ns	ns	ns
	04/04/12	ns	ns	ns	ns	ns	ns
MW-51	08/13/11	ns	ns	ns	ns	ns	ns
	04/23/11	ns	ns	ns	ns	ns	ns
	08/19/15	779	507	3.06	25.6	7.07	62.18
	08/14/13	441	287	2.17	69.0	7.35	61.34
	08/15/12	557	362	2.58	116.8	7.57	62.90
	08/22/11	509	351	4.80	181.0	6.90	61.10
	08/13/10	664	459	0.52	273.0	7.12	63.10
MW-52	08/19/15	4849	3153	3.37	64.2	6.49	60.50
	08/14/13	4471	2908	2.69	5.2	6.78	59.30
	08/15/12	3518	2286	2.60	4.7	6.61	64.70
	08/22/11	4139	3255	3.12	201.0	6.90	60.70
	08/13/10	3602	2801	0.63	291.0	7.07	62.20
MW-53	08/19/15	5333	3467	3.23	59.7	6.58	60.50
	08/14/13	4603	2990	3.05	48.3	7.15	59.72
	08/15/12	5477	3562	3.55	38.0	7.27	61.90
	08/22/11	4574	3658	3.63	215.0	6.90	59.60
	08/13/10	4288	3394	0.59	242.0	7.14	61.60
RCRA Investigation Wells							
MW-50	08/19/15	ns	ns	ns	ns	ns	ns
	08/14/13	544	353	1.73	55.0	7.44	60.98
	08/15/12	558	348	10.37	148.4	7.21	62.20
	08/22/11	650	453	6.12	183.0	6.70	59.50
	08/13/10	612	425	0.66	248.0	7.12	61.40

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Location ID	Date	Electrical Conductivity (uS/cm)	Total Dissolved Solids (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)	pH	Temperature (° F)
MW-54	08/19/15	ns	ns	ns	ns	ns	ns
	08/14/13	ns	ns	ns	ns	ns	ns
	08/15/12	ns	ns	ns	ns	ns	ns
	08/22/11	ns	ns	ns	ns	ns	ns
	08/13/10	ns	ns	ns	ns	ns	ns
MW-55	08/19/15	ns	ns	ns	ns	ns	ns
	08/14/13	ns	ns	ns	ns	ns	ns
	08/15/12	ns	ns	ns	ns	ns	ns
	08/22/11	3001	2284	1.72	198.0	7.00	60.60
	08/13/10	3160	2440	1.28	277.0	6.85	61.10
MW-56	08/19/15	ns	ns	ns	ns	ns	ns
	08/14/13	ns	ns	ns	ns	ns	ns
	08/15/12	ns	ns	ns	ns	ns	ns
	08/22/11	ns	ns	ns	ns	ns	ns
	08/13/10	ns	ns	ns	ns	ns	ns
MW-57	08/19/15	ns	ns	ns	ns	ns	ns
	08/14/13	ns	ns	ns	ns	ns	ns
	08/15/12	ns	ns	ns	ns	ns	ns
	08/22/11	ns	ns	ns	ns	ns	ns
	08/13/10	ns	ns	ns	ns	ns	ns
MW-58	08/19/15	ns	ns	ns	ns	ns	ns
	08/14/13	ns	ns	ns	ns	ns	ns
	08/15/12	ns	ns	ns	ns	ns	ns
	08/22/11	ns	ns	ns	ns	ns	ns
	08/13/10	2562	1928	1.68	279.0	6.95	65.30
MW-59	08/19/15	3488	2266	2.75	-121.2	6.90	62.90
	08/14/13	2876	1869	1.79	-91.1	7.09	63.95
	08/15/12	2867	1863	1.60	-85.9	7.10	63.10
	08/25/11	2423	1812	2.12	221.0	6.80	62.00
	08/13/10	2067	1523	0.61	287.0	6.90	62.40
MW-60	08/19/15	ns	ns	ns	ns	ns	ns
	08/14/13	ns	ns	ns	ns	ns	ns
	08/15/12	ns	ns	ns	ns	ns	ns
	08/25/11	3551	2743	1.78	200.0	7.00	62.60
	08/13/10	2567	1939	0.68	284.0	6.88	61.50
MW-61	08/19/15	ns	ns	ns	ns	ns	ns
	08/14/13	ns	ns	ns	ns	ns	ns
	08/15/12	ns	ns	ns	ns	ns	ns
	08/08/11	ns	ns	ns	ns	ns	ns
	08/13/10	ns	ns	ns	ns	ns	ns
MW-62	08/19/15	7172	4663	6.36	44.5	6.87	63.02
	08/14/13	7051	4583	4.54	38.3	7.07	61.76
	08/15/12	7450	4843	4.75	125.4	6.95	61.40
	08/23/11	6247	5203	50' cord -didn't reach	189.0	7.00	60.50
	08/13/10	6458	5330	50' cord -didn't reach	297.0	6.93	62.40
MW-63	08/19/15	5282	3432	3.24	30.5	6.60	66.92
	08/14/13	5899	3835	1.39	62.1	6.83	65.39
	08/15/12	5374	3479	1.47	137.6	6.91	65.40
	08/24/11	3416	2651	1.71	238.0	6.60	63.90
	08/13/10	4764	3809	0.44	222.0	7.06	68.30

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Location ID	Date	Electrical Conductivity (uS/cm)	Total Dissolved Solids (mg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)	pH	Temperature (° F)
MW-64	08/19/15	6249	4060	9.15	67.1	6.94	64.52
	08/14/13	6049	3933	6.49	60.9	7.03	64.28
	08/15/12	6501	4186	4.90	121.2	7.12	65.40
	08/24/11	4989	4026	4.22	235.0	6.70	61.50
	08/13/10	5302	4279	4.59	251.0	7.06	65.50
MW-65	08/19/15	4299	2795	3.57	-114.7	6.89	64.16
	08/14/13	4707	3059	1.80	-97.6	7.04	64.10
	08/15/12	5341	3458	1.09	-93.5	7.09	63.90
	08/22/11	2866	2189	0.55	169.0	7.10	63.00
	08/13/10	2787	2103	0.41	245.0	7.05	65.80
MW-66	08/19/15	ns	ns	ns	ns	ns	ns
	08/14/13	ns	ns	ns	ns	ns	ns
	08/15/12	ns	ns	ns	ns	ns	ns
	08/08/11	ns	ns	ns	ns	ns	ns
	08/13/10	ns	ns	ns	ns	ns	ns
MW-67	08/19/15	1008	654	3.00	70.4	6.87	60.14
	08/14/13	876	570	2.39	59.7	7.12	59.60
	08/15/12	1309	849	2.48	221.9	6.96	59.70
	08/22/11	1017	712	1.17	170.0	7.00	58.70
MW-68	08/19/15	1135	737	3.56	52.4	6.97	63.32
	08/14/13	1053	685	3.31	84.5	7.19	61.04
	08/15/12	1114	724	7.85	197.6	6.82	61.20
	08/22/11	1150	809	0.91	218.0	7.00	60.90
MW-69	08/19/15	ns	ns	ns	ns	ns	ns
	08/14/13	ns	ns	ns	ns	ns	ns
	08/15/12	ns	ns	ns	ns	ns	ns
	08/22/11	ns	ns	ns	ns	ns	ns
MW-70	08/19/14	6088	3956	6.13	-65.3	6.81	63.44

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			RW-1				MW-4				MW-8						
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11
Volatile Organic Compounds (ug/L)																	
1,1,1,2-Tetrachloroethane	5.72E+00	(5)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1,1,1-Trichloroethane	6.00E+01	(3)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1,1,2,2-Tetrachloroethane	1.00E+01	(3)	---	---	---	---	< 20	< 2.0	< 20	< 20	---	< 2.0	---	< 2.0	---	< 2.0	---
1,1,2-Trichloroethane	5.00E+00	(2)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1,1-Dichloroethane	2.50E+01	(3)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1,1-Dichloroethene	5.00E+00	(3)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1,1-Dichloropropene	-	-	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1,2,3-Trichlorobenzene	-	-	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1,2,3-Trichloropropane	7.47E-03	(5)	---	---	---	---	< 20	< 2.0	< 20	< 20	---	< 2.0	---	< 2.0	---	< 2.0	---
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1,2,4-Trimethylbenzene	1.50E+01	(1)	---	---	---	---	< 10	10	220	130	---	8.0	---	21	---	30	---
1,2-Dibromo-3-chloropropane	2.00E-01	(2)	---	---	---	---	< 20	< 2.0	< 20	< 20	---	< 2.0	---	< 2.0	---	< 2.0	---
1,2-Dibromoethane (EDB)	5.00E-02	(2)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1,2-Dichloroethane (EDC)	5.00E+00	(2)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1,2-Dichloropropane	5.00E+00	(2)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1,3,5-Trimethylbenzene	1.20E+01	(1)	---	---	---	---	< 10	2.3	11	38	---	2.0	---	5.2	---	13	---
1,3-Dichlorobenzene	-	-	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1,3-Dichloropropane	7.30E+02	(1)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
1-Methylnaphthalene	2.30E+00	(1)	---	---	---	---	< 40	17	< 40	< 40	---	< 4.0	---	23	---	25	---
2,2-Dichloropropane	-	-	---	---	---	---	< 20	< 2.0	< 20	< 20	---	< 2.0	---	< 2.0	---	< 2.0	---
2-Butanone	5.56E+03	(5)	---	---	---	---	< 100	< 10	< 100	< 100	---	< 10	---	< 10	---	< 10	---
2-Chlorotoluene	7.30E+02	(1)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
2-Hexanone	-	-	---	---	---	---	< 100	< 10	< 100	< 100	---	< 10	---	< 10	---	< 10	---
2-Methylnaphthalene	1.50E+02	(1)	---	---	---	---	< 40	29	66	49	---	< 4.0	---	19	---	37	---
4-Chlorotoluene	2.60E+03	(1)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
4-Isopropyltoluene	-	-	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
4-Methyl-2-pentanone	-	-	---	---	---	---	< 100	< 10	< 100	< 100	---	< 10	---	< 10	---	< 10	---
Acetone	1.41E+04	(5)	---	---	---	---	< 100	< 10	< 100	< 100	---	< 10	---	< 10	---	< 10	---
Benzene	5.00E+00	(2)	---	---	---	---	27	120	190	160	< 1.0	< 1.0	< 1.0	< 1.0	1.3	< 10	< 10
Bromobenzene	2.00E+01	(1)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Bromodichloromethane	1.34E+00	(5)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Bromoform	8.50E+00	(1)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Bromomethane	7.54E+00	(5)	---	---	---	---	< 30	< 3.0	< 30	< 30	---	< 3.0	---	< 3.0	---	< 3.0	---
Carbon disulfide	8.10E+02	(5)	---	---	---	---	< 100	< 10	< 100	< 100	---	< 10	---	< 10	---	< 10	---
Carbon Tetrachloride	5.00E+00	(2)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Chlorobenzene	1.00E+02	(2)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Chloroethane	-	-	---	---	---	---	< 20	< 2.0	< 20	< 20	---	< 2.0	---	< 2.0	---	< 2.0	---
Chloroform	1.00E+02	(3)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Chloromethane	2.03E+01	(5)	---	---	---	---	< 30	< 3.0	< 30	< 30	---	< 3.0	---	< 3.0	---	< 3.0	---
cis-1,2-DCE	7.00E+01	(2)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
cis-1,3-Dichloropropene	-	-	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Dibromochloromethane	1.68E+00	(5)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Dibromomethane	3.70E+02	(1)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Dichlorodifluoromethane	1.97E+02	(5)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Ethylbenzene	7.00E+02	(2)	---	---	---	---	< 10	18	83	69	< 1.0	1.2	2.3	3.9	16.0	1.9	15
Hexachlorobutadiene	8.60E-01	(1)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Isopropylbenzene	4.47E+02	(5)	---	---	---	---	25	27	58	42	---	< 1.0	---	1.4	---	2.4	---

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			RW-1				MW-4				MW-8						
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11
Methyl tert-butyl ether (MTBE)	1.43E+02	(5)	---	---	---	---	< 10	1.4	< 10	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene Chloride	5.00E+00	(2)	---	---	---	---	< 30	< 3.0	< 30	< 30	---	< 3.0	---	< 3.0	---	< 3.0	---
Naphthalene	1.65E+00	(5)	---	---	---	---	55	56	110	100	---	< 2.0	---	8.7	---	20	---
n-Butylbenzene	-	-	---	---	---	---	< 30	< 3.0	< 10	< 10	---	< 3.0	---	1.1	---	2.3	---
n-Propylbenzene	-	-	---	---	---	---	25	22	77	37	---	1.2	---	3.6	---	3.7	---
sec-Butylbenzene	-	-	---	---	---	---	< 10	5.2	14	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Styrene	1.00E+02	(2)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
tert-Butylbenzene	-	-	---	---	---	---	< 10	1.2	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Tetrachloroethene (PCE)	5.00E+00	(2)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Toluene	7.50E+02	(3)	---	---	---	---	< 10	< 1.0	< 10	< 10	< 1.0	< 1.0	< 1.0	< 1.0	3.0	< 1.0	< 1.0
trans-1,2-DCE	1.00E+02	(2)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
trans-1,3-Dichloropropene	4.30E-01	(1)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Trichloroethene (TCE)	5.00E+00	(2)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Trichlorofluoromethane	1.14E+03	(5)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Vinyl chloride	1.00E+00	(3)	---	---	---	---	< 10	< 1.0	< 10	< 10	---	< 1.0	---	< 1.0	---	< 1.0	---
Xylenes, Total	6.20E+02	(3)	---	---	---	---	< 15	5.6	34	140	1.9	3.6	8.6	9.3	56.0	2	37
Semi Volatile Organic Compounds (ug/l):																	
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1-Methylnaphthalene	2.30E+00	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4,5-Trichlorophenol	1.17E+03	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4,6-Trichlorophenol	1.19E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dichlorophenol	4.53E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dimethylphenol	3.54E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dinitrophenol	3.88E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dinitrotoluene	2.37E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,6-Dinitrotoluene	3.70E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chloronaphthalene	2.90E+03	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chlorophenol	9.10E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	1.50E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylphenol	1.80E+03	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Nitroaniline	1.10E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Nitrophenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3,3'-Dichlorobenzidine	1.50E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4-Methylphenol	1.80E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3-Nitroaniline	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4,6-Dinitro-2-methylphenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Bromophenyl phenyl ether	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloro-3-methylphenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloroaniline	3.40E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chlorophenyl phenyl ether	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Nitroaniline	3.40E+00	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Nitrophenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	5.35E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthylene	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Aniline	1.20E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Anthracene	1.72E+03	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Azobenzene	1.20E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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			RW-1				MW-4				MW-8						
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11
Benzo(a)anthracene	3.43E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(a)pyrene	2.00E-01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(b)fluoranthene	3.43E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(g,h,i)perylene	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(k)fluoranthene	3.43E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzoic acid	1.50E+05	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzyl alcohol	1.80E+04	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroethoxy)methane	1.10E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroethyl)ether	1.36E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroisopropyl)ether	9.76E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-ethylhexyl)phthalate	6.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Butyl benzyl phthalate	3.50E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbazole	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	3.43E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenz(a,h)anthracene	1.06E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenzofuran	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Diethyl phthalate	1.48E+04	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dimethyl phthalate	5.56E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butyl phthalate	8.85E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-octyl phthalate	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	8.02E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluorene	2.88E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	1.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobutadiene	8.60E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorocyclopentadiene	5.00E+01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachloroethane	6.80E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	2.90E-02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Isophorone	7.79E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Naphthalene	1.65E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Nitrobenzene	1.40E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodimethylamine	4.90E-03	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodi-n-propylamine	9.60E-03	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodiphenylamine	1.21E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pentachlorophenol	1.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Phenanthrene	1.70E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Phenol	5.00E+00	(3)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pyrene	1.17E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pyridine	3.70E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
General Chemistry (mg/l):																	
Fluoride	1.6	(3)	---	---	---	---	< 0.50	< 0.50	< 0.50	0.21	---	0.67	---	0.79	---	0.72	---
Chloride	250	(3)	---	---	---	---	220	210	220	150	---	120	---	240	---	190	---
Nitrite	1	(2)	---	---	---	---	< 0.50	< 0.50	< 0.50	2.3*	---	0.88	---	<0.10	---	8.6*	---
Bromide	-	-	---	---	---	---	3.4	3.1	3.0	2.0	---	0.86	---	1.0	---	1.10	---
Nitrate	10	(3)	---	---	---	---	< 0.50	< 0.50	< 0.50	<0.50	---	13	---	16	---	--	---
Phosphorus	-	-	---	---	---	---	< 2.5	< 2.5	< 2.5	<0.50	---	< 2.5	---	< 10	---	<0.50	---
Sulfate	600	(3)	---	---	---	---	6.8	4.0	< 2.5	3.0	---	990	---	1800	---	1000	---
Carbon Dioxide (CO ₂)	-	-	---	---	---	---	1200	1100	1000	990	---	61	---	< 1.0	---	62	---
Alkalinity (CaCO ₃)	-	-	---	---	---	---	1400	1200	1100	1100	---	31	---	< 20	---	<20	---
Bicarbonate (CaCO ₃)	-	-	---	---	---	---	1400	1200	1100	1100	---	31	---	< 20	---	<20	---

TABLE 3
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			RW-1				MW-4				MW-8						
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11
Total Metals (mg/l):																	
Arsenic	0.01	(2)	---	---	---	---	< 0.020	< 0.020	< 0.02	0.021	---	< 0.020	---	< 0.04	---	0.18	---
Barium	1.0	(3)	---	---	---	---	2.6	2.3	2.3	1.9	---	0.021	---	0.035	---	0.13	---
Cadmium	0.005	(2)	---	---	---	---	< 0.0020	< 0.0020	<0.002	<0.002	---	< 0.0020	---	< 0.004	---	0.009	---
Chromium	0.05	(3)	---	---	---	---	0.024	0.034	0.014	0.066	---	0.46	---	4.8	---	0.98	---
Lead	0.015	(2)	---	---	---	---	0.010	0.012	0.0077	0.0057	---	< 0.0010	---	< 0.01	---	0.0086	---
Selenium	0.05	(2)	---	---	---	---	< 0.050	< 0.050	<0.05	<0.05	---	0.084	---	< 0.1	---	<0.05	---
Silver	0.05	(3)	---	---	---	---	< 0.0050	< 0.025	<0.005	<0.005	---	< 0.025	---	< 0.01	---	<0.005	---
Mercury	0.002	(3)	---	---	---	---	< 0.00020	< 0.00020	<0.0002	<0.0002	---	0.0012	---	0.0040	---	0.074	---
Dissolved Metals (mg/l):																	
Arsenic	0.1	(3)	---	---	---	---	< 0.010	0.015	0.0095	0.0061	---	< 0.0050	---	0.011	---	0.0032	---
Barium	1.0	(3)	---	---	---	---	2.1	2.1	2.0	1.8	---	0.012	---	0.026	---	0.014	---
Cadmium	0.01	(3)	---	---	---	---	< 0.0020	< 0.0020	<0.002	<0.002	---	< 0.0020	---	< 0.01	---	<0.002	---
Calcium	-	-	---	---	---	---	150	150	160	130	---	140	---	240	---	190	---
Chromium	0.05	(3)	---	---	---	---	< 0.0060	< 0.0060	<0.006	<0.006	---	0.019	---	3.9	---	0.09	---
Copper	1.0	(3)	---	---	---	---	0.023	0.017	<0.006	<0.006	---	0.0076	---	0.17	---	<0.006	---
Iron	1.0	(3)	---	---	---	---	12	12	7.9	12	---	2.5	---	60	---	4.6	---
Lead	0.05	(3)	---	---	---	---	0.0011	0.001	0.0014	<0.005	---	< 0.0010	---	0.0016	---	<0.005	---
Magnesium	-	-	---	---	---	---	62	67	63	53	---	31	---	48	---	36	---
Manganese	0.2	(3)	---	---	---	---	2.5	2.8	3.5	2.6	---	2.7	---	9.6	---	2.4	---
Mercury	-	-	---	---	---	---	< 0.00020	< 0.00020	< 0.0002	< 0.0002	---	< 0.00020	---	0.0040	---	0.074	---
Potassium	-	-	---	---	---	---	6.1	6.9	4.2	3.9	---	3.1	---	5.4	---	3.1	---
Selenium	0.05	(3)	---	---	---	---	0.012	0.014	0.0079	0.0063	---	0.04	---	0.040	---	0.021	---
Silver	0.05	(3)	---	---	---	---	< 0.0050	< 0.0050	<0.005	<0.005	---	< 0.0050	---	< 0.025	---	<0.005	---
Sodium	-	-	---	---	---	---	470	370	330	340	---	250	---	330	---	290	---
Uranium	0.03	(3)	---	---	---	---	< 0.0010	< 0.0010	< 0.001	<0.001	---	0.001	---	0.03	---	0.0016	---
Zinc	10	(3)	---	---	---	---	0.011	< 0.010	0.042	0.25	---	0.076	---	0.54	---	0.22	---
Total Petroleum Hydrocarbons (mg/l):																	
Diesel Range Organics	0.2	(4)	---	---	---	---	0.84	3.3	0.48	1.1	---	<0.20	---	0.27	---	0.48	---
Gasoline Range Organics	-	-	---	---	---	---	5.4	7.0	9.8	6.0	---	0.083	---	0.16	---	0.35	---
Motor Oil Range Organics	-	-	---	---	---	---	< 2.5	< 2.5	< 2.5	<2.5	---	<2.5	---	<2.5	---	<2.5	---

Notes:

- (1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water
- (2) EPA - Regional Screening Levels (April 2009) - MCL
- (3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or
- (4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening levels
- (5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013.
2014 Background Document for Development of Soil Screening Levels for analysis beginning in 2014.

-	= No screening level available
*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required and/or well contains separate phase
	= Analytical result exceeds the respective screening level.

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			RW-9				RW-15				RW-18				MW-21			
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11
Volatile Organic Compounds (ug/L)																		
1,1,1,2-Tetrachloroethane	5.72E+00	(5)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
1,1,1-Trichloroethane	6.00E+01	(3)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
1,1,2,2-Tetrachloroethane	1.00E+01	(3)	---	---	< 40	---	< 100	< 2.0	< 40	< 40	---	---	---	< 40	---	---	---	---
1,1,2-Trichloroethane	5.00E+00	(2)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
1,1-Dichloroethane	2.50E+01	(3)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
1,1-Dichloroethene	5.00E+00	(3)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
1,1-Dichloropropene	-	-	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
1,2,3-Trichlorobenzene	-	-	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
1,2,3-Trichloropropane	7.47E-03	(5)	---	---	< 40	---	< 100	< 2.0	< 40	< 40	---	---	---	< 40	---	---	---	---
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
1,2,4-Trimethylbenzene	1.50E+01	(1)	---	---	1200	---	2500	14	700	1700	---	---	---	400	---	---	---	---
1,2-Dibromo-3-chloropropane	2.00E-01	(2)	---	---	< 40	---	< 100	< 2.0	< 40	< 40	---	---	---	< 40	---	---	---	---
1,2-Dibromoethane (EDB)	5.00E-02	(2)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
1,2-Dichloroethane (EDC)	5.00E+00	(2)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	540	---	---	---	---
1,2-Dichloropropane	5.00E+00	(2)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
1,3,5-Trimethylbenzene	1.20E+01	(1)	---	---	250	---	490	1.0	190	510	---	---	---	< 20	---	---	---	---
1,3-Dichlorobenzene	-	-	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
1,3-Dichloropropane	7.30E+02	(1)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
1-Methylnaphthalene	2.30E+00	(1)	---	---	130	---	< 200	< 4.0	< 80	110	---	---	---	720	---	---	---	---
2,2-Dichloropropane	-	-	---	---	< 40	---	< 100	< 2.0	< 40	< 40	---	---	---	< 40	---	---	---	---
2-Butanone	5.56E+03	(5)	---	---	< 200	---	< 500	< 10	< 200	< 200	---	---	---	< 200	---	---	---	---
2-Chlorotoluene	7.30E+02	(1)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
2-Hexanone	-	-	---	---	< 200	---	< 500	< 10	< 200	< 200	---	---	---	< 200	---	---	---	---
2-Methylnaphthalene	1.50E+02	(1)	---	---	190	---	210	< 4.0	85	170	---	---	---	< 80	---	---	---	---
4-Chlorotoluene	2.60E+03	(1)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
4-Isopropyltoluene	-	-	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
4-Methyl-2-pentanone	-	-	---	---	< 200	---	< 500	< 10	< 200	< 200	---	---	---	< 200	---	---	---	---
Acetone	1.41E+04	(5)	---	---	< 200	---	< 500	< 10	< 200	< 200	---	---	---	< 200	---	---	---	---
Benzene	5.00E+00	(2)	---	---	5400	---	2100	30	1100	2800	---	---	---	42	---	---	---	---
Bromobenzene	2.00E+01	(1)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Bromodichloromethane	1.34E+00	(5)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Bromoform	8.50E+00	(1)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Bromomethane	7.54E+00	(5)	---	---	< 60	---	< 150	< 3.0	< 60	< 60	---	---	---	< 60	---	---	---	---
Carbon disulfide	8.10E+02	(5)	---	---	< 200	---	< 500	< 10	< 200	< 200	---	---	---	< 200	---	---	---	---
Carbon Tetrachloride	5.00E+00	(2)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Chlorobenzene	1.00E+02	(2)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Chloroethane	-	-	---	---	< 40	---	< 100	< 2.0	< 40	< 40	---	---	---	< 40	---	---	---	---
Chloroform	1.00E+02	(3)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Chloromethane	2.03E+01	(5)	---	---	< 60	---	< 150	< 3.0	< 60	< 60	---	---	---	< 60	---	---	---	---
cis-1,2-DCE	7.00E+01	(2)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
cis-1,3-Dichloropropene	-	-	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Dibromochloromethane	1.68E+00	(5)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Dibromomethane	3.70E+02	(1)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Dichlorodifluoromethane	1.97E+02	(5)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Ethylbenzene	7.00E+02	(2)	---	---	670	---	3400	19	1000	2500	---	---	---	90	---	---	---	---
Hexachlorobutadiene	8.60E-01	(1)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Isopropylbenzene	4.47E+02	(5)	---	---	46	---	93	< 1.0	24	80	---	---	---	29	---	---	---	---

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			RW-9				RW-15				RW-18				MW-21			
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11
Methyl tert-butyl ether (MTBE)	1.43E+02	(5)	---	---	6400	---	150	1.6	93	71	---	---	---	2200	---	---	---	---
Methylene Chloride	5.00E+00	(2)	---	---	< 60	---	< 150	< 3.0	< 60	< 60	---	---	---	< 60	---	---	---	---
Naphthalene	1.65E+00	(5)	---	---	250	---	640	3.1	160	470	---	---	---	< 40	---	---	---	---
n-Butylbenzene	-	-	---	---	< 20	---	< 150	< 3.0	< 20	25	---	---	---	36	---	---	---	---
n-Propylbenzene	-	-	---	---	99	---	320	1.7	97	270	---	---	---	52	---	---	---	---
sec-Butylbenzene	-	-	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Styrene	1.00E+02	(2)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
tert-Butylbenzene	-	-	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Tetrachloroethene (PCE)	5.00E+00	(2)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Toluene	7.50E+02	(3)	---	---	< 20	---	< 50	1.5	< 20	790	---	---	---	< 20	---	---	---	---
trans-1,2-DCE	1.00E+02	(2)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
trans-1,3-Dichloropropene	4.30E-01	(1)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Trichloroethene (TCE)	5.00E+00	(2)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Trichlorofluoromethane	1.14E+03	(5)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Vinyl chloride	1.00E+00	(3)	---	---	< 20	---	< 50	< 1.0	< 20	< 20	---	---	---	< 20	---	---	---	---
Xylenes, Total	6.20E+02	(3)	---	---	1800	---	6600	8.3	2100	9700	---	---	---	< 30	---	---	---	---
Semi Volatile Organic Compounds (ug/l):																		
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1-Methylnaphthalene	2.30E+00	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4,5-Trichlorophenol	1.17E+03	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4,6-Trichlorophenol	1.19E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dichlorophenol	4.53E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dimethylphenol	3.54E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dinitrophenol	3.88E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dinitrotoluene	2.37E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,6-Dinitrotoluene	3.70E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chloronaphthalene	2.90E+03	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chlorophenol	9.10E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	1.50E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylphenol	1.80E+03	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Nitroaniline	1.10E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Nitrophenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3,3'-Dichlorobenzidine	1.50E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4-Methylphenol	1.80E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3-Nitroaniline	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4,6-Dinitro-2-methylphenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Bromophenyl phenyl ether	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloro-3-methylphenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloroaniline	3.40E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chlorophenyl phenyl ether	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Nitroaniline	3.40E+00	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Nitrophenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	5.35E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthylene	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Aniline	1.20E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Anthracene	1.72E+03	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Azobenzene	1.20E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 3
Refinery Wells Analytical Summary
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				RW-9				RW-15				RW-18				MW-21			
				Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11
Benzo(a)anthracene	3.43E-01	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(a)pyrene	2.00E-01	(2)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(b)fluoranthene	3.43E-01	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(g,h,i)perylene	-	-		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(k)fluoranthene	3.43E+00	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzoic acid	1.50E+05	(1)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzyl alcohol	1.80E+04	(1)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroethoxy)methane	1.10E+02	(1)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroethyl)ether	1.36E-01	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroisopropyl)ether	9.76E+00	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-ethylhexyl)phthalate	6.00E+00	(2)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Butyl benzyl phthalate	3.50E+01	(1)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbazole	-	-		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	3.43E+01	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenz(a,h)anthracene	1.06E-01	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenzofuran	-	-		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Diethyl phthalate	1.48E+04	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dimethyl phthalate	5.56E+01	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butyl phthalate	8.85E+02	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-octyl phthalate	-	-		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	8.02E+02	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluorene	2.88E+02	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	1.00E+00	(2)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobutadiene	8.60E-01	(1)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorocyclopentadiene	5.00E+01	(2)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachloroethane	6.80E+00	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	2.90E-02	(1)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Isophorone	7.79E+02	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Naphthalene	1.65E+00	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Nitrobenzene	1.40E+00	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodimethylamine	4.90E-03	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodi-n-propylamine	9.60E-03	(1)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodiphenylamine	1.21E+02	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pentachlorophenol	1.00E+00	(2)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Phenanthrene	1.70E+02	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Phenol	5.00E+00	(3)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pyrene	1.17E+02	(5)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pyridine	3.70E+01	(1)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
General Chemistry (mg/l):																			
Fluoride	1.6	(3)		---	---	< 1.0	---	< 0.50	< 0.50	< 0.50	<0.5	---	---	---	<2.0	---	---	---	---
Chloride	250	(3)		---	---	460	---	410	360	440	380	---	---	---	310	---	---	---	---
Nitrite	1	(2)		---	---	< 2.0 *	---	< 0.50	< 0.50	< 0.50	<0.50	---	---	---	<2.0	---	---	---	---
Bromide	-	-		---	---	5.6	---	6.1	6.8	7.4	7.70	---	---	---	3.20	---	---	---	---
Nitrate	10	(3)		---	---	< 2.0 *	---	< 0.50	< 0.50	< 0.50	<0.50	---	---	---	<2.0	---	---	---	---
Phosphorus	-	-		---	---	< 5.0	---	< 2.5	< 2.5	< 2.5	<2.5	---	---	---	<10	---	---	---	---
Sulfate	600	(3)		---	---	21	---	2.8	< 2.5	< 2.5	2.90	---	---	---	3300	---	---	---	---
Carbon Dioxide (CO ₂)	-	-		---	---	1200	---	1100	1100	1000	1100	---	---	---	480	---	---	---	---
Alkalinity (CaCO ₃)	-	-		---	---	1200	---	1200	1200	1100	1200	---	---	---	520	---	---	---	---
Bicarbonate (CaCO ₃)	-	-		---	---	1200	---	1200	1200	1100	1200	---	---	---	520	---	---	---	---

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			RW-9				RW-15				RW-18				MW-21			
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11
Total Metals (mg/l):																		
Arsenic	0.01	(2)	---	---	<0.02	---	< 0.020	< 0.020	<0.02	<0.02	---	---	---	0.1	---	---	---	---
Barium	1.0	(3)	---	---	4.5	---	1.6	0.98	1.2	1.8	---	---	---	4.2	---	---	---	---
Cadmium	0.005	(2)	---	---	<0.002	---	< 0.0020	< 0.0020	<0.002	<0.002	---	---	---	0.013	---	---	---	---
Chromium	0.05	(3)	---	---	0.0097	---	< 0.0060	< 0.0060	<0.006	<0.006	---	---	---	0.17	---	---	---	---
Lead	0.015	(2)	---	---	0.041	---	< 0.0050	< 0.0010	<0.005	<0.005	---	---	---	0.055	---	---	---	---
Selenium	0.05	(2)	---	---	<0.05	---	< 0.050	< 0.050	<0.05	<0.05	---	---	---	<0.10	---	---	---	---
Silver	0.05	(3)	---	---	<0.005	---	< 0.0050	< 0.025	<0.005	<0.005	---	---	---	<0.010	---	---	---	---
Mercury	0.002	(3)	---	---	<0.0002	---	< 0.00020	< 0.00020	<0.0002	<0.0002	---	---	---	0.0059	---	---	---	---
Dissolved Metals (mg/l):																		
Arsenic	0.1	(3)	---	---	0.02	---	< 0.010	< 0.010	0.0074	0.011	---	---	---	0.0034	---	---	---	---
Barium	1.0	(3)	---	---	3.8	---	1.4	1.1	1.1	1.3	---	---	---	0.035	---	---	---	---
Cadmium	0.01	(3)	---	---	<0.002	---	< 0.0020	< 0.0020	<0.002	<0.002	---	---	---	<0.002	---	---	---	---
Calcium	-	-	---	---	230	---	150	140	130	79	---	---	---	420	---	---	---	---
Chromium	0.05	(3)	---	---	0.007	---	< 0.0060	< 0.0060	<0.006	<0.006	---	---	---	<0.006	---	---	---	---
Copper	1.0	(3)	---	---	<0.006	---	< 0.010	0.014	<0.006	<0.006	---	---	---	<0.006	---	---	---	---
Iron	1.0	(3)	---	---	43	---	6.8	9.0	11	18	---	---	---	11	---	---	---	---
Lead	0.05	(3)	---	---	0.014	---	< 0.0010	< 0.0010	< 0.001	<0.005	---	---	---	<0.005	---	---	---	---
Magnesium	-	-	---	---	71	---	47	43	46	48	---	---	---	120	---	---	---	---
Manganese	0.2	(3)	---	---	5.6	---	3.6	1.5	1.4	1.2	---	---	---	6.2	---	---	---	---
Mercury	-	-	---	---	< 0.0002	---	< 0.00020	< 0.00020	< 0.0002	< 0.0002	---	---	---	---	---	---	---	---
Potassium	-	-	---	---	4.9	---	3.5	4.6	4.9	6.5	---	---	---	6.9	---	---	---	---
Selenium	0.05	(3)	---	---	0.013	---	0.020	0.026	0.015	0.024	---	---	---	0.013	---	---	---	---
Silver	0.05	(3)	---	---	<0.005	---	< 0.0050	< 0.0050	<0.005	<0.005	---	---	---	<0.005	---	---	---	---
Sodium	-	-	---	---	450	---	560	530	550	600	---	---	---	1000	---	---	---	---
Uranium	0.03	(3)	---	---	<0.001	---	< 0.0010	< 0.0010	<0.001	<0.001	---	---	---	<0.001	---	---	---	---
Zinc	10	(3)	---	---	0.14	---	0.013	< 0.010	0.076	0.052	---	---	---	0.063	---	---	---	---
Total Petroleum Hydrocarbons (mg/l):																		
Diesel Range Organics	0.2	(4)	---	---	14.0	---	4.7	3.5	2.1	1.8	---	---	---	470	---	---	---	---
Gasoline Range Organics	-	-	---	---	23	---	39	2.0	10	47	---	---	---	18	---	---	---	---
Motor Oil Range Organics	-	-	---	---	< 2.5	---	< 2.5	< 2.5	< 2.5	<2.5	---	---	---	<2.5	---	---	---	---

Notes:

- (1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water
(2) EPA - Regional Screening Levels (April 2009) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or less
(4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening levels
(5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013.
2014 Background Document for Development of Soil Screening Levels for analysis beginning in 2014.

-	= No screening level available
*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required and/or well contains separate phase
	= Analytical result exceeds the respective screening level.

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			RW-23				MW-29				MW-30						MW-31			
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-14	Aug-13	Aug-12	Aug-11
Volatile Organic Compounds (ug/L)																				
1,1,1,2-Tetrachloroethane	5.72E+00	(5)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1,1,1-Trichloroethane	6.00E+01	(3)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1,1,2,2-Tetrachloroethane	1.00E+01	(3)	---	---	---	---	< 2.0	< 2.0	< 2.0	< 2.0	< 200	---	< 200	---	< 200	---	< 100	< 100	< 100	< 100
1,1,2-Trichloroethane	5.00E+00	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1,1-Dichloroethane	2.50E+01	(3)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1,1-Dichloroethene	5.00E+00	(3)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1,1-Dichloropropene	-	-	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1,2,3-Trichlorobenzene	-	-	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1,2,3-Trichloropropane	7.47E-03	(5)	---	---	---	---	< 2.0	< 2.0	< 2.0	< 2.0	< 200	---	< 200	---	< 200	---	< 100	< 100	< 100	< 100
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1,2,4-Trimethylbenzene	1.50E+01	(1)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	3400	---	3600	---	3600	---	1200	1500	1800	1400
1,2-Dibromo-3-chloropropane	2.00E-01	(2)	---	---	---	---	< 2.0	< 2.0	< 2.0	< 2.0	< 200	---	< 200	---	< 200	---	< 100	< 100	< 100	< 100
1,2-Dibromoethane (EDB)	5.00E-02	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1,2-Dichloroethane (EDC)	5.00E+00	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1,2-Dichloropropane	5.00E+00	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1,3,5-Trimethylbenzene	1.20E+01	(1)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	840	---	760	---	840	---	100	98	270	230
1,3-Dichlorobenzene	-	-	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1,3-Dichloropropane	7.30E+02	(1)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
1-Methylnaphthalene	2.30E+00	(1)	---	---	---	---	< 4.0	< 4.0	< 4.0	< 4.0	< 400	---	< 400	---	< 400	---	< 200	< 200	< 200	< 200
2,2-Dichloropropane	-	-	---	---	---	---	< 2.0	< 2.0	< 2.0	< 2.0	< 200	---	< 200	---	< 200	---	< 100	< 100	< 100	< 100
2-Butanone	5.56E+03	(5)	---	---	---	---	< 10	< 10	< 10	< 10	< 1000	---	< 1000	---	< 1000	---	< 500	< 500	< 500	< 500
2-Chlorotoluene	7.30E+02	(1)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
2-Hexanone	-	-	---	---	---	---	< 10	< 10	< 10	< 10	< 1000	---	< 1000	---	< 1000	---	< 500	< 500	< 500	< 500
2-Methylnaphthalene	1.50E+02	(1)	---	---	---	---	< 4.0	< 4.0	< 4.0	< 4.0	< 400	---	< 400	---	< 400	---	< 200	< 200	< 200	270
4-Chlorotoluene	2.60E+03	(1)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
4-Isopropyltoluene	-	-	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
4-Methyl-2-pentanone	-	-	---	---	---	---	< 10	< 10	< 10	< 10	< 1000	---	< 1000	---	< 1000	---	< 500	< 500	< 500	< 500
Acetone	1.41E+04	(5)	---	---	---	---	< 10	< 10	< 10	< 10	< 1000	---	< 1000	---	< 1000	---	< 500	< 500	< 500	< 500
Benzene	5.00E+00	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	4600	---	4800	5700	5400	4700	1600	2500	4200	2900
Bromobenzene	2.00E+01	(1)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Bromodichloromethane	1.34E+00	(5)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Bromoform	8.50E+00	(1)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Bromomethane	7.54E+00	(5)	---	---	---	---	< 3.0	< 3.0	< 3.0	< 3.0	< 300	---	< 300	---	< 300	---	< 150	< 150	< 150	< 150
Carbon disulfide	8.10E+02	(5)	---	---	---	---	< 10	< 10	< 10	< 10	< 1000	---	< 1000	---	< 1000	---	< 500	< 500	< 500	< 500
Carbon Tetrachloride	5.00E+00	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Chlorobenzene	1.00E+02	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Chloroethane	-	-	---	---	---	---	< 2.0	< 2.0	< 2.0	< 2.0	< 200	---	< 200	---	< 200	---	< 100	< 100	< 100	< 100
Chloroform	1.00E+02	(3)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Chloromethane	2.03E+01	(5)	---	---	---	---	< 3.0	< 3.0	< 3.0	< 3.0	< 300	---	< 300	---	< 300	---	< 150	< 150	< 150	< 150
cis-1,2-DCE	7.00E+01	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
cis-1,3-Dichloropropene	-	-	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Dibromochloromethane	1.68E+00	(5)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Dibromomethane	3.70E+02	(1)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Dichlorodifluoromethane	1.97E+02	(5)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Ethylbenzene	7.00E+02	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	3900	---	3800	5400	4300	3700	770	960	1400	1200
Hexachlorobutadiene	8.60E-01	(1)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Isopropylbenzene	4.47E+02	(5)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	150	---	140	---	130	---	73	82	94	100

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			RW-23				MW-29				MW-30						MW-31			
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-14	Aug-13	Aug-12	Aug-11
Methyl tert-butyl ether (MTBE)	1.43E+02	(5)	---	---	---	---	< 1.0	< 1.0	< 1.0	1.2	< 100	---	< 100	< 100	< 100	<50	< 50	< 50	< 50	< 50
Methylene Chloride	5.00E+00	(2)	---	---	---	---	< 3.0	< 3.0	< 3.0	< 3.0	< 300	---	< 300	---	< 300	---	< 150	< 150	< 150	< 150
Naphthalene	1.65E+00	(5)	---	---	---	---	< 2.0	< 2.0	< 1.0	< 2.0	860	---	610	---	760	---	180	170	230	320
n-Butylbenzene	-	-	---	---	---	---	< 3.0	< 3.0	< 1.0	< 1.0	< 300	---	< 300	---	< 100	---	< 150	< 150	< 50	< 50
n-Propylbenzene	-	-	---	---	---	---	< 1.0	< 1.0	< 2.0	< 1.0	610	---	500	---	550	---	220	190	300	260
sec-Butylbenzene	-	-	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Styrene	1.00E+02	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
tert-Butylbenzene	-	-	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Tetrachloroethene (PCE)	5.00E+00	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Toluene	7.50E+02	(3)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	2200	---	6300	3500	8800	1600	130	210	2000	460
trans-1,2-DCE	1.00E+02	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
trans-1,3-Dichloropropene	4.30E-01	(1)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Trichloroethene (TCE)	5.00E+00	(2)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Trichlorofluoromethane	1.14E+03	(5)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Vinyl chloride	1.00E+00	(3)	---	---	---	---	< 1.0	< 1.0	< 1.0	< 1.0	< 100	---	< 100	---	< 100	---	< 50	< 50	< 50	< 50
Xylenes, Total	6.20E+02	(3)	---	---	---	---	< 1.5	< 1.5	< 1.5	< 1.5	14000	---	14000	18000	16000	9400	1400	2800	5100	4200
Semi Volatile Organic Compounds (ug/l):																				
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1-Methylnaphthalene	2.30E+00	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4,5-Trichlorophenol	1.17E+03	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4,6-Trichlorophenol	1.19E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dichlorophenol	4.53E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dimethylphenol	3.54E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dinitrophenol	3.88E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dinitrotoluene	2.37E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,6-Dinitrotoluene	3.70E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chloronaphthalene	2.90E+03	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chlorophenol	9.10E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	1.50E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylphenol	1.80E+03	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Nitroaniline	1.10E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Nitrophenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3,3'-Dichlorobenzidine	1.50E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4-Methylphenol	1.80E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3-Nitroaniline	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4,6-Dinitro-2-methylphenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Bromophenyl phenyl ether	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloro-3-methylphenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloroaniline	3.40E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chlorophenyl phenyl ether	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Nitroaniline	3.40E+00	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Nitrophenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	5.35E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthylene	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Aniline	1.20E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Anthracene	1.72E+03	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Azobenzene	1.20E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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			RW-23				MW-29				MW-30						MW-31			
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-14	Aug-13	Aug-12	Aug-11
Benzo(a)anthracene	3.43E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(a)pyrene	2.00E-01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(b)fluoranthene	3.43E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(g,h,i)perylene	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(k)fluoranthene	3.43E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzoic acid	1.50E+05	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzyl alcohol	1.80E+04	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroethoxy)methane	1.10E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroethyl)ether	1.36E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroisopropyl)ether	9.76E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-ethylhexyl)phthalate	6.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Butyl benzyl phthalate	3.50E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbazole	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	3.43E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenz(a,h)anthracene	1.06E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenzofuran	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Diethyl phthalate	1.48E+04	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dimethyl phthalate	5.56E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butyl phthalate	8.85E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-octyl phthalate	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	8.02E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluorene	2.88E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	1.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobutadiene	8.60E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorocyclopentadiene	5.00E+01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachloroethane	6.80E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	2.90E-02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Isophorone	7.79E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Naphthalene	1.65E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Nitrobenzene	1.40E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodimethylamine	4.90E-03	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodi-n-propylamine	9.60E-03	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodiphenylamine	1.21E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pentachlorophenol	1.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Phenanthrene	1.70E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Phenol	5.00E+00	(3)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pyrene	1.17E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pyridine	3.70E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
General Chemistry (mg/l):																				
Fluoride	1.6	(3)	---	---	---	---	0.27	0.26	0.32	<0.5	< 0.50	---	< 0.50	---	< 0.5	---	0.14	0.48	0.51	0.13
Chloride	250	(3)	---	---	---	---	48	110	44	79	270	---	230	---	230	---	300	360	380	540
Nitrite	1	(2)	---	---	---	---	0.34	< 0.10	< 0.10	*2.5	< 0.50	---	< 0.50	---	< 0.5	---	< 0.10	< 0.10	< 2.0	*<1.0
Bromide	-	-	---	---	---	---	< 0.10	0.64	0.28	<0.5	4.7	---	3.9	---	3.9	---	5.5	0.22	2.1	3.00
Nitrate	10	(3)	---	---	---	---	0.48	7.2	0.59	---	< 0.50	---	< 0.50	---	< 0.5	---	< 2.0	0.92	0.73	---
Phosphorus	-	-	---	---	---	---	< 0.50	< 0.50	< 0.50	<0.50	< 2.5	---	< 2.5	---	< 2.5	---	< 0.50	< 0.50	< 0.5	<0.50
Sulfate	600	(3)	---	---	---	---	210	290	160	210	47	---	24	---	23	---	5.4	4.6	88	9
Carbon Dioxide (CO ₂)	-	-	---	---	---	---	260	240	230	230	1200	---	1300	---	1400	---	1100	1100	1100	1000
Alkalinity (CaCO ₃)	-	-	---	---	---	---	280	260	250	260	1300	---	1400	---	1500	---	1200	1200	1200	1100
Bicarbonate (CaCO ₃)	-	-	---	---	---	---	280	260	250	260	1300	---	1400	---	1500	---	1200	1200	1200	1100

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				RW-23				MW-29				MW-30						MW-31			
				Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-14	Aug-13	Aug-12	Aug-11
Total Metals (mg/l):																					
Arsenic	0.01	(2)		---	---	---	---	< 0.020	< 0.020	< 0.020	<0.02	< 0.020	---	< 0.020	---	< 0.02	---	< 0.020	< 0.020	< 0.020	<0.02
Barium	1.0	(3)		---	---	---	---	0.026	0.14	0.070	0.034	0.66	---	0.73	---	1.1	---	0.69	0.90	1.1	0.8
Cadmium	0.005	(2)		---	---	---	---	< 0.0020	< 0.0020	< 0.0020	<0.002	< 0.0020	---	< 0.0020	---	< 0.002	---	< 0.0020	< 0.0020	<0.002	<0.002
Chromium	0.05	(3)		---	---	---	---	< 0.0060	< 0.0060	<0.006	<0.006	< 0.0060	---	0.0081	---	< 0.006	---	< 0.0060	< 0.0060	<0.006	<0.006
Lead	0.015	(2)		---	---	---	---	< 0.0050	0.0037	<0.005	<0.005	< 0.0050	---	0.031	---	< 0.005	---	< 0.0050	0.0013	<0.005	<0.005
Selenium	0.05	(2)		---	---	---	---	< 0.050	< 0.050	<0.05	<0.05	< 0.050	---	< 0.050	---	< 0.05	---	< 0.050	< 0.050	<0.05	<0.05
Silver	0.05	(3)		---	---	---	---	< 0.0050	< 0.025	<0.005	<0.005	< 0.0050	---	< 0.025	---	< 0.005	---	< 0.0050	< 0.025	<0.005	<0.005
Mercury	0.002	(3)		---	---	---	---	< 0.00020	< 0.00020	<0.0002	<0.0002	< 0.00020	---	< 0.00020	---	< 0.0002	---	< 0.00020	< 0.00020	<0.0002	<0.0002
Dissolved Metals (mg/l):																					
Arsenic	0.1	(3)		---	---	---	---	0.0013	< 0.0050	0.0013	0.0015	< 0.010	---	0.0067	---	0.0039	---	< 0.010	< 0.010	0.0042	0.0063
Barium	1.0	(3)		---	---	---	---	0.021	0.037	0.02	0.026	0.44	---	0.93	---	0.93	---	0.59	0.81	1.3	0.76
Cadmium	0.01	(3)		---	---	---	---	< 0.0020	< 0.0020	< 0.002	<0.002	< 0.0020	---	< 0.0020	---	< 0.002	---	< 0.0020	< 0.0020	< 0.002	<0.002
Calcium	-	-		---	---	---	---	83	130	69	82	200	---	140	---	150	---	98	100	140	110
Chromium	0.05	(3)		---	---	---	---	< 0.0060	< 0.0060	< 0.006	<0.006	< 0.0060	---	< 0.0060	---	< 0.006	---	< 0.0060	< 0.0060	<0.006	<0.006
Copper	1.0	(3)		---	---	---	---	0.0022	< 0.0050	<0.006	<0.006	< 0.010	---	0.018	---	< 0.006	---	< 0.010	0.016	<0.006	<0.006
Iron	1.0	(3)		---	---	---	---	< 0.020	< 0.020	<0.02	<0.02	0.35	---	3.3	---	2.7	---	0.079	0.2	0.19	0.14
Lead	0.05	(3)		---	---	---	---	< 0.0010	< 0.0010	< 0.001	<0.005	< 0.010	---	< 0.0010	---	< 0.001	---	< 0.010	< 0.0010	< 0.001	<0.005
Magnesium	-	-		---	---	---	---	19	30	16	20	41	---	42	---	48	---	36	42	53	53
Manganese	0.2	(3)		---	---	---	---	1.7	2.3	1.2	1.4	1.1	---	2.2	---	2.8	---	0.47	0.56	1.1	0.44
Mercury	-	-		---	---	---	---	< 0.00020	< 0.00020	---	---	< 0.00020	---	< 0.00020	---	---	---	< 0.00020	< 0.00020	---	---
Potassium	-	-		---	---	---	---	2.2	3.5	2.8	2.7	3.2	---	3.8	---	4.1	---	3.3	4.3	5.7	4.2
Selenium	0.05	(3)		---	---	---	---	0.0025	< 0.0050	0.0023	0.0026	0.014	---	0.016	---	0.0098	---	0.014	0.024	0.015	0.029
Silver	0.05	(3)		---	---	---	---	< 0.0050	< 0.0050	< 0.005	<0.005	< 0.0050	---	< 0.0050	---	< 0.005	---	< 0.0050	< 0.0050	<0.005	<0.005
Sodium	-	-		---	---	---	---	130	130	120	130	610	---	560	---	590	---	550	560	570	610
Uranium	0.03	(3)		---	---	---	---	0.0034	0.004	0.0022	0.0026	< 0.010	---	0.0021	---	0.0024	---	< 0.0010	< 0.0010	0.008	<0.001
Zinc	10	(3)		---	---	---	---	< 0.010	< 0.010	0.08	0.15	< 0.010	---	< 0.010	---	0.040	---	< 0.010	< 0.010	0.085	0.029
Total Petroleum Hydrocarbons (mg/l):																					
Diesel Range Organics	0.2	(4)		---	---	---	---	< 0.20	< 0.20	< 0.20	<0.20	9.4	---	9.9	---	4.4	---	4.0	3.8	1.8	1.1
Gasoline Range Organics	-	-		---	---	---	---	< 0.050	< 0.050	< 0.050	<0.05	73	---	83	---	77	---	15	20	26	25
Motor Oil Range Organics	-	-		---	---	---	---	< 2.5	< 2.5	< 2.5	<2.5	< 2.5	---	< 2.5	---	< 2.5	---	< 2.5	< 2.5	< 2.5	<2.5

Notes:
(1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water
(2) EPA - Regional Screening Levels (April 2009) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or less
(4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening levels
(5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013.
nd Document for Development of Soil Screening Levels for analysis beq

-	= No screening level available
*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required and/or well contains separate phase
	= Analytical result exceeds the respective screening level.

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			MW-40				RW-43				MW-44		
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-11
Volatile Organic Compounds (ug/L)													
1,1,1,2-Tetrachloroethane	5.72E+00	(5)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	6.00E+01	(3)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	1.00E+01	(3)	---	---	---	< 10	---	---	---	---	< 2.0	< 2.0	< 2.0
1,1,2-Trichloroethane	5.00E+00	(2)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	2.50E+01	(3)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	5.00E+00	(3)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	-	-	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	-	-	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane	7.47E-03	(5)	---	---	---	< 10	---	---	---	---	< 2.0	< 2.0	< 2.0
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	1.50E+01	(1)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	2.00E-01	(2)	---	---	---	< 10	---	---	---	---	< 2.0	< 2.0	< 2.0
1,2-Dibromoethane (EDB)	5.00E-02	(2)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane (EDC)	5.00E+00	(2)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	5.00E+00	(2)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	1.20E+01	(1)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	-	-	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	7.30E+02	(1)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
1-Methylnaphthalene	2.30E+00	(1)	---	---	---	71	---	---	---	---	< 4.0	< 4.0	< 4.0
2,2-Dichloropropane	-	-	---	---	---	< 10	---	---	---	---	< 2.0	< 2.0	< 2.0
2-Butanone	5.56E+03	(5)	---	---	---	< 50	---	---	---	---	< 10	< 10	< 10
2-Chlorotoluene	7.30E+02	(1)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
2-Hexanone	-	-	---	---	---	< 50	---	---	---	---	< 10	< 10	< 10
2-Methylnaphthalene	1.50E+02	(1)	---	---	---	130	---	---	---	---	< 4.0	< 4.0	< 4.0
4-Chlorotoluene	2.60E+03	(1)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
4-Isopropyltoluene	-	-	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
4-Methyl-2-pentanone	-	-	---	---	---	< 50	---	---	---	---	< 10	< 10	< 10
Acetone	1.41E+04	(5)	---	---	---	< 50	---	---	---	---	< 10	< 10	< 10
Benzene	5.00E+00	(2)	---	---	---	23	---	---	---	---	< 1.0	< 1.0	< 1.0
Bromobenzene	2.00E+01	(1)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Bromodichloromethane	1.34E+00	(5)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Bromoform	8.50E+00	(1)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Bromomethane	7.54E+00	(5)	---	---	---	< 15	---	---	---	---	< 3.0	< 3.0	< 3.0
Carbon disulfide	8.10E+02	(5)	---	---	---	< 50	---	---	---	---	< 10	< 10	< 10
Carbon Tetrachloride	5.00E+00	(2)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Chlorobenzene	1.00E+02	(2)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Chloroethane	-	-	---	---	---	< 10	---	---	---	---	< 2.0	< 2.0	< 2.0
Chloroform	1.00E+02	(3)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Chloromethane	2.03E+01	(5)	---	---	---	< 15	---	---	---	---	< 3.0	< 3.0	< 3.0
cis-1,2-DCE	7.00E+01	(2)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	-	-	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Dibromochloromethane	1.68E+00	(5)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Dibromomethane	3.70E+02	(1)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane	1.97E+02	(5)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Ethylbenzene	7.00E+02	(2)	---	---	---	5.3	---	---	---	---	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	8.60E-01	(1)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Isopropylbenzene	4.47E+02	(5)	---	---	---	98	---	---	---	---	< 1.0	< 1.0	< 1.0

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			MW-40				RW-43				MW-44		
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-11
Methyl tert-butyl ether (MTBE)	1.43E+02	(5)	---	---	---	< 5.0	---	---	---	---	1.0	1.2	1.3
Methylene Chloride	5.00E+00	(2)	---	---	---	< 15	---	---	---	---	< 3.0	< 3.0	< 3.0
Naphthalene	1.65E+00	(5)	---	---	---	140	---	---	---	---	< 2.0	< 2.0	< 2.0
n-Butylbenzene	-	-	---	---	---	< 5.0	---	---	---	---	< 3.0	< 3.0	< 1.0
n-Propylbenzene	-	-	---	---	---	99	---	---	---	---	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	-	-	---	---	---	10	---	---	---	---	< 1.0	< 1.0	< 1.0
Styrene	1.00E+02	(2)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	-	-	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Tetrachloroethene (PCE)	5.00E+00	(2)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Toluene	7.50E+02	(3)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
trans-1,2-DCE	1.00E+02	(2)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	4.30E-01	(1)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Trichloroethene (TCE)	5.00E+00	(2)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	1.14E+03	(5)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Vinyl chloride	1.00E+00	(3)	---	---	---	< 5.0	---	---	---	---	< 1.0	< 1.0	< 1.0
Xylenes, Total	6.20E+02	(3)	---	---	---	< 7.5	---	---	---	---	< 1.5	< 1.5	< 1.5
Semi Volatile Organic Compounds (ug/l):													
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	---	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	-	-	---	---	---	---	---	---	---	---	---	---	---
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	---	---	---	---	---	---	---	---	---
1-Methylnaphthalene	2.30E+00	(1)	---	---	---	---	---	---	---	---	---	---	---
2,4,5-Trichlorophenol	1.17E+03	(5)	---	---	---	---	---	---	---	---	---	---	---
2,4,6-Trichlorophenol	1.19E+01	(5)	---	---	---	---	---	---	---	---	---	---	---
2,4-Dichlorophenol	4.53E+01	(5)	---	---	---	---	---	---	---	---	---	---	---
2,4-Dimethylphenol	3.54E+02	(5)	---	---	---	---	---	---	---	---	---	---	---
2,4-Dinitrophenol	3.88E+01	(5)	---	---	---	---	---	---	---	---	---	---	---
2,4-Dinitrotoluene	2.37E+00	(5)	---	---	---	---	---	---	---	---	---	---	---
2,6-Dinitrotoluene	3.70E+01	(1)	---	---	---	---	---	---	---	---	---	---	---
2-Chloronaphthalene	2.90E+03	(1)	---	---	---	---	---	---	---	---	---	---	---
2-Chlorophenol	9.10E+01	(5)	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	1.50E+02	(1)	---	---	---	---	---	---	---	---	---	---	---
2-Methylphenol	1.80E+03	(1)	---	---	---	---	---	---	---	---	---	---	---
2-Nitroaniline	1.10E+02	(1)	---	---	---	---	---	---	---	---	---	---	---
2-Nitrophenol	-	-	---	---	---	---	---	---	---	---	---	---	---
3,3'-Dichlorobenzidine	1.50E-01	(1)	---	---	---	---	---	---	---	---	---	---	---
3+4-Methylphenol	1.80E+02	(1)	---	---	---	---	---	---	---	---	---	---	---
3-Nitroaniline	-	-	---	---	---	---	---	---	---	---	---	---	---
4,6-Dinitro-2-methylphenol	-	-	---	---	---	---	---	---	---	---	---	---	---
4-Bromophenyl phenyl ether	-	-	---	---	---	---	---	---	---	---	---	---	---
4-Chloro-3-methylphenol	-	-	---	---	---	---	---	---	---	---	---	---	---
4-Chloroaniline	3.40E-01	(1)	---	---	---	---	---	---	---	---	---	---	---
4-Chlorophenyl phenyl ether	-	-	---	---	---	---	---	---	---	---	---	---	---
4-Nitroaniline	3.40E+00	(1)	---	---	---	---	---	---	---	---	---	---	---
4-Nitrophenol	-	-	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	5.35E+02	(5)	---	---	---	---	---	---	---	---	---	---	---
Acenaphthylene	-	-	---	---	---	---	---	---	---	---	---	---	---
Aniline	1.20E+01	(1)	---	---	---	---	---	---	---	---	---	---	---
Anthracene	1.72E+03	(5)	---	---	---	---	---	---	---	---	---	---	---
Azobenzene	1.20E-01	(1)	---	---	---	---	---	---	---	---	---	---	---

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			MW-40				RW-43				MW-44		
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-11
Benzo(a)anthracene	3.43E-01	(5)	---	---	---	---	---	---	---	---	---	---	---
Benzo(a)pyrene	2.00E-01	(2)	---	---	---	---	---	---	---	---	---	---	---
Benzo(b)fluoranthene	3.43E-01	(5)	---	---	---	---	---	---	---	---	---	---	---
Benzo(g,h,i)perylene	-	-	---	---	---	---	---	---	---	---	---	---	---
Benzo(k)fluoranthene	3.43E+00	(5)	---	---	---	---	---	---	---	---	---	---	---
Benzoic acid	1.50E+05	(1)	---	---	---	---	---	---	---	---	---	---	---
Benzyl alcohol	1.80E+04	(1)	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroethoxy)methane	1.10E+02	(1)	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroethyl)ether	1.36E-01	(5)	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroisopropyl)ether	9.76E+00	(5)	---	---	---	---	---	---	---	---	---	---	---
Bis(2-ethylhexyl)phthalate	6.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---
Butyl benzyl phthalate	3.50E+01	(1)	---	---	---	---	---	---	---	---	---	---	---
Carbazole	-	-	---	---	---	---	---	---	---	---	---	---	---
Chrysene	3.43E+01	(5)	---	---	---	---	---	---	---	---	---	---	---
Dibenz(a,h)anthracene	1.06E-01	(5)	---	---	---	---	---	---	---	---	---	---	---
Dibenzofuran	-	-	---	---	---	---	---	---	---	---	---	---	---
Diethyl phthalate	1.48E+04	(5)	---	---	---	---	---	---	---	---	---	---	---
Dimethyl phthalate	5.56E+01	(5)	---	---	---	---	---	---	---	---	---	---	---
Di-n-butyl phthalate	8.85E+02	(5)	---	---	---	---	---	---	---	---	---	---	---
Di-n-octyl phthalate	-	-	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	8.02E+02	(5)	---	---	---	---	---	---	---	---	---	---	---
Fluorene	2.88E+02	(5)	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	1.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobutadiene	8.60E-01	(1)	---	---	---	---	---	---	---	---	---	---	---
Hexachlorocyclopentadiene	5.00E+01	(2)	---	---	---	---	---	---	---	---	---	---	---
Hexachloroethane	6.80E+00	(5)	---	---	---	---	---	---	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	2.90E-02	(1)	---	---	---	---	---	---	---	---	---	---	---
Isophorone	7.79E+02	(5)	---	---	---	---	---	---	---	---	---	---	---
Naphthalene	1.65E+00	(5)	---	---	---	---	---	---	---	---	---	---	---
Nitrobenzene	1.40E+00	(5)	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodimethylamine	4.90E-03	(5)	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodi-n-propylamine	9.60E-03	(1)	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodiphenylamine	1.21E+02	(5)	---	---	---	---	---	---	---	---	---	---	---
Pentachlorophenol	1.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---
Phenanthrene	1.70E+02	(5)	---	---	---	---	---	---	---	---	---	---	---
Phenol	5.00E+00	(3)	---	---	---	---	---	---	---	---	---	---	---
Pyrene	1.17E+02	(5)	---	---	---	---	---	---	---	---	---	---	---
Pyridine	3.70E+01	(1)	---	---	---	---	---	---	---	---	---	---	---
General Chemistry (mg/l):													
Fluoride	1.6	(3)	---	---	---	<0.50	---	---	---	---	0.26	0.35	0.25
Chloride	250	(3)	---	---	---	320	---	---	---	---	48	59	59
Nitrite	1	(2)	---	---	---	*16	---	---	---	---	< 0.10	< 0.10	*<1.0
Bromide	-	-	---	---	---	4.40	---	---	---	---	0.20	0.22	0.20
Nitrate	10	(3)	---	---	---	*16	---	---	---	---	< 0.10	0.23	---
Phosphorus	-	-	---	---	---	<2.5	---	---	---	---	< 10	< 10	<10
Sulfate	600	(3)	---	---	---	<2.5	---	---	---	---	3200	2800	3200
Carbon Dioxide (CO ₂)	-	-	---	---	---	1100	---	---	---	---	330	350	340
Alkalinity (CaCO ₃)	-	-	---	---	---	1200	---	---	---	---	360	380	360
Bicarbonate (CaCO ₃)	-	-	---	---	---	1200	---	---	---	---	360	380	360

TABLE 3
Refinery Wells Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

				MW-40				RW-43				MW-44		
				Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-11
Total Metals (mg/l):														
Arsenic	0.01	(2)		---	---	---	<0.02	---	---	---	---	< 0.020	< 0.020	<0.02
Barium	1.0	(3)		---	---	---	2	---	---	---	---	0.012	0.32	<0.02
Cadmium	0.005	(2)		---	---	---	<0.002	---	---	---	---	< 0.0020	< 0.0020	<0.002
Chromium	0.05	(3)		---	---	---	<0.006	---	---	---	---	< 0.0060	0.046	<0.006
Lead	0.015	(2)		---	---	---	<0.005	---	---	---	---	< 0.0050	0.023	<0.005
Selenium	0.05	(2)		---	---	---	<0.05	---	---	---	---	< 0.050	< 0.050	<0.05
Silver	0.05	(3)		---	---	---	<0.005	---	---	---	---	< 0.0050	< 0.025	<0.005
Mercury	0.002	(3)		---	---	---	<0.0002	---	---	---	---	< 0.00020	< 0.00020	<0.0002
Dissolved Metals (mg/l):														
Arsenic	0.1	(3)		---	---	---	0.0055	---	---	---	---	< 0.0010	< 0.020	<0.002
Barium	1.0	(3)		---	---	---	1.8	---	---	---	---	0.0094	0.014	0.014
Cadmium	0.01	(3)		---	---	---	<0.002	---	---	---	---	< 0.0020	< 0.0020	<0.002
Calcium	-	-		---	---	---	95	---	---	---	---	460	470	480
Chromium	0.05	(3)		---	---	---	<0.006	---	---	---	---	< 0.0060	< 0.0060	<0.006
Copper	1.0	(3)		---	---	---	<0.006	---	---	---	---	< 0.020	0.034	<0.006
Iron	1.0	(3)		---	---	---	5	---	---	---	---	< 0.020	0.37	<0.02
Lead	0.05	(3)		---	---	---	<0.005	---	---	---	---	< 0.0010	< 0.0010	<0.005
Magnesium	-	-		---	---	---	44	---	---	---	---	65	56	68
Manganese	0.2	(3)		---	---	---	2.3	---	---	---	---	0.47	0.82	0.0029
Mercury	-	-		---	---	---	---	---	---	---	---	< 0.00020	< 0.00020	---
Potassium	-	-		---	---	---	3.8	---	---	---	---	7.3	8.6	8.2
Selenium	0.05	(3)		---	---	---	0.014	---	---	---	---	0.0012	< 0.020	<0.002
Silver	0.05	(3)		---	---	---	<0.005	---	---	---	---	< 0.0050	< 0.0050	<0.005
Sodium	-	-		---	---	---	540	---	---	---	---	900	910	920
Uranium	0.03	(3)		---	---	---	<0.001	---	---	---	---	0.0013	0.0019	<0.002
Zinc	10	(3)		---	---	---	0.14	---	---	---	---	< 0.010	< 0.010	0.086
Total Petroleum Hydrocarbons (mg/l):														
Diesel Range Organics	0.2	(4)		---	---	---	9.7	---	---	---	---	< 0.20	0.26	<0.20
Gasoline Range Organics	-	-		---	---	---	8	---	---	---	---	< 0.050	< 0.050	<0.05
Motor Oil Range Organics	-	-		---	---	---	<2.5	---	---	---	---	< 2.5	< 2.5	<2.5

Notes:

- (1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water
(2) EPA - Regional Screening Levels (April 2009) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or
(4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening levels
(5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 201
nd Document for Development of Soil Screening Levels for analysis beg

-	= No screening level available
*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required and/or well contains separate phase
	= Analytical result exceeds the respective screening level.

TABLE 4
Cross-Gradient Wells Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

			MW-1								MW-13							
			Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11
Volatile Organic Compounds (ug/L)																		
1,1,1,2-Tetrachloroethane	5.72E+00	(5)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,1,1-Trichloroethane	6.00E+01	(3)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,1,2,2-Tetrachloroethane	1.00E+01	(3)	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---
1,1,2-Trichloroethane	5.00E+00	(2)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,1-Dichloroethane	2.50E+01	(3)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,1-Dichloroethene	5.00E+00	(3)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,1-Dichloropropene	-	-	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,2,3-Trichlorobenzene	-	-	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,2,3-Trichloropropane	7.47E-03	(5)	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---
1,2,4-Trichlorobenzene	7.00E+01	(2)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,2,4-Trimethylbenzene	1.50E+01	(1)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,2-Dibromo-3-chloropropane	2.00E-01	(2)	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---
1,2-Dibromoethane (EDB)	5.00E-02	(2)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,2-Dichlorobenzene	6.00E+02	(2)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,2-Dichloroethane (EDC)	5.00E+00	(2)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,2-Dichloropropane	5.00E+00	(2)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,3,5-Trimethylbenzene	1.20E+01	(1)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,3-Dichlorobenzene	-	-	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,3-Dichloropropane	7.30E+02	(1)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1,4-Dichlorobenzene	7.50E+01	(2)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
1-Methylnaphthalene	2.30E+00	(1)	< 4.0	---	< 4.0	---	< 4.0	---	< 4.0	---	< 4.0	---	< 4.0	---	< 4.0	---	< 4.0	---
2,2-Dichloropropane	-	-	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---
2-Butanone	5.56E+03	(5)	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---
2-Chlorotoluene	7.30E+02	(1)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
2-Hexanone	-	-	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---
2-Methylnaphthalene	1.50E+02	(1)	< 4.0	---	< 4.0	---	< 4.0	---	< 4.0	---	< 4.0	---	< 4.0	---	< 4.0	---	< 4.0	---
4-Chlorotoluene	2.60E+03	(1)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
4-Isopropyltoluene	-	-	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
4-Methyl-2-pentanone	-	-	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---
Acetone	1.41E+04	(5)	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---
Benzene	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	<1.0	< 1.0	<1.0	< 1.0	<1.0
Bromobenzene	2.00E+01	(1)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Bromodichloromethane	1.34E+00	(5)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Bromoform	8.50E+00	(1)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Bromomethane	7.54E+00	(5)	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---
Carbon disulfide	8.10E+02	(5)	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---	< 10	---
Carbon Tetrachloride	5.00E+00	(2)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Chlorobenzene	1.00E+02	(2)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Chloroethane	-	-	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0	---
Chloroform	1.00E+02	(3)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Chloromethane	2.03E+01	(5)	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---
cis-1,2-DCE	7.00E+01	(2)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
cis-1,3-Dichloropropene	-	-	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Dibromochloromethane	1.68E+00	(5)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Dibromomethane	3.70E+02	(1)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Dichlorodifluoromethane	1.97E+02	(5)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Ethylbenzene	7.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	<1.0	< 1.0	<1.0	< 1.0	<1.0	< 1.0	<1.0	< 1.0	<1.0
Hexachlorobutadiene	8.60E-01	(1)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Isopropylbenzene	4.47E+02	(5)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Methyl tert-butyl ether (MTBE)	1.43E+02	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	<1.0	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	<1.0	1.0	<1.0

TABLE 4
Cross-Gradient Wells Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

			MW-1								MW-13							
			Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11
Methylene Chloride	5.00E+00	(2)	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0	---
Naphthalene	1.65E+00	(5)	< 2.0	---	< 2.0	---	< 3.0	---	< 2.0	---	< 2.0	---	< 2.0	---	< 3.0	---	< 2.0	---
n-Butylbenzene	-	-	< 3.0	---	< 3.0	---	< 1.0	---	< 1.0	---	< 3.0	---	< 3.0	---	< 1.0	---	< 1.0	---
n-Propylbenzene	-	-	< 1.0	---	< 1.0	---	< 2.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 2.0	---	< 1.0	---
sec-Butylbenzene	-	-	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Styrene	1.00E+02	(2)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
tert-Butylbenzene	-	-	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Tetrachloroethene (PCE)	5.00E+00	(2)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Toluene	7.50E+02	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	<1.0	< 1.0	<1.0	< 1.0	<1.0	< 1.0	<1.0	< 1.0	<1.0
trans-1,2-DCE	1.00E+02	(2)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
trans-1,3-Dichloropropene	4.30E-01	(1)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Trichloroethene (TCE)	5.00E+00	(2)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Trichlorofluoromethane	1.14E+03	(5)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Vinyl chloride	1.00E+00	(3)	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0	---
Xylenes, Total	6.20E+02	(3)	< 1.5	< 1.5	< 1.5	< 2.0	< 1.5	< 2.0	< 1.5	< 2.0	< 1.5	<1.5	< 1.5	<2.0	< 1.5	<1.0	< 1.5	<2.0
Semi Volatile Organic Compounds (ug/l):																		
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1-Methylnaphthalene	2.30E+00	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4,5-Trichlorophenol	1.17E+03	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4,6-Trichlorophenol	1.19E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dichlorophenol	4.53E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dimethylphenol	3.54E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dinitrophenol	3.88E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,4-Dinitrotoluene	2.37E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,6-Dinitrotoluene	3.70E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chloronaphthalene	2.90E+03	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chlorophenol	9.10E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	1.50E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylphenol	1.80E+03	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Nitroaniline	1.10E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Nitrophenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3,3'-Dichlorobenzidine	1.50E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3+4-Methylphenol	1.80E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3-Nitroaniline	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4,6-Dinitro-2-methylphenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Bromophenyl phenyl ether	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloro-3-methylphenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloroaniline	3.40E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chlorophenyl phenyl ether	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Nitroaniline	3.40E+00	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Nitrophenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthene	5.35E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acenaphthylene	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Aniline	1.20E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Anthracene	1.72E+03	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Azobenzene	1.20E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(a)anthracene	3.43E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(a)pyrene	2.00E-01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4
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			MW-1								MW-13							
			Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11
Benzo(b)fluoranthene	3.43E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(g,h,i)perylene	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(k)fluoranthene	3.43E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzoic acid	1.50E+05	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzyl alcohol	1.80E+04	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroethoxy)methane	1.10E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroethyl)ether	1.36E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroisopropyl)ether	9.76E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-ethylhexyl)phthalate	6.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Butyl benzyl phthalate	3.50E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbazole	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	3.43E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenz(a,h)anthracene	1.06E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenzofuran	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Diethyl phthalate	1.48E+04	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dimethyl phthalate	5.56E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butyl phthalate	8.85E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-octyl phthalate	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	8.02E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluorene	2.88E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	1.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobutadiene	8.60E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorocyclopentadiene	5.00E+01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachloroethane	6.80E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	2.90E-02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Isophorone	7.79E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Naphthalene	1.65E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Nitrobenzene	1.40E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodimethylamine	4.90E-03	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodi-n-propylamine	9.60E-03	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodiphenylamine	1.21E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pentachlorophenol	1.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Phenanthrene	1.70E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Phenol	5.00E+00	(3)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pyrene	1.17E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pyridine	3.70E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
General Chemistry (mg/l):																		
Fluoride	1.6	(3)	0.49	---	0.56	---	0.48	---	0.54	---	< 0.10	---	< 0.10	---	< 0.10	---	0.15	---
Chloride	250	(3)	14	---	12	---	8.5	---	11	---	160	---	170	---	190	---	230	---
Nitrite	1	(2)	< 0.10	---	< 0.10	---	<0.10	---	<0.10	---	0.36	---	0.36	---	< 2.0	---	<2.0	---
Bromide	-	-	0.12	---	< 0.10	---	<0.10	---	0.10	---	2.7	---	1.8	---	1.7	---	2.70	---
Nitrate	10	(3)	0.43	---	1.0	---	0.49	---	0.99	---	2.9	---	3.6	---	4.0	---	5.80	---
Phosphorus	-	-	< 0.50	---	< 0.50	---	<0.50	---	<0.50	---	< 0.50	---	< 0.50	---	< 0.50	---	<0.50	---
Sulfate	600	(6)	110	---	99	---	76	---	110	---	1200	---	1200	---	1100	---	1100	---
Carbon Dioxide (CO ₂)	-	-	270	---	240	---	250	---	270	---	880	---	870	---	870	---	880	---
Alkalinity (CaCO ₃)	-	-	300	---	270	---	270	---	290	---	930	---	950	---	940	---	940	---
Bicarbonate (CaCO ₃)	-	-	300	---	270	---	270	---	290	---	930	---	950	---	940	---	940	---

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				MW-1								MW-13							
				Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11
Total Metals (mg/l):																			
Arsenic	0.01	(2)		< 0.020	---	< 0.020	---	<0.02	---	<0.02	---	< 0.020	---	< 0.020	---	< 0.001	---	<0.02	---
Barium	1	(3)		0.072	---	0.078	---	0.11	---	0.038	---	0.023	---	0.026	---	0.030	---	0.027	---
Cadmium	0.005	(2)		< 0.0020	---	< 0.0020	---	<0.002	---	<0.002	---	< 0.0020	---	< 0.0020	---	< 0.002	---	<0.002	---
Chromium	0.05	(3)		< 0.0060	---	< 0.0060	---	<0.006	---	<0.006	---	< 0.0060	---	0.026	---	0.01	---	<0.006	---
Lead	0.015	(2)		< 0.0050	---	< 0.0050	---	<0.005	---	<0.005	---	< 0.0050	---	< 0.0050	---	< 0.0050	---	<0.005	---
Selenium	0.05	(2)		< 0.050	---	< 0.050	---	<0.05	---	<0.05	---	< 0.050	---	< 0.050	---	< 0.050	---	<0.05	---
Silver	0.05	(3)		< 0.0050	---	< 0.0050	---	<0.005	---	<0.005	---	< 0.0050	---	< 0.0050	---	< 0.005	---	<0.005	---
Mercury	0.002	(3)		< 0.00020	---	< 0.00020	---	<0.0002	---	<0.0002	---	< 0.00020	---	< 0.00020	---	< 0.0002	---	<0.001	---
Dissolved Metals (mg/l):																			
Arsenic	0.1	(3)		0.0011	---	< 0.0010	---	<0.001	---	<0.001	---	< 0.020	---	0.0025	---	< 0.0021	---	0.0028	---
Barium	1	(3)		0.027	---	0.024	---	0.025	---	0.026	---	0.022	---	0.024	---	0.025	---	0.024	---
Cadmium	0.01	(3)		< 0.0020	---	< 0.0020	---	<0.002	---	<0.002	---	< 0.0020	---	< 0.0020	---	< 0.0020	---	<0.002	---
Calcium	-	-		71	---	70	---	71	---	77	---	280	---	300	---	290	---	300	---
Chromium	0.05	(3)		< 0.0060	---	< 0.0060	---	<0.006	---	<0.006	---	< 0.0060	---	< 0.0060	---	<0.0060	---	<0.006	---
Copper	1	(3)		< 0.0060	---	< 0.0050	---	<0.006	---	<0.006	---	< 0.0060	---	< 0.010	---	<0.006	---	<0.006	---
Iron	1	(3)		0.053	---	< 0.020	---	<0.020	---	0.023	---	< 0.020	---	< 0.020	---	< 0.02	---	<0.02	---
Lead	0.05	(3)		< 0.0010	---	< 0.0010	---	<0.001	---	<0.005	---	< 0.0010	---	< 0.0010	---	< 0.0010	---	0.005	---
Magnesium	-	-		16	---	16	---	17	---	19	---	83	---	94	---	89	---	88	---
Manganese	0.2	(3)		0.11	---	0.074	---	0.097	---	0.039	---	1.4	---	1.1	---	0.97	---	1.4	---
Mercury	-	-		< 0.00020	---	<0.00020	---	<0.00020	---	<0.00020	---	< 0.00020	---	<0.00020	---	<0.00020	---	<0.00020	---
Potassium	-	-		2.7	---	2.1	---	1.9	---	2.4	---	5.5	---	4.1	---		---	4.4	---
Selenium	0.05	(3)		0.0015	---	< 0.0010	---	<0.001	---	0.0014	---	0.023	---	0.01	---	< 0.010	---	0.012	---
Silver	0.05	(3)		< 0.0050	---	< 0.0050	---	<0.005	---	<0.005	---	< 0.0050	---	< 0.0050	---	< 0.005	---	<0.005	---
Sodium	-	-		81	---	67	---	62	---	78	---	600	---	600	---	610	---	600	---
Uranium	0.03	(3)		0.0027	---	0.0025	---	0.0026	---	0.0029	---	0.0081	---	0.0084	---	0.0087	---	0.01	---
Zinc	10	(3)		< 0.010	---	< 0.010	---	0.029	---	0.057	---	< 0.010	---	< 0.010	---	0.066	---	0.068	---
Total Petroleum Hydrocarbons (mg/l):																			
Diesel Range Organics	0.2	(4)		< 0.20	< 0.20	< 0.20	< 0.20	<0.20	<0.20	<0.20	<0.20	< 0.20	---	< 0.20	---	<0.20	<0.20	<0.20	---
Gasoline Range Organics	-	-		< 0.050	< 0.050	< 0.050	< 0.050	<0.05	<0.050	<0.05	<0.05	< 0.050	---	< 0.050	---	<0.05	<0.050	<0.05	---
Motor Oil Range Organics	-	-		< 2.5	< 2.5	< 2.5	< 2.5	<2.5	<2.5	<2.5	<2.5	< 2.5	---	< 2.5	---	<2.5	<2.5	<2.5	---

Notes:
(1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water
(2) EPA - Regional Screening Levels (April 2009) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or less
(4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening levels
(5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013.
"2014 Background Document for Development of Soil Screening Levels" for analysis beginning in 2014.

-	= No screening level available
*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required and/or well contains separate phase
	= Analytical result exceeds the respective screening level.

TABLE 4
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			MW-26				MW-27				MW-32				MW-33						
			Apr-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
Volatile Organic Compounds (ug/L)																					
1,1,1,2-Tetrachloroethane	5.72E+00	(5)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,1,1-Trichloroethane	6.00E+01	(3)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,1,2,2-Tetrachloroethane	1.00E+01	(3)	---	---	< 20	< 20	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	---	< 2.0	---	---	---	< 2.0
1,1,2-Trichloroethane	5.00E+00	(2)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,1-Dichloroethane	2.50E+01	(3)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,1-Dichloroethene	5.00E+00	(3)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,1-Dichloropropene	-	-	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,2,3-Trichlorobenzene	-	-	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,2,3-Trichloropropane	7.47E-03	(5)	---	---	< 20	< 20	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	---	< 2.0	---	---	---	< 2.0
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,2,4-Trimethylbenzene	1.50E+01	(1)	---	---	1100	830	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,2-Dibromo-3-chloropropane	2.00E-01	(2)	---	---	< 20	< 20	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	---	< 2.0	---	---	---	< 2.0
1,2-Dibromoethane (EDB)	5.00E-02	(2)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,2-Dichloroethane (EDC)	5.00E+00	(2)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,2-Dichloropropane	5.00E+00	(2)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,3,5-Trimethylbenzene	1.20E+01	(1)	---	---	280	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,3-Dichlorobenzene	-	-	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,3-Dichloropropane	7.30E+02	(1)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
1-Methylnaphthalene	2.30E+00	(1)	---	---	130	< 40	< 8.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	---	< 4.0	---	---	---	< 4.0
2,2-Dichloropropane	-	-	---	---	< 20	< 20	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	---	< 2.0	---	---	---	< 2.0
2-Butanone	5.56E+03	(5)	---	---	< 100	< 100	< 20	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	---	< 10	---	---	---	< 10
2-Chlorotoluene	7.30E+02	(1)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
2-Hexanone	-	-	---	---	< 100	< 100	< 20	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	---	< 10	---	---	---	< 10
2-Methylnaphthalene	1.50E+02	(1)	---	---	210	< 40	< 8.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	---	< 4.0	---	---	---	< 4.0
4-Chlorotoluene	2.60E+03	(1)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
4-Isopropyltoluene	-	-	---	---	33	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
4-Methyl-2-pentanone	-	-	---	---	< 100	< 100	< 20	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	---	< 10	---	---	---	< 10
Acetone	1.41E+04	(5)	---	---	< 100	< 100	< 20	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	---	< 10	---	---	---	< 10
Benzene	5.00E+00	(2)	---	---	29	26	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	<1.0	---	<1.0	< 1.0
Bromobenzene	2.00E+01	(1)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
Bromodichloromethane	1.34E+00	(5)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
Bromoform	8.50E+00	(1)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
Bromomethane	7.54E+00	(5)	---	---	< 30	< 30	< 6.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	---	< 3.0	---	---	---	< 3.0
Carbon disulfide	8.10E+02	(5)	---	---	< 100	< 100	< 20	< 10	< 10	< 10	< 1.0	< 10	< 10	< 10	< 10	---	< 10	---	---	---	< 10
Carbon Tetrachloride	5.00E+00	(2)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
Chlorobenzene	1.00E+02	(2)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
Chloroethane	-	-	---	---	< 20	< 20	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	---	< 2.0	---	---	---	< 2.0
Chloroform	1.00E+02	(3)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
Chloromethane	2.03E+01	(5)	---	---	< 30	< 30	< 6.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	---	< 3.0	---	---	---	< 3.0
cis-1,2-DCE	7.00E+01	(2)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
cis-1,3-Dichloropropene	-	-	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
Dibromochloromethane	1.68E+00	(5)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
Dibromomethane	3.70E+02	(1)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 31.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
Dichlorodifluoromethane	1.97E+02	(5)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
Ethylbenzene	7.00E+02	(2)	---	---	110	46	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	<1.0	---	<1.0	< 1.0
Hexachlorobutadiene	8.60E-01	(1)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
Isopropylbenzene	4.47E+02	(5)	---	---	68	93	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0
Methyl tert-butyl ether (MTBE)	1.43E+02	(5)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	<1.0	---	<1.0	< 1.0

TABLE 4
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			MW-26				MW-27				MW-32				MW-33						
			Apr-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
Methylene Chloride	5.00E+00	(2)	---	---	< 30	< 30	< 6.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	---	< 3.0	---	---	---	< 3.0	
Naphthalene	1.65E+00	(5)	---	---	290	110	< 4.0	< 2.0	< 3.0	< 2.0	< 2.0	< 3.0	< 2.0	< 2.0	---	< 2.0	---	---	---	< 2.0	
n-Butylbenzene	-	-	---	---	46	< 10	< 6.0	< 3.0	< 1.0	< 1.0	< 3.0	< 3.0	< 1.0	< 1.0	---	< 3.0	---	---	---	< 1.0	
n-Propylbenzene	-	-	---	---	110	110	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0	
sec-Butylbenzene	-	-	---	---	31	15	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0	
Styrene	1.00E+02	(2)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0	
tert-Butylbenzene	-	-	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0	
Tetrachloroethene (PCE)	5.00E+00	(2)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0	
Toluene	7.50E+02	(3)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	<1.0	---	<1.0	
trans-1,2-DCE	1.00E+02	(2)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0	
trans-1,3-Dichloropropene	4.30E-01	(1)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0	
Trichloroethene (TCE)	5.00E+00	(2)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0	
Trichlorofluoromethane	1.14E+03	(5)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0	
Vinyl chloride	1.00E+00	(3)	---	---	< 10	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	---	< 1.0	---	---	---	< 1.0	
Xylenes, Total	6.20E+02	(3)	---	---	1400	< 15	< 3.0	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	<1.5	< 1.5	<1.0	---	<2.0	
Semi Volatile Organic Compounds (ug/l):																					
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
1,3-Dichlorobenzene	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
1-Methylnaphthalene	2.30E+00	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2,4,5-Trichlorophenol	1.17E+03	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2,4,6-Trichlorophenol	1.19E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2,4-Dichlorophenol	4.53E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2,4-Dimethylphenol	3.54E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2,4-Dinitrophenol	3.88E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2,4-Dinitrotoluene	2.37E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2,6-Dinitrotoluene	3.70E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2-Chloronaphthalene	2.90E+03	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2-Chlorophenol	9.10E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2-Methylnaphthalene	1.50E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2-Methylphenol	1.80E+03	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2-Nitroaniline	1.10E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2-Nitrophenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
3,3´-Dichlorobenzidine	1.50E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
3+4-Methylphenol	1.80E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
3-Nitroaniline	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
4-Chloro-3-methylphenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
4-Chloroaniline	3.40E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
4-Nitroaniline	3.40E+00	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
4-Nitrophenol	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Acenaphthene	5.35E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Acenaphthylene	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Aniline	1.20E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Anthracene	1.72E+03	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Azobenzene	1.20E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Benzo(a)anthracene	3.43E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Benzo(a)pyrene	2.00E-01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	

TABLE 4
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			MW-26				MW-27				MW-32				MW-33						
			Apr-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
Benzo(b)fluoranthene	3.43E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(g,h,i)perylene	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzo(k)fluoranthene	3.43E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzoic acid	1.50E+05	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Benzyl alcohol	1.80E+04	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroethoxy)methane	1.10E+02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroethyl)ether	1.36E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-chloroisopropyl)ether	9.76E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-ethylhexyl)phthalate	6.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Butyl benzyl phthalate	3.50E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbazole	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chrysene	3.43E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenz(a,h)anthracene	1.06E-01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenzofuran	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Diethyl phthalate	1.48E+04	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dimethyl phthalate	5.56E+01	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-butyl phthalate	8.85E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-n-octyl phthalate	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	8.02E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluorene	2.88E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	1.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobutadiene	8.60E-01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorocyclopentadiene	5.00E+01	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachloroethane	6.80E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	2.90E-02	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Isophorone	7.79E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Naphthalene	1.65E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Nitrobenzene	1.40E+00	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodimethylamine	4.90E-03	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodi-n-propylamine	9.60E-03	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N-Nitrosodiphenylamine	1.21E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pentachlorophenol	1.00E+00	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Phenanthrene	1.70E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Phenol	5.00E+00	(3)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pyrene	1.17E+02	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pyridine	3.70E+01	(1)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
General Chemistry (mg/l):																					
Fluoride	1.6	(3)	---	---	< 1.0	<0.50	0.19	0.16	0.14	0.4	0.15	0.16	<0.10	0.22	0.10	---	< 0.10	---	---	---	0.3
Chloride	250	(3)	---	---	250	300	690	590	480	380	650	600	620	690	340	---	470	---	---	---	530
Nitrite	1	(2)	---	---	< 1.0	<0.50	< 2.0	< 2.0	< 2.0	<2.0	<0.10	< 2.0	<2.0	<2.0	< 0.10	---	< 2.0	---	---	---	<2.0
Bromide	-	-	---	---	4.1	4.30	6.2	5.6	4.3	3.10	4.9	4.5	4.10	4.60	1.7	---	2.2	---	---	---	2.40
Nitrate	10	(3)	---	---	< 1.0	<0.50	< 0.10	< 0.10	< 0.10	<0.1	39	41	43	48	24	---	19	---	---	---	0.29
Phosphorus	-	-	---	---	< 5.0	<2.5	< 10	< 10	< 10	<0.50	< 10	< 10	<10	<0.50	< 10	---	< 10	---	---	---	<0.50
Sulfate	600	(6)	---	---	< 5.0	<2.5	3100	3200	1800	1500	1600	1400	1500	1600	2100	---	2200	---	---	---	2100
Carbon Dioxide (CO ₂)	-	-	---	---	1100	1100	230	190	280	380	170	170	160	170	110	---	120	---	---	---	200
Alkalinity (CaCO ₃)	-	-	---	---	1200	1200	220	200	310	410	190	190	180	180	120	---	130	---	---	---	210
Bicarbonate (CaCO ₃)	-	-	---	---	1200	1200	220	200	310	410	190	190	180	180	120	---	130	---	---	---	210

TABLE 4
Cross-Gradient Wells Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

				MW-26				MW-27				MW-32				MW-33							
				Apr-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	
Total Metals (mg/l):																							
Arsenic	0.01	(2)	---	---	<0.02	<0.02	< 0.020	< 0.020	<0.02	<0.02	< 0.020	< 0.020	<0.020	<0.0002	< 0.020	---	< 0.020	---	---	---	<0.02		
Barium	1	(3)	---	---	2.4	2.3	0.058	0.072	0.091	0.088	0.034	0.023	0.029	0.031	0.016	---	0.023	---	---	---	0.023		
Cadmium	0.005	(2)	---	---	< 0.002	<0.002	< 0.020	< 0.0020	<0.002	<0.002	< 0.0020	< 0.0020	<0.002	<0.002	< 0.0020	---	< 0.0020	---	---	---	<0.002		
Chromium	0.05	(3)	---	---	< 0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	< 0.0060	---	< 0.0060	---	---	---	<0.006		
Lead	0.015	(2)	---	---	< 0.005	<0.005	<0.0050	< 0.0050	<0.005	<0.005	< 0.0050	< 0.0050	<0.005	<0.005	< 0.0050	---	< 0.0050	---	---	---	<0.005		
Selenium	0.05	(2)	---	---	< 0.05	<0.05	< 0.050	< 0.050	<0.05	<0.05	< 0.050	< 0.050	<0.05	<0.05	< 0.050	---	< 0.050	---	---	---	<0.05		
Silver	0.05	(3)	---	---	< 0.005	<0.005	<0.0050	< 0.0050	<0.005	<0.005	< 0.0050	< 0.0050	<0.005	<0.005	< 0.0050	---	< 0.0050	---	---	---	<0.005		
Mercury	0.002	(3)	---	---	< 0.0002	<0.0002	< 0.00020	< 0.00020	<0.0002	<0.0002	< 0.00020	< 0.00020	<0.0002	<0.0002	< 0.00020	---	< 0.00020	---	---	---	<0.0002		
Dissolved Metals (mg/l):																							
Arsenic	0.1	(3)	---	---	0.099	0.009	0.016	0.0038	0.0030	0.0025	< 0.020	0.0039	0.0034	0.0044	< 0.010	---	0.0026	---	---	---	0.0025		
Barium	1	(3)	---	---	2.3	2.3	0.053	0.057	0.045	0.046	0.017	0.02	0.020	0.019	0.015	---	0.019	---	---	---	0.02		
Cadmium	0.01	(3)	---	---	< 0.002	<0.002	< 0.0020	< 0.0020	<0.0020	<0.0020	< 0.0020	< 0.0020	<0.002	<0.002	< 0.0020	---	< 0.0020	---	---	---	<0.002		
Calcium	-	-	---	---	120	130	700	820	470	380	290	310	340	350	370	---	400	---	---	---	410		
Chromium	0.05	(3)	---	---	< 0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	< 0.0060	---	< 0.0060	---	---	---	<0.006		
Copper	1	(3)	---	---	<0.006	<0.006	< 0.0060	< 0.020	<0.006	<0.006	< 0.0060	< 0.010	<0.006	<0.006	< 0.0060	---	< 0.020	---	---	---	<0.006		
Iron	1	(3)	---	---	5.2	6	0.36	0.19	0.35	0.13	< 0.020	< 0.020	<0.020	<0.02	< 0.020	---	< 0.020	---	---	---	<0.02		
Lead	0.05	(3)	---	---	< 0.0010	<0.005	< 0.010	< 0.0010	<0.0050	<0.0050	< 0.0010	< 0.0010	<0.0010	<0.005	< 0.010	---	< 0.0010	---	---	---	<0.005		
Magnesium	-	-	---	---	43	45	110	110	68	54	44	45	47	50	55	---	58	---	---	---	55		
Manganese	0.2	(3)	---	---	2.6	2.7	0.80	1.3	0.95	3	< 0.0020	< 0.0020	<0.0020	<0.002	< 0.0020	---	< 0.0020	---	---	---	0.083		
Mercury	-	-	---	---	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.00020	< 0.00020	---	< 0.00020	---	---	---	<0.0002		
Potassium	-	-	---	---	4.1	3.9	3.3	0.015	3.4	2.6	5.9	3.6	4.4	4.4	7.0	---	5.2	---	---	---	1.9		
Selenium	0.05	(3)	---	---	<0.010	0.014	0.054	1.2	<0.020	0.0095	0.057	0.028	<0.050	0.031	0.049	---	0.05	---	---	---	0.024		
Silver	0.05	(3)	---	---	< 0.005	<0.005	< 0.0050	< 0.0050	<0.005	<0.005	< 0.0050	< 0.0050	<0.0050	<0.005	< 0.0050	---	< 0.0050	---	---	---	<0.005		
Sodium	-	-	---	---	480	500	910	900	630	530	800	700	790	790	770	---	680	---	---	---	780		
Uranium	0.03	(3)	---	---	< 0.001	<0.001	<0.010	0.0051	0.0021	0.0015	0.016	0.014	0.012	0.013	0.012	---	0.013	---	---	---	0.017		
Zinc	10	(3)	---	---	0.056	0.072	< 0.010	0.01	0.11	0.053	< 0.010	< 0.010	0.12	0.099	< 0.010	---	< 0.010	---	---	---	0.052		
Total Petroleum Hydrocarbons (mg/l):																							
Diesel Range Organics	0.2	(4)	---	---	1.7	1.3	0.34	< 0.20	< 0.20	0.45	< 0.20	< 0.20	<0.20	<0.20	< 0.20	<0.20	< 0.20	---	---	<0.20	<0.20		
Gasoline Range Organics	-	-	---	---	12	4.0	< 0.050	< 0.050	0.21	<0.05	< 0.050	< 0.050	<0.05	<0.05	< 0.050	< 0.050	< 0.050	---	---	<0.050	<0.05		
Motor Oil Range Organics	-	-	---	---	<2.5	<2.5	< 2.5	< 2.5	< 2.5	<2.5	< 2.5	< 2.5	<2.5	<2.5	< 2.5	< 2.5	< 2.5	---	---	<2.5	<2.5		

Notes:
(1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water
(2) EPA - Regional Screening Levels (April 2009) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or less
(4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening levels
(5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013. "2014 Background Document for Development of Soil Screening Levels" for analysis beginning in 2014.

-	= No screening level available
*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required and/or well contains separate phase
	= Analytical result exceeds the respective screening level.

TABLE 5
Downgradient Wells Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

			MW-11				MW-12						
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
Volatile Organic Compounds (ug/L)													
1,1,1,2-Tetrachloroethane	5.72E+00	(5)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,1,1-Trichloroethane	6.00E+01	(3)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,1,2,2-Tetrachloroethane	1.00E+01	(3)	< 10	< 10	< 10	<10	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0
1,1,2-Trichloroethane	5.00E+00	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,1-Dichloroethane	2.50E+01	(3)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,1-Dichloroethene	5.00E+00	(3)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,1-Dichloropropene	-	-	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,2,3-Trichlorobenzene	-	-	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,2,3-Trichloropropane	7.47E-03	(5)	< 10	< 10	< 10	<10	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0
1,2,4-Trichlorobenzene	7.00E+01	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,2,4-Trimethylbenzene	1.50E+01	(1)	230	270	350	0.43	< 1.0	---	< 1.0	---	< 1.0	---	<1.0
1,2-Dibromo-3-chloropropane	2.00E-01	(2)	< 10	< 10	< 10	<10	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0
1,2-Dibromoethane (EDB)	5.00E-02	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,2-Dichlorobenzene	6.00E+02	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,2-Dichloroethane (EDC)	5.00E+00	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,2-Dichloropropane	5.00E+00	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,3,5-Trimethylbenzene	1.20E+01	(1)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,3-Dichlorobenzene	-	-	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,3-Dichloropropane	7.30E+02	(1)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,4-Dichlorobenzene	7.50E+01	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
1-Methylnaphthalene	2.30E+00	(1)	< 20	< 20	< 20	<20	< 4.0	---	< 4.0	---	< 4.0	---	< 4.0
2,2-Dichloropropane	-	-	< 10	< 10	< 10	<10	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0
2-Butanone	5.56E+03	(5)	< 50	< 50	< 50	<50	< 10	---	< 10	---	< 10	---	< 10
2-Chlorotoluene	7.30E+02	(1)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
2-Hexanone	-	-	< 50	< 50	< 50	<50	< 10	---	< 10	---	< 10	---	< 10
2-Methylnaphthalene	1.50E+02	(1)	< 20	< 20	< 20	0.028	< 4.0	---	< 4.0	---	< 4.0	---	< 4.0
4-Chlorotoluene	2.60E+03	(1)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
4-Isopropyltoluene	-	-	< 5.0	5.1	< 5.0	0.0054	< 1.0	---	< 1.0	---	< 1.0	---	<1.0
4-Methyl-2-pentanone	-	-	< 50	< 50	< 50	<50	< 10	---	< 10	---	< 10	---	< 10
Acetone	1.41E+04	(5)	< 50	< 50	< 50	<50	< 10	---	< 10	---	< 10	---	< 10
Benzene	5.00E+00	(2)	< 5.0	< 5.0	< 5.0	56	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1	<1.0
Bromobenzene	2.00E+01	(1)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Bromodichloromethane	1.34E+00	(5)	< 5.0	< 5.0	< 5.0	0.0054	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Bromoform	8.50E+00	(1)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Bromomethane	7.54E+00	(5)	< 15	< 15	< 15	<5.0	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0
Carbon disulfide	8.10E+02	(5)	< 50	< 50	< 50	<50	< 10	---	< 10	---	< 10	---	< 10
Carbon Tetrachloride	5.00E+00	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Chlorobenzene	1.00E+02	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Chloroethane	-	-	< 10	< 10	< 10	<10	< 2.0	---	< 2.0	---	< 2.0	---	< 2.0
Chloroform	1.00E+02	(3)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Chloromethane	2.03E+01	(5)	< 15	< 15	< 15	<5.0	< 3.0	---	< 3.0	---	< 3.0	---	<1.0
cis-1,2-DCE	7.00E+01	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
cis-1,3-Dichloropropene	-	-	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Dibromochloromethane	1.68E+00	(5)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Dibromomethane	3.70E+02	(1)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Dichlorodifluoromethane	1.97E+02	(5)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Ethylbenzene	7.00E+02	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1	< 1.0
Hexachlorobutadiene	8.60E-01	(1)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Isopropylbenzene	4.47E+02	(5)	48	70	51	0.074	< 1.0	---	< 1.0	---	< 1.0	---	<1.0
Methyl tert-butyl ether (MTBE)	1.43E+02	(5)	< 5.0	6.2	8	0.012	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1	<1.0
Methylene Chloride	5.00E+00	(2)	< 15	< 15	< 15	<15	< 3.0	---	< 3.0	---	< 3.0	---	< 3.0
Naphthalene	1.65E+00	(5)	59	76	63	0.097	< 2.0	---	< 2.0	---	< 3.0	---	<2.0
n-Butylbenzene	-	-	< 15	< 15	< 15	<5.0	< 3.0	---	< 3.0	---	< 1.0	---	<1.0

TABLE 5
Downgradient Wells Analytical Summary
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			MW-11				MW-12						
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
n-Propylbenzene	-	-	62	68	56	0.075	< 1.0	---	< 1.0	---	< 2.0	---	<1.0
sec-Butylbenzene	-	-	12	12	9	0.012	< 1.0	---	< 1.0	---	< 1.0	---	<1.0
Styrene	1.00E+02	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
tert-Butylbenzene	-	-	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	<1.0
Tetrachloroethene (PCE)	5.00E+00	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Toluene	7.50E+02	(3)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1	< 1.0
trans-1,2-DCE	1.00E+02	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
trans-1,3-Dichloropropene	4.30E-01	(1)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Trichloroethene (TCE)	5.00E+00	(2)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Trichlorofluoromethane	1.14E+03	(5)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Vinyl chloride	1.00E+00	(3)	< 5.0	< 5.0	< 5.0	<5.0	< 1.0	---	< 1.0	---	< 1.0	---	< 1.0
Xylenes, Total	6.20E+02	(3)	< 7.5	< 7.5	< 7.5	<7.5	< 1.5	<1.5	< 1.5	<2.0	< 1.5	<2	< 1.5
Semi Volatile Organic Compounds (ug/l):													
1,2,4-Trichlorobenzene	7.00E+01	(2)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
1,2-Dichlorobenzene	6.00E+02	(2)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
1,3-Dichlorobenzene	-	-	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
1,4-Dichlorobenzene	7.50E+01	(2)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
1-Methylnaphthalene	2.30E+00	(1)	16	21	---	< 10	< 10	---	< 10	---	---	---	< 10
2,4,5-Trichlorophenol	1.17E+03	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
2,4,6-Trichlorophenol	1.19E+01	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
2,4-Dichlorophenol	4.53E+01	(5)	< 20	< 20	---	< 20	< 20	---	< 20	---	---	---	< 20
2,4-Dimethylphenol	3.54E+02	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
2,4-Dinitrophenol	3.88E+01	(5)	< 20	< 20	---	< 20	< 20	---	< 20	---	---	---	< 20
2,4-Dinitrotoluene	2.37E+00	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
2,6-Dinitrotoluene	3.70E+01	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
2-Chloronaphthalene	2.90E+03	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
2-Chlorophenol	9.10E+01	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
2-Methylnaphthalene	1.50E+02	(1)	< 10	14	---	< 10	< 10	---	< 10	---	---	---	< 10
2-Methylphenol	1.80E+03	(1)	< 20	< 10	---	< 10	< 20	---	< 10	---	---	---	< 10
2-Nitroaniline	1.10E+02	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
2-Nitrophenol	-	-	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
3,3'-Dichlorobenzidine	1.50E-01	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
3+4-Methylphenol	1.80E+02	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
3-Nitroaniline	-	-	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
4,6-Dinitro-2-methylphenol	-	-	< 20	< 20	---	< 20	< 20	---	< 20	---	---	---	< 20
4-Bromophenyl phenyl ether	-	-	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
4-Chloro-3-methylphenol	-	-	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
4-Chloroaniline	3.40E-01	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
4-Chlorophenyl phenyl ether	-	-	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
4-Nitroaniline	3.40E+00	(1)	< 10	< 10	---	< 20	< 10	---	< 10	---	---	---	< 20
4-Nitrophenol	-	-	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Acenaphthene	5.35E+02	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Acenaphthylene	-	-	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Aniline	1.20E+01	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Anthracene	1.72E+03	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Azobenzene	1.20E-01	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Benzo(a)anthracene	3.43E-01	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Benzo(a)pyrene	2.00E-01	(2)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Benzo(b)fluoranthene	3.43E-01	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Benzo(g,h,i)perylene	-	-	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Benzo(k)fluoranthene	3.43E+00	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Benzoic acid	1.50E+05	(1)	< 20	62	---	< 20	< 20	---	< 40	---	---	---	< 20
Benzyl alcohol	1.80E+04	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Bis(2-chloroethoxy)methane	1.10E+02	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10

TABLE 5
Downgradient Wells Analytical Summary
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			MW-11				MW-12						
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
Bis(2-chloroethyl)ether	1.36E-01	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Bis(2-chloroisopropyl)ether	9.76E+00	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Bis(2-ethylhexyl)phthalate	6.00E+00	(2)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Butyl benzyl phthalate	3.50E+01	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Carbazole	-	-	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Chrysene	3.43E+01	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Dibenz(a,h)anthracene	1.06E-01	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Dibenzofuran	-	-	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Diethyl phthalate	1.48E+04	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Dimethyl phthalate	5.56E+01	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Di-n-butyl phthalate	8.85E+02	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Di-n-octyl phthalate	-	-	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Fluoranthene	8.02E+02	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Fluorene	2.88E+02	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Hexachlorobenzene	1.00E+00	(2)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Hexachlorobutadiene	8.60E-01	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Hexachlorocyclopentadiene	5.00E+01	(2)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Hexachloroethane	6.80E+00	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Indeno(1,2,3-cd)pyrene	2.90E-02	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Isophorone	7.79E+02	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Naphthalene	1.65E+00	(5)	23	54	---	< 10	< 10	---	< 10	---	---	---	< 10
Nitrobenzene	1.40E+00	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
N-Nitrosodimethylamine	4.90E-03	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
N-Nitrosodi-n-propylamine	9.60E-03	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
N-Nitrosodiphenylamine	1.21E+02	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Pentachlorophenol	1.00E+00	(2)	< 20	< 20	---	< 40	< 20	---	< 20	---	---	---	< 40
Phenanthrene	1.70E+02	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Phenol	5.00E+00	(3)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Pyrene	1.17E+02	(5)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
Pyridine	3.70E+01	(1)	< 10	< 10	---	< 10	< 10	---	< 10	---	---	---	< 10
General Chemistry (mg/l):													
Fluoride	1.6	(3)	0.62	0.84	0.52	0.59	0.63	---	0.55	---	0.46	---	0.49
Chloride	250	(3)	96	300	370	340	4.0	---	4.0	---	53	---	4
Nitrite	1.0	(2)	< 0.50	< 0.50	< 0.50	<0.50	< 0.10	---	< 0.10	---	< 0.1	---	<0.10
Bromide	-	-	1.4	3.9	4.4	4.30	< 0.10	---	< 0.10	---	0.25	---	<0.10
Nitrate	10	(3)	< 0.50	< 0.50	< 0.5	<0.5	< 0.10	---	< 0.10	---	0.78	---	<0.10
Phosphorus	-	-	< 2.5	< 2.5	< 2.5	<2.5	< 0.50	---	< 0.50	---	< 0.5	---	<0.50
Sulfate	600	(6)	6.3	4.6	13	5.10	120	---	67	---	240	---	63
Carbon Dioxide (CO ₂)	-	-	1100	1100	1000	960	130	---	200	---	170	---	190
Alkalinity (CaCO ₃)	-	-	1000	1100	1100	1000	140	---	220	---	190	---	220
Bicarbonate (CaCO ₃)	-	-	1000	1100	1100	1000	140	---	220	---	190	---	220
Total Metals (mg/l):													
Arsenic	0.01	(2)	< 0.020	< 0.020	< 0.02	<0.02	< 0.020	---	< 0.020	---	<0.02	---	<0.02
Barium	1	(3)	0.74	1.1	0.84	0.98	0.19	---	0.071	---	0.090	---	0.064
Cadmium	0.005	(2)	< 0.0020	< 0.0020	< 0.002	<0.002	< 0.0020	---	< 0.0020	---	<0.002	---	<0.002
Chromium	0.05	(3)	< 0.0060	< 0.0060	< 0.006	<0.006	0.82	---	0.29	---	0.29	---	0.38
Lead	0.015	(2)	0.019	< 0.025	0.013	0.016	0.0096	---	< 0.025	---	0.024	---	0.018
Selenium	0.05	(2)	< 0.050	< 0.050	< 0.05	<0.05	< 0.050	---	< 0.050	---	<0.05	---	<0.05
Silver	0.05	(3)	< 0.0050	< 0.025	< 0.005	<0.005	< 0.0050	---	< 0.025	---	<0.005	---	<0.005
Mercury	0.002	(3)	< 0.00020	< 0.00020	< 0.0002	<0.0002	< 0.00020	---	< 0.00020	---	<0.0002	---	<0.0002

TABLE 5
Downgradient Wells Analytical Summary
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			MW-11				MW-12						
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
Dissolved Metals (mg/l):													
Arsenic	0.1	(3)	< 0.0050	0.02	0.015	0.0061	0.0012	---	< 0.0010	---	<0.001	---	<0.001
Barium	1	(3)	0.64	1.1	0.93	0.85	0.062	---	0.043	---	0.035	---	0.033
Cadmium	0.01	(3)	< 0.0020	< 0.0020	< 0.0020	<0.002	< 0.0020	---	< 0.0020	---	<0.002	---	<0.002
Calcium	-	-	73	130	140	140	66	---	59	---	50	---	50
Chromium	0.05	(3)	< 0.0060	< 0.0060	< 0.0060	<0.006	< 0.0060	---	0.021	---	0.0099	---	0.0064
Copper	1	(3)	< 0.0060	< 0.020	< 0.0060	<0.006	< 0.0060	---	< 0.020	---	<0.006	---	<0.006
Iron	1	(3)	8	11	9.3	12	0.046	---	0.54	---	0.069	---	0.095
Lead	0.05	(3)	0.0019	0.0042	0.0015	<0.005	< 0.0010	---	0.0018	---	< 0.001	---	<0.005
Magnesium	-	-	17	28	31	31	9.3	---	9.6	---	8.2	---	8.9
Manganese	0.2	(3)	1.2	2.3	2.2	2.2	0.25	---	0.039	---	0.016	---	0.031
Mercury	-	-	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.00020	---	< 0.00020	---	< 0.0002	---	< 0.0002
Potassium	-	-	2.4	2.4	2.4	2.0	1.1	---	< 1.0	---	< 1	---	<1.0
Selenium	0.05	(3)	0.0090	< 0.020	< 0.010	0.014	< 0.0010	---	< 0.020	---	< 0.001	---	0.0019
Silver	0.05	(3)	< 0.0050	< 0.025	< 0.005	<0.005	< 0.0050	---	< 0.025	---	< 0.005	---	<0.005
Sodium	-	-	380	440	480	460	40	---	55	---	47	---	62
Uranium	0.03	(3)	< 0.0010	---	0.0017	<0.001	< 0.0010	---	---	---	< 0.001	---	0.0016
Zinc	10	(3)	< 0.010	< 0.010	0.16	0.072	< 0.010	---	< 0.010	---	0.066	---	0.082
Total Petroleum Hydrocarbons (mg/l):													
Diesel Range Organics	0.2	(4)	1.6	2.5	1.1	0.83	< 0.20	< 0.20	< 0.20	< 0.20	<0.20	<0.2	<0.20
Gasoline Range Organics	-	-	2.3	2.1	0.82	1.7	< 0.050	< 0.050	< 0.050	< 0.050	<0.05	<0.05	<0.05
Motor Oil Range Organics	-	-	< 2.5	< 2.5	< 2.5	<2.5	< 2.5	< 2.5	< 2.5	< 2.5	<2.5	<2.5	<2.5

Notes:

- (1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels Tap Water.
- (2) EPA - Regional Screening Levels (April 2009) - MCL
- (3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration
- (4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening
- (5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 20

-	= No screening level available
*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required and/or well contains separate phase
	= Analytical result exceeds the respective screening level.

TABLE 5
Downgradient Wells Analytical Summary
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				MW-34							MW-35						
			Apr-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-09	Aug-08	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
Volatile Organic Compounds (ug/L)																	
1,1,1,2-Tetrachloroethane	5.72E+00	(5)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,1,1-Trichloroethane	6.00E+01	(3)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,1,2,2-Tetrachloroethane	1.00E+01	(3)	---	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	< 2.0	---	< 2.0	---	< 2.0	---	< 20
1,1,2-Trichloroethane	5.00E+00	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,1-Dichloroethane	2.50E+01	(3)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,1-Dichloroethene	5.00E+00	(3)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,1-Dichloropropene	-	-	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,2,3-Trichlorobenzene	-	-	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,2,3-Trichloropropane	7.47E-03	(5)	---	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<1.0	<1.0	< 2.0	---	< 2.0	---	< 2.0	---	< 20
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,2,4-Trimethylbenzene	1.50E+01	(1)	---	51	< 1.0	6.1	65	44	180	210	51	---	3.0	---	48	---	37
1,2-Dibromo-3-chloropropane	2.00E-01	(2)	---	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	< 2.0	---	< 2.0	---	< 2.0	---	< 20
1,2-Dibromoethane (EDB)	5.00E-02	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,2-Dichlorobenzene	6.00E+02	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,2-Dichloroethane (EDC)	5.00E+00	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,2-Dichloropropane	5.00E+00	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,3,5-Trimethylbenzene	1.20E+01	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,3-Dichlorobenzene	-	-	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,3-Dichloropropane	7.30E+02	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1,4-Dichlorobenzene	7.50E+01	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
1-Methylnaphthalene	2.30E+00	(1)	---	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	4.6	4.7	< 4.0	---	< 4.0	---	< 4.0	---	< 40
2,2-Dichloropropane	-	-	---	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	< 2.0	---	< 2.0	---	< 2.0	---	< 20
2-Butanone	5.56E+03	(5)	---	< 10	< 10	< 10	< 10	< 10	<10.0	<10.0	< 10	---	< 10	---	< 10	---	< 100
2-Chlorotoluene	7.30E+02	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
2-Hexanone	-	-	---	< 10	< 10	< 10	< 10	< 10	<1.0	<1.0	< 10	---	< 10	---	< 10	---	< 100
2-Methylnaphthalene	1.50E+02	(1)	---	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	<4.0	<4.0	< 4.0	---	< 4.0	---	< 4.0	---	< 40
4-Chlorotoluene	2.60E+03	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
4-Isopropyltoluene	-	-	---	3.1	< 1.0	< 1.0	2.9	1.7	4.5	5.2	2.3	---	< 1.0	---	1.8	---	< 10
4-Methyl-2-pentanone	-	-	---	< 10	< 10	< 10	< 10	< 10	<10.0	<10.0	< 10	---	< 10	---	< 10	---	< 100
Acetone	1.41E+04	(5)	---	< 10	< 10	< 10	< 10	< 10	<10.0	<10.0	< 10	---	< 10	---	10	---	< 100
Benzene	5.00E+00	(2)	---	< 1.0	< 1.0	< 1.0	20	< 1.0	32	3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<10	< 10
Bromobenzene	2.00E+01	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Bromodichloromethane	1.34E+00	(5)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Bromoform	8.50E+00	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Bromomethane	7.54E+00	(5)	---	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	<1.0	<1.0	< 3.0	---	< 3.0	---	< 3.0	---	< 30
Carbon disulfide	8.10E+02	(5)	---	< 10	< 10	< 10	< 10	< 10	<10.0	<10.0	< 10	---	< 10	---	< 10	---	< 100
Carbon Tetrachloride	5.00E+00	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Chlorobenzene	1.00E+02	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Chloroethane	-	-	---	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	< 2.0	---	< 2.0	---	< 2.0	---	< 20
Chloroform	1.00E+02	(3)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Chloromethane	2.03E+01	(5)	---	< 3.0	< 3.0	< 3.0	< 3.0	< 2.0	<1.0	<1.0	< 3.0	---	< 3.0	---	< 3.0	---	< 30
cis-1,2-DCE	7.00E+01	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
cis-1,3-Dichloropropene	-	-	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Dibromochloromethane	1.68E+00	(5)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Dibromomethane	3.70E+02	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Dichlorodifluoromethane	1.97E+02	(5)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Ethylbenzene	7.00E+02	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<10	< 10
Hexachlorobutadiene	8.60E-01	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Isopropylbenzene	4.47E+02	(5)	---	13	2.5	7.6	20	19	23	25	5.9	---	2.2	---	2.2	---	< 10
Methyl tert-butyl ether (MTBE)	1.43E+02	(5)	---	< 1.0	1.3	2.3	3.1	2.1	4.1	2.6	< 1.0	1.2	1.4	1	1.5	<10	< 10
Methylene Chloride	5.00E+00	(2)	---	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	<3.0	<3.0	< 3.0	---	< 3.0	---	< 3.0	---	< 30
Naphthalene	1.65E+00	(5)	---	4.2	< 2.0	< 2.0	6.2	5	9.8	9.4	< 2.0	---	< 2.0	---	2.6	---	< 20
n-Butylbenzene	-	-	---	< 3.0	< 3.0	< 3.0	1.4	<1.0	<1.0	<1.0	< 3.0	---	< 3.0	---	< 3.0	---	< 10

TABLE 5
Downgradient Wells Analytical Summary
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				MW-34							MW-35						
			Apr-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-09	Aug-08	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
n-Propylbenzene	-	-	---	<10	1.4	7.2	15	11	17	20	5.8	---	1.4	---	1.4	---	< 10
sec-Butylbenzene	-	-	---	6.7	1.6	4.7	7.2	6.5	8.5	9.7	3.7	---	1.5	---	1.2	---	< 10
Styrene	1.00E+02	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
tert-Butylbenzene	-	-	---	2.5	2.0	1.9	2.3	2.1	2.4	2.4	2.2	---	2.4	---	1.4	---	< 10
Tetrachloroethene (PCE)	5.00E+00	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Toluene	7.50E+02	(3)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<10	< 10
trans-1,2-DCE	1.00E+02	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
trans-1,3-Dichloropropene	4.30E-01	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Trichloroethene (TCE)	5.00E+00	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Trichlorofluoromethane	1.14E+03	(5)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Vinyl chloride	1.00E+00	(3)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	---	< 1.0	---	< 1.0	---	< 10
Xylenes, Total	6.20E+02	(3)	---	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	<1.5	1.7	< 1.5	<1.5	< 1.5	<2.0	< 1.5	<20	< 15
Semi Volatile Organic Compounds (ug/l):																	
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
1,3-Dichlorobenzene	-	-	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
1-Methylnaphthalene	2.30E+00	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
2,4,5-Trichlorophenol	1.17E+03	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
2,4,6-Trichlorophenol	1.19E+01	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
2,4-Dichlorophenol	4.53E+01	(5)	---	---	---	---	---	---	<20	<20	---	---	---	---	---	---	---
2,4-Dimethylphenol	3.54E+02	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
2,4-Dinitrophenol	3.88E+01	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
2,4-Dinitrotoluene	2.37E+00	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
2,6-Dinitrotoluene	3.70E+01	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
2-Chloronaphthalene	2.90E+03	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
2-Chlorophenol	9.10E+01	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
2-Methylnaphthalene	1.50E+02	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
2-Methylphenol	1.80E+03	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
2-Nitroaniline	1.10E+02	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
2-Nitrophenol	-	-	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
3,3'-Dichlorobenzidine	1.50E-01	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
3+4-Methylphenol	1.80E+02	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
3-Nitroaniline	-	-	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
4,6-Dinitro-2-methylphenol	-	-	---	---	---	---	---	---	<20	<20	---	---	---	---	---	---	---
4-Bromophenyl phenyl ether	-	-	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
4-Chloro-3-methylphenol	-	-	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
4-Chloroaniline	3.40E-01	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
4-Chlorophenyl phenyl ether	-	-	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
4-Nitroaniline	3.40E+00	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
4-Nitrophenol	-	-	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Acenaphthene	5.35E+02	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Acenaphthylene	-	-	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Aniline	1.20E+01	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Anthracene	1.72E+03	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Azobenzene	1.20E-01	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Benzo(a)anthracene	3.43E-01	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Benzo(a)pyrene	2.00E-01	(2)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Benzo(b)fluoranthene	3.43E-01	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Benzo(g,h,i)perylene	-	-	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Benzo(k)fluoranthene	3.43E+00	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Benzoic acid	1.50E+05	(1)	---	---	---	---	---	---	<20	<20	---	---	---	---	---	---	---
Benzyl alcohol	1.80E+04	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Bis(2-chloroethoxy)methane	1.10E+02	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---

TABLE 5
Downgradient Wells Analytical Summary
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				MW-34							MW-35						
			Apr-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-09	Aug-08	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
Bis(2-chloroethyl)ether	1.36E-01	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Bis(2-chloroisopropyl)ether	9.76E+00	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Bis(2-ethylhexyl)phthalate	6.00E+00	(2)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Butyl benzyl phthalate	3.50E+01	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Carbazole	-	-	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Chrysene	3.43E+01	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Dibenz(a,h)anthracene	1.06E-01	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Dibenzofuran	-	-	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Diethyl phthalate	1.48E+04	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Dimethyl phthalate	5.56E+01	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Di-n-butyl phthalate	8.85E+02	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Di-n-octyl phthalate	-	-	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Fluoranthene	8.02E+02	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Fluorene	2.88E+02	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Hexachlorobenzene	1.00E+00	(2)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Hexachlorobutadiene	8.60E-01	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Hexachlorocyclopentadiene	5.00E+01	(2)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Hexachloroethane	6.80E+00	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	2.90E-02	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Isophorone	7.79E+02	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Naphthalene	1.65E+00	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Nitrobenzene	1.40E+00	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
N-Nitrosodimethylamine	4.90E-03	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
N-Nitrosodi-n-propylamine	9.60E-03	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
N-Nitrosodiphenylamine	1.21E+02	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Pentachlorophenol	1.00E+00	(2)	---	---	---	---	---	---	<40	<40	---	---	---	---	---	---	---
Phenanthrene	1.70E+02	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Phenol	5.00E+00	(3)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Pyrene	1.17E+02	(5)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
Pyridine	3.70E+01	(1)	---	---	---	---	---	---	<10	<10	---	---	---	---	---	---	---
General Chemistry (mg/l):																	
Fluoride	1.6	(3)	---	0.70	1.1	0.92	0.84	0.65	0.61	0.83	0.76	---	1.1	---	0.77	---	0.61
Chloride	250	(3)	---	180	230	270	240	200	180	110	130	---	260	---	240	---	180
Nitrite	1.0	(2)	---	< 0.50	< 0.50	< 0.50	<0.50	<2.0	<2.0	<0.10	< 0.50	---	< 0.50	---	< 0.5	---	<0.50
Bromide	-	-	---	2.3	2.9	2.9	2.80	2.10	2.20	1.30	1.7	---	3.3	---	3.0	---	2.10
Nitrate	10	(3)	---	< 0.50	< 0.50	< 0.50	<0.50	1.20	<0.10	<0.10	< 0.50	---	< 0.50	---	< 0.5	---	<0.50
Phosphorus	-	-	---	< 2.5	< 2.5	< 2.5	<2.5	<0.50	<0.50	<0.50	< 2.5	---	< 2.5	---	< 2.5	---	<2.5
Sulfate	600	(6)	---	14	9.1	83	22	320	18	9.90	9.4	---	< 2.5	---	11	---	3.50
Carbon Dioxide (CO ₂)	-	-	---	870	950	980	840	760	850	740	900	---	950	---	850	---	760
Alkalinity (CaCO ₃)	-	-	---	900	1000	1000	910	760	880	750	950	---	1000	---	900	---	820
Bicarbonate (CaCO ₃)	-	-	---	900	1000	1000	910	760	880	750	950	---	1000	---	900	---	820
Total Metals (mg/l):																	
Arsenic	0.01	(2)	---	< 0.020	< 0.020	< 0.02	<0.02	<0.02	<0.02	<0.02	< 0.020	---	< 0.020	---	0.57	---	<0.02
Barium	1	(3)	---	0.39	0.79	1.10	0.76	0.38	0.71	0.57	0.75	---	1.1	---	1.9	---	0.92
Cadmium	0.005	(2)	---	< 0.0020	< 0.0020	< 0.002	<0.002	<0.002	<0.002	<0.002	< 0.0020	---	< 0.0020	---	<0.002	---	<0.002
Chromium	0.05	(3)	---	< 0.0060	< 0.0060	< 0.006	<0.006	<0.006	<0.006	<0.006	< 0.0060	---	< 0.0060	---	<0.006	---	<0.006
Lead	0.015	(2)	---	0.0076	< 0.025	< 0.005	<0.005	<0.005	0.0073	<0.005	0.0054	---	< 0.025	---	0.0072	---	0.008
Selenium	0.05	(2)	---	< 0.050	< 0.050	< 0.05	<0.05	<0.05	<0.050	<0.25	< 0.050	---	< 0.050	---	<0.05	---	<0.05
Silver	0.05	(3)	---	< 0.0050	< 0.025	< 0.005	<0.005	<0.005	<0.005	<0.005	< 0.0050	---	< 0.025	---	<0.005	---	<0.005
Mercury	0.002	(3)	---	< 0.00020	< 0.00020	< 0.0002	<0.0002	<0.0002	<0.0002	<0.0002	< 0.00020	---	< 0.00020	---	<0.0002	---	<0.0002

TABLE 5
Downgradient Wells Analytical Summary
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				MW-34								MW-35					
Apr-11				Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-09	Aug-08	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
Dissolved Metals (mg/l):																	
Arsenic	0.1	(3)	---	< 0.010	0.0049	0.01	0.0041	<0.02	<0.02	<0.02	0.013	---	0.0096	---	0.043	---	0.0063
Barium	1	(3)	---	0.5	0.81	1.2	0.71	0.52	0.65	0.57	0.67	---	0.93	---	1.7	---	0.84
Cadmium	0.01	(3)	---	< 0.0020	< 0.0020	< 0.0020	<0.002	<0.002	<0.002	<0.002	< 0.0020	---	< 0.0020	---	<0.002	---	<0.002
Calcium	-	-	---	110	130	140	120	78	99	---	83	---	140	---	130	---	110
Chromium	0.05	(3)	---	< 0.0060	< 0.0060	< 0.0060	<0.006	<0.006	<0.006	<0.006	< 0.0060	---	< 0.0060	---	<0.006	---	<0.006
Copper	1	(3)	---	< 0.0060	< 0.020	< 0.0060	<0.006	<0.006	<0.006	<0.006	< 0.0060	---	< 0.020	---	<0.006	---	<0.006
Iron	1	(3)	---	1.5	3.2	6	4	3.1	3.6	4.1	3.5	---	4.4	---	3.6	---	4.1
Lead	0.05	(3)	---	< 0.0010	< 0.0010	< 0.0010	<0.005	<0.005	<0.005	<0.005	< 0.0010	---	< 0.0010	---	< 0.001	---	<0.005
Magnesium	-	-	---	21	23	26	23	15	19	---	16	---	25	---	23	---	19
Manganese	0.2	(3)	---	2.9	4.2	5.6	4.4	3.2	3.6	3.1	2.1	---	3.1	---	3.10	---	2.5
Mercury	-	-	---	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00020	---	< 0.00020	---	< 0.0002	---	< 0.0002
Potassium	-	-	---	2.8	1.8	1.9	1.5	1.2	1.3	---	3.5	---	3.2	---	3.6	---	2.8
Selenium	0.05	(3)	---	< 0.010	< 0.020	< 0.010	0.0088	<0.05	<0.05	<0.25	0.015	---	< 0.020	---	< 0.01	---	0.0069
Silver	0.05	(3)	---	< 0.0050	< 0.025	< 0.0050	<0.005	<0.005	<0.005	<0.005	< 0.0050	---	< 0.025	---	<0.005	---	<0.005
Sodium	-	-	---	420	410	430	390	320	350	---	380	---	390	---	390	---	340
Uranium	0.03	(3)	---	< 0.0010	---	0.0011	<0.001	<0.001	<0.001	<0.001	< 0.0010	---	---	---	0.01	---	<0.001
Zinc	10	(3)	---	< 0.010	< 0.010	0.074	0.045	<0.05	<0.05	<0.05	< 0.010	---	< 0.010	---	0.068	---	0.03
Total Petroleum Hydrocarbons (mg/l):																	
Diesel Range Organics	0.2	(4)	<0.20	2.2	1.8	0.91	1.2	1.0	9.5	3.9	1.5	---	2.4	---	0.44	---	0.89
Gasoline Range Organics	-	-	<0.050	2.0	1.1	0.71	0.87	0.7	0.74	1.4	1.0	---	0.85	---	0.35	---	0.97
Motor Oil Range Organics	-	-	<2.5	< 2.5	< 2.5	< 2.5	<2.5	<2.5	<5.0	<5.0	< 2.5	---	< 2.5	---	<2.5	---	<2.5

Notes:

- (1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water
(2) EPA - Regional Screening Levels (April 2009) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS
(4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific
(5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013.

113.

-	= No screening level available
*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required and/or well contains separate phase
	= Analytical result exceeds the respective screening level.

TABLE 5
Downgradient Wells Analytical Summary
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				MW-37								MW-38						
Apr-11				Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
Volatile Organic Compounds (ug/L)																		
1,1,1,2-Tetrachloroethane	5.72E+00	(5)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,1,1-Trichloroethane	6.00E+01	(3)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,1,2,2-Tetrachloroethane	1.00E+01	(3)	---	< 2.0	---	< 2.0	---	< 4.0	---	< 20	---	<2.0	---	< 2.0	---	< 2.0	---	< 2.0
1,1,2-Trichloroethane	5.00E+00	(2)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,1-Dichloroethane	2.50E+01	(3)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,1-Dichloroethene	5.00E+00	(3)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,1-Dichloropropene	-	-	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,2,3-Trichlorobenzene	-	-	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,2,3-Trichloropropane	7.47E-03	(5)	---	< 2.0	---	< 2.0	---	< 4.0	---	< 20	---	<2.0	---	< 2.0	---	< 2.0	---	< 2.0
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,2,4-Trimethylbenzene	1.50E+01	(1)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	<1.0
1,2-Dibromo-3-chloropropane	2.00E-01	(2)	---	< 2.0	---	< 2.0	---	< 4.0	---	< 20	---	<2.0	---	< 2.0	---	< 2.0	---	< 2.0
1,2-Dibromoethane (EDB)	5.00E-02	(2)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,2-Dichlorobenzene	6.00E+02	(2)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,2-Dichloroethane (EDC)	5.00E+00	(2)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,2-Dichloropropane	5.00E+00	(2)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,3,5-Trimethylbenzene	1.20E+01	(1)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,3-Dichlorobenzene	-	-	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,3-Dichloropropane	7.30E+02	(1)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1,4-Dichlorobenzene	7.50E+01	(2)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
1-Methylnaphthalene	2.30E+00	(1)	---	< 4.0	---	< 4.0	---	< 8.0	---	< 40	---	<4.0	---	< 4.0	---	< 4.0	---	< 4.0
2,2-Dichloropropane	-	-	---	< 2.0	---	< 2.0	---	< 4.0	---	< 20	---	<2.0	---	< 2.0	---	< 2.0	---	< 2.0
2-Butanone	5.56E+03	(5)	---	< 10	---	< 10	---	< 20	---	< 100	---	<10	---	< 10	---	< 10	---	< 10
2-Chlorotoluene	7.30E+02	(1)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
2-Hexanone	-	-	---	< 10	---	< 10	---	< 20	---	< 100	---	<10	---	< 10	---	< 10	---	< 10
2-Methylnaphthalene	1.50E+02	(1)	---	< 4.0	---	< 4.0	---	< 8.0	---	< 40	---	<4.0	---	< 4.0	---	< 4.0	---	< 4.0
4-Chlorotoluene	2.60E+03	(1)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
4-Isopropyltoluene	-	-	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	<1.0
4-Methyl-2-pentanone	-	-	---	< 10	---	< 10	---	< 20	---	< 100	---	<10	---	< 10	---	< 10	---	< 10
Acetone	1.41E+04	(5)	---	< 10	---	< 10	---	< 20	---	< 100	---	<10	---	< 10	---	< 10	---	< 10
Benzene	5.00E+00	(2)	<10	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<10	< 10	---	< 1.0	<1.0	< 1.0	<5.0	< 1.0	<1.0	<1.0
Bromobenzene	2.00E+01	(1)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Bromodichloromethane	1.34E+00	(5)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Bromoform	8.50E+00	(1)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Bromomethane	7.54E+00	(5)	---	< 3.0	---	< 3.0	---	< 6.0	---	< 30	---	<3.0	---	< 3.0	---	< 3.0	---	< 3.0
Carbon disulfide	8.10E+02	(5)	---	< 10	---	< 10	---	< 20	---	< 100	---	<10	---	< 10	---	< 10	---	< 10
Carbon Tetrachloride	5.00E+00	(2)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Chlorobenzene	1.00E+02	(2)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Chloroethane	-	-	---	< 2.0	---	< 2.0	---	< 4.0	---	< 20	---	<2.0	---	< 2.0	---	< 2.0	---	< 2.0
Chloroform	1.00E+02	(3)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Chloromethane	2.03E+01	(5)	---	< 3.0	---	< 3.0	---	< 6.0	---	< 30	---	<3.0	---	< 3.0	---	< 3.0	---	< 3.0
cis-1,2-DCE	7.00E+01	(2)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
cis-1,3-Dichloropropene	-	-	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Dibromochloromethane	1.68E+00	(5)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Dibromomethane	3.70E+02	(1)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Dichlorodifluoromethane	1.97E+02	(5)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Ethylbenzene	7.00E+02	(2)	<10	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<10	< 10	---	< 1.0	<1.0	< 1.0	<5.0	< 1.0	<1.0	< 1.0
Hexachlorobutadiene	8.60E-01	(1)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Isopropylbenzene	4.47E+02	(5)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	<1.0
Methyl tert-butyl ether (MTBE)	1.43E+02	(5)	<10	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<10	< 10	---	< 1.0	< 1.0	< 1.0	<5.0	1.1	1.2	1.6
Methylene Chloride	5.00E+00	(2)	---	< 3.0	---	< 3.0	---	< 6.0	---	< 30	---	<3.0	---	< 3.0	---	< 3.0	---	< 3.0
Naphthalene	1.65E+00	(5)	---	< 2.0	---	< 2.0	---	< 6.0	---	< 20	---	<2.0	---	< 2.0	---	< 3.0	---	<2.0
n-Butylbenzene	-	-	---	< 1.0	---	< 3.0	---	< 2.0	---	< 10	---	<1.0	---	< 3.0	---	< 1.0	---	<1.0

TABLE 5
Downgradient Wells Analytical Summary
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				MW-37								MW-38						
			Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
n-Propylbenzene	-	-	---	< 1.0	---	< 1.0	---	< 4.0	---	< 10	---	<1.0	---	< 1.0	---	< 2.0	---	<1.0
sec-Butylbenzene	-	-	---	< 3.0	---	< 1.0	---	< 2.0	---	< 10	---	<3.0	---	< 1.0	---	< 1.0	---	<1.0
Styrene	1.00E+02	(2)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
tert-Butylbenzene	-	-	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	<1.0
Tetrachloroethene (PCE)	5.00E+00	(2)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Toluene	7.50E+02	(3)	<10	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	<10	< 10	---	< 1.0	<1.0	< 1.0	<5.0	< 1.0	<1.0	< 1.0
trans-1,2-DCE	1.00E+02	(2)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
trans-1,3-Dichloropropene	4.30E-01	(1)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Trichloroethene (TCE)	5.00E+00	(2)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Trichlorofluoromethane	1.14E+03	(5)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Vinyl chloride	1.00E+00	(3)	---	< 1.0	---	< 1.0	---	< 2.0	---	< 10	---	<1.0	---	< 1.0	---	< 1.0	---	< 1.0
Xylenes, Total	6.20E+02	(3)	<20	< 1.5	< 1.5	< 1.5	<1.5	< 3.0	<20	< 15	---	< 1.5	<1.5	< 1.5	<10	< 1.5	<2.0	< 1.5
Semi Volatile Organic Compounds (ug/l):																		
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
1,3-Dichlorobenzene	-	-	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
1-Methylnaphthalene	2.30E+00	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
2,4,5-Trichlorophenol	1.17E+03	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
2,4,6-Trichlorophenol	1.19E+01	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
2,4-Dichlorophenol	4.53E+01	(5)	---	---	---	---	---	---	---	---	---	< 20	---	< 20	---	---	---	<20
2,4-Dimethylphenol	3.54E+02	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
2,4-Dinitrophenol	3.88E+01	(5)	---	---	---	---	---	---	---	---	---	< 20	---	< 20	---	---	---	<20
2,4-Dinitrotoluene	2.37E+00	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
2,6-Dinitrotoluene	3.70E+01	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
2-Chloronaphthalene	2.90E+03	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
2-Chlorophenol	9.10E+01	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
2-Methylnaphthalene	1.50E+02	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
2-Methylphenol	1.80E+03	(1)	---	---	---	---	---	---	---	---	---	< 20	---	< 10	---	---	---	<10
2-Nitroaniline	1.10E+02	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
2-Nitrophenol	-	-	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
3,3'-Dichlorobenzidine	1.50E-01	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
3+4-Methylphenol	1.80E+02	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
3-Nitroaniline	-	-	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
4,6-Dinitro-2-methylphenol	-	-	---	---	---	---	---	---	---	---	---	< 20	---	< 20	---	---	---	<20
4-Bromophenyl phenyl ether	-	-	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
4-Chloro-3-methylphenol	-	-	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
4-Chloroaniline	3.40E-01	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
4-Chlorophenyl phenyl ether	-	-	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
4-Nitroaniline	3.40E+00	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
4-Nitrophenol	-	-	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Acenaphthene	5.35E+02	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Acenaphthylene	-	-	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Aniline	1.20E+01	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Anthracene	1.72E+03	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Azobenzene	1.20E-01	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Benzo(a)anthracene	3.43E-01	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Benzo(a)pyrene	2.00E-01	(2)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Benzo(b)fluoranthene	3.43E-01	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Benzo(g,h,i)perylene	-	-	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Benzo(k)fluoranthene	3.43E+00	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<20
Benzoic acid	1.50E+05	(1)	---	---	---	---	---	---	---	---	---	< 20	---	< 40	---	---	---	<10
Benzyl alcohol	1.80E+04	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Bis(2-chloroethoxy)methane	1.10E+02	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10

TABLE 5
Downgradient Wells Analytical Summary
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				MW-37								MW-38						
			Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
Bis(2-chloroethyl)ether	1.36E-01	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Bis(2-chloroisopropyl)ether	9.76E+00	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Bis(2-ethylhexyl)phthalate	6.00E+00	(2)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Butyl benzyl phthalate	3.50E+01	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Carbazole	-	-	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Chrysene	3.43E+01	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Dibenz(a,h)anthracene	1.06E-01	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Dibenzofuran	-	-	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Diethyl phthalate	1.48E+04	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Dimethyl phthalate	5.56E+01	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Di-n-butyl phthalate	8.85E+02	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Di-n-octyl phthalate	-	-	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Fluoranthene	8.02E+02	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Fluorene	2.88E+02	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Hexachlorobenzene	1.00E+00	(2)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Hexachlorobutadiene	8.60E-01	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Hexachlorocyclopentadiene	5.00E+01	(2)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Hexachloroethane	6.80E+00	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Indeno(1,2,3-cd)pyrene	2.90E-02	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Isophorone	7.79E+02	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Naphthalene	1.65E+00	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Nitrobenzene	1.40E+00	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
N-Nitrosodimethylamine	4.90E-03	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
N-Nitrosodi-n-propylamine	9.60E-03	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
N-Nitrosodiphenylamine	1.21E+02	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Pentachlorophenol	1.00E+00	(2)	---	---	---	---	---	---	---	---	---	< 20	---	< 20	---	---	---	<40
Phenanthrene	1.70E+02	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Phenol	5.00E+00	(3)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Pyrene	1.17E+02	(5)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
Pyridine	3.70E+01	(1)	---	---	---	---	---	---	---	---	---	< 10	---	< 10	---	---	---	<10
General Chemistry (mg/l):																		
Fluoride	1.6	(3)	---	0.74	---	0.67	---	0.66	---	0.71	---	0.96	---	0.72	---	0.65	---	0.72
Chloride	250	(3)	---	190	---	260	---	280	---	310	---	62	---	160	---	110	---	86
Nitrite	1.0	(2)	---	< 0.10	---	< 0.10	---	< 0.5	---	<2.0	---	< 0.10	---	< 0.10	---	< 0.5	---	<0.10
Bromide	-	-	---	2.7	---	3	---	3.5	---	3.50	---	0.87	---	2	---	1.4	---	0.73
Nitrate	10	(3)	---	< 0.10	---	0.44	---	< 0.5	---	7.30	---	< 0.10	---	< 0.10	---	< 0.5	---	<0.10
Phosphorus	-	-	---	< 0.50	---	< 0.50	---	< 2.5	---	<0.50	---	< 0.50	---	< 0.50	---	< 2.5	---	<0.50
Sulfate	600	(6)	---	24	---	180	---	69	---	29.0	---	36	---	36	---	19	---	49
Carbon Dioxide (CO ₂)	-	-	---	810	---	790	---	830	---	770	---	490	---	620	---	570	---	530
Alkalinity (CaCO ₃)	-	-	---	890	---	870	---	920	---	860	---	520	---	680	---	630	---	590
Bicarbonate (CaCO ₃)	-	-	---	890	---	870	---	920	---	860	---	520	---	680	---	630	---	590
Total Metals (mg/l):																		
Arsenic	0.01	(2)	---	< 0.020	---	< 0.020	---	<0.02	---	<0.02	---	< 0.020	---	< 0.020	---	<0.02	---	<0.02
Barium	1	(3)	---	0.31	---	0.71	---	0.600	---	0.44	---	0.28	---	0.37	---	0.62	---	0.27
Cadmium	0.005	(2)	---	< 0.0020	---	< 0.0020	---	<0.002	---	<0.002	---	< 0.0020	---	< 0.0020	---	<0.002	---	<0.002
Chromium	0.05	(3)	---	< 0.0060	---	0.026	---	< 0.006	---	0.0073	---	< 0.0060	---	< 0.0060	---	0.023	---	0.0089
Lead	0.015	(2)	---	< 0.0050	---	< 0.025	---	< 0.005	---	<0.005	---	0.0052	---	< 0.025	---	0.020	---	0.0054
Selenium	0.05	(2)	---	< 0.050	---	< 0.050	---	<0.05	---	<0.05	---	< 0.050	---	< 0.050	---	<0.05	---	<0.05
Silver	0.05	(3)	---	< 0.0050	---	< 0.025	---	<0.005	---	<0.005	---	< 0.0050	---	< 0.025	---	< 0.025	---	<0.005
Mercury	0.002	(3)	---	< 0.00020	---	< 0.00020	---	<0.0002	---	<0.0002	---	< 0.00020	---	< 0.00020	---	<0.0002	---	<0.0002

TABLE 5
Downgradient Wells Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

				MW-37								MW-38						
Apr-11				Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11
Dissolved Metals (mg/l):																		
Arsenic	0.1	(3)	---	< 0.010	---	0.0056	---	0.0033	---	0.0042	---	< 0.0050	---	0.004	---	0.001	---	0.0023
Barium	1	(3)	---	0.20	---	0.35	---	0.45	---	0.34	---	0.18	---	0.28	---	0.21	---	0.23
Cadmium	0.01	(3)	---	< 0.0020	---	< 0.0020	---	<0.002	---	<0.002	---	< 0.0020	---	< 0.0020	---	<0.002	---	<0.002
Calcium	-	-	---	44	---	120	---	100	---	110	---	42	---	120	---	100	---	90
Chromium	0.05	(3)	---	< 0.0060	---	< 0.0060	---	<0.006	---	<0.006	---	< 0.0060	---	< 0.0060	---	<0.006	---	<0.006
Copper	1	(3)	---	< 0.0060	---	< 0.020	---	<0.006	---	<0.006	---	< 0.0060	---	< 0.010	---	<0.006	---	<0.006
Iron	1	(3)	---	0.38	---	< 0.0010	---	0.77	---	2.6	---	0.89	---	3.1	---	0.75	---	3
Lead	0.05	(3)	---	< 0.0010	---	3.0	---	< 0.001	---	<0.005	---	< 0.0010	---	< 0.0010	---	< 0.001	---	<0.005
Magnesium	-	-	---	15	---	21	---	20	---	21	---	7.3	---	18	---	17	---	15
Manganese	0.2	(3)	---	0.99	---	1.2	---	0.970	---	1.1	---	1.2	---	2.5	---	1.5	---	2.3
Mercury	-	-	---	< 0.00020	---	< 0.00020	---	< 0.0002	---	< 0.0002	---	< 0.00020	---	< 0.00020	---	< 0.0002	---	< 0.0002
Potassium	-	-	---	3.0	---	3.7	---	4	---	3.6	---	1.9	---	3.1	---	3.4	---	2.6
Selenium	0.05	(3)	---	0.022	---	< 0.020	---	< 0.01	---	0.011	---	0.0072	---	< 0.010	---	< 0.005	---	0.0036
Silver	0.05	(3)	---	< 0.0050	---	< 0.025	---	<0.005	---	<0.005	---	< 0.0050	---	< 0.025	---	<0.005	---	<0.005
Sodium	-	-	---	460	---	440	---	450	---	440	---	240	---	240	---	230	---	210
Uranium	0.03	(3)	---	0.0010	---	---	---	0.003	---	0.0018	---	0.0017	---	---	---	0.006	---	0.0026
Zinc	10	(3)	---	< 0.010	---	< 0.010	---	0.042	---	0.087	---	< 0.010	---	< 0.010	---	0.056	---	0.068
Total Petroleum Hydrocarbons (mg/l):																		
Diesel Range Organics	0.2	(4)	---	0.55	< 0.20	< 0.20	< 0.2	< 0.2	<0.20	0.35	<0.20	< 0.20	<0.20	0.53	0.56	<0.20	0.81	0.21
Gasoline Range Organics	-	-	---	0.074	< 0.050	< 0.050	<0.050	<0.05	<0.50	<0.05	<0.05	< 0.050	<0.050	0.12	0.11	<0.05	0.067	<0.05
Motor Oil Range Organics	-	-	---	< 2.5	< 2.5	< 2.5	<2.5	<2.5	<2.5	<2.5	<2.5	< 2.5	<2.5	< 2.5	< 2.5	<2.5	<2.5	<2.5

Notes:
(1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water
(2) EPA - Regional Screening Levels (April 2009) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration
(4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening
(5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013.

-	= No screening level available
*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required and/or well contains separate phase
	= Analytical result exceeds the respective screening level.

TABLE 6
RCRA Wells Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

			MW-50					MW-51					MW-52					MW-53				
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10
Volatile Organic Compounds (ug/L)																						
1,1,1,2-Tetrachloroethane	5.72E+00	(5)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1,1-Trichloroethane	6.00E+01	(3)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1,2,2-Tetrachloroethane	1.00E+01	(3)	---	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,1,2-Trichloroethane	5.00E+00	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1-Dichloroethane	2.50E+01	(3)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1-Dichloroethene	5.00E+00	(3)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,1-Dichloropropene	-	-	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2,3-Trichlorobenzene	-	-	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2,3-Trichloropropane	7.47E-03	(5)	---	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2,4-Trimethylbenzene	1.50E+01	(1)	---	< 1.0	< 1.0	< 1.0	1.1	< 1.0	< 1.0	< 1.0	< 1.0	36	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2-Dibromo-3-chloropropane	2.00E-01	(2)	---	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
1,2-Dibromoethane (EDB)	5.00E-02	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2-Dichlorobenzene	6.00E+02	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2-Dichloroethane (EDC)	5.00E+00	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,2-Dichloropropane	5.00E+00	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,3,5-Trimethylbenzene	1.20E+01	(1)	---	< 1.0	< 1.0	< 1.0	2.9	< 1.0	< 1.0	< 1.0	< 1.0	14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,3-Dichlorobenzene	-	-	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,3-Dichloropropane	7.30E+02	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1,4-Dichlorobenzene	7.50E+01	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
1-Methylnaphthalene	2.30E+00	(1)	---	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	
2,2-Dichloropropane	-	-	---	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
2-Butanone	5.56E+03	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
2-Chlorotoluene	7.30E+02	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
2-Hexanone	-	-	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
2-Methylnaphthalene	1.50E+02	(1)	---	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	
4-Chlorotoluene	2.60E+03	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
4-Isopropyltoluene	-	-	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
4-Methyl-2-pentanone	-	-	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Acetone	1.41E+04	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Benzene	5.00E+00	(2)	---	< 1.0	< 1.0	< 1.0	90	< 1.0	< 1.0	< 1.0	2.0	390	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Bromobenzene	2.00E+01	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Bromodichloromethane	1.34E+00	(5)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Bromoform	8.50E+00	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Bromomethane	7.54E+00	(5)	---	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	
Carbon disulfide	8.10E+02	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Carbon Tetrachloride	5.00E+00	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chlorobenzene	1.00E+02	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chloroethane	-	-	---	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Chloroform	1.00E+02	(3)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Chloromethane	2.03E+01	(5)	---	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	
cis-1,2-DCE	7.00E+01	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
cis-1,3-Dichloropropene	-	-	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Dibromochloromethane	1.68E+00	(5)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Dibromomethane	3.70E+02	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Dichlorodifluoromethane	1.97E+02	(5)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Ethylbenzene	7.00E+02	(2)	---	< 1.0	< 1.0	< 1.0	4.1	< 1.0	< 1.0	< 1.0	< 1.0	22	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Hexachlorobutadiene	8.60E-01	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Isopropylbenzene	4.47E+02	(5)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	

TABLE 6
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			MW-50					MW-51					MW-52					MW-53				
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10
Methyl tert-butyl ether (MTBE)	1.43E+02	(5)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Methylene Chloride	5.00E+00	(2)	---	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 2.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	
Naphthalene	1.65E+00	(5)	---	< 2.0	< 3.0	< 2.0	4.6	< 2.0	< 2.0	< 3.0	< 2.0	9	< 2.0	< 3.0	< 3.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
n-Butylbenzene	-	-	---	< 3.0	< 1.0	< 1.0	< 1.0	< 3.0	< 3.0	< 1.0	< 1.0	< 1.0	< 3.0	< 3.0	< 1.0	< 1.0	< 1.0	< 3.0	< 3.0	< 1.0	< 1.0	
n-Propylbenzene	-	-	---	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	2.4	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	
sec-Butylbenzene	-	-	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Styrene	1.00E+02	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
tert-Butylbenzene	-	-	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Tetrachloroethene (PCE)	5.00E+00	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Toluene	7.50E+02	(3)	---	< 1.0	< 1.0	< 1.0	2.4	< 1.0	< 1.0	< 1.0	< 1.0	8.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans-1,2-DCE	1.00E+02	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
trans-1,3-Dichloropropene	4.30E-01	(1)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Trichloroethene (TCE)	5.00E+00	(2)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Trichlorofluoromethane	1.14E+03	(5)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Vinyl chloride	1.00E+00	(3)	---	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Xylenes, Total	6.20E+02	(3)	---	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	34	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	
Semi Volatile Organic Compounds (ug/l):																						
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
1,2-Dichlorobenzene	6.00E+02	(2)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
1,3-Dichlorobenzene	-	-	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
1,4-Dichlorobenzene	7.50E+01	(2)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
1-Methylnaphthalene	2.30E+00	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
2,4,5-Trichlorophenol	1.17E+03	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
2,4,6-Trichlorophenol	1.19E+01	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
2,4-Dichlorophenol	4.53E+01	(5)	---	< 20	< 20	< 20	< 20	< 21	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 22	< 20	< 20	< 20	< 20	
2,4-Dimethylphenol	3.54E+02	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
2,4-Dinitrophenol	3.88E+01	(5)	---	< 20	< 20	< 20	< 20	< 21	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 22	< 20	< 20	< 20	< 20	
2,4-Dinitrotoluene	2.37E+00	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
2,6-Dinitrotoluene	3.70E+01	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
2-Chloronaphthalene	2.90E+03	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
2-Chlorophenol	9.10E+01	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
2-Methylnaphthalene	1.50E+02	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
2-Methylphenol	1.80E+03	(1)	---	< 10	< 10	< 10	< 10	< 21	< 10	< 10	< 10	< 10	< 20	< 10	< 10	< 10	< 22	< 10	< 10	< 10	< 10	
2-Nitroaniline	1.10E+02	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
2-Nitrophenol	-	-	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
3,3'-Dichlorobenzidine	1.50E-01	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
3+4-Methylphenol	1.80E+02	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
3-Nitroaniline	-	-	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
4,6-Dinitro-2-methylphenol	-	-	---	< 20	< 20	< 20	< 20	< 21	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 22	< 20	< 20	< 20	< 20	
4-Bromophenyl phenyl ether	-	-	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
4-Chloro-3-methylphenol	-	-	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
4-Chloroaniline	3.40E-01	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
4-Chlorophenyl phenyl ether	-	-	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
4-Nitroaniline	3.40E+00	(1)	---	< 10	< 20	< 20	< 20	< 10	< 10	< 20	< 20	< 20	< 10	< 10	< 20	< 20	< 11	< 10	< 20	< 20	< 20	
4-Nitrophenol	-	-	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
Acenaphthene	5.35E+02	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
Acenaphthylene	-	-	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
Aniline	1.20E+01	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
Anthracene	1.72E+03	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	
Azobenzene	1.20E-01	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10	

TABLE 6
RCRA Wells Analytical Summary
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			MW-50					MW-51					MW-52					MW-53				
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10
Benzo(a)anthracene	3.43E-01	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Benzo(a)pyrene	2.00E-01	(2)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Benzo(b)fluoranthene	3.43E-01	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Benzo(g,h,i)perylene	-	-	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	3.43E+00	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Benzoic acid	1.50E+05	(1)	---	< 40	< 20	< 20	< 20	< 21	< 40	< 20	< 20	< 20	< 20	< 40	< 20	< 20	< 20	< 22	< 40	< 20	< 20	< 20
Benzyl alcohol	1.80E+04	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Bis(2-chloroethoxy)methane	1.10E+02	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Bis(2-chloroethyl)ether	1.36E-01	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Bis(2-chloroisopropyl)ether	9.76E+00	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Bis(2-ethylhexyl)phthalate	6.00E+00	(2)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Butyl benzyl phthalate	3.50E+01	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Carbazole	-	-	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Chrysene	3.43E+01	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Dibenz(a,h)anthracene	1.06E-01	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Dibenzofuran	-	-	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Diethyl phthalate	1.48E+04	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Dimethyl phthalate	5.56E+01	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Di-n-butyl phthalate	8.85E+02	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Di-n-octyl phthalate	-	-	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Fluoranthene	8.02E+02	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Fluorene	2.88E+02	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Hexachlorobenzene	1.00E+00	(2)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Hexachlorobutadiene	8.60E-01	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Hexachlorocyclopentadiene	5.00E+01	(2)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Hexachloroethane	6.80E+00	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	2.90E-02	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Isophorone	7.79E+02	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Naphthalene	1.65E+00	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Nitrobenzene	1.40E+00	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
N-Nitrosodimethylamine	4.90E-03	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
N-Nitrosodi-n-propylamine	9.60E-03	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
N-Nitrosodiphenylamine	1.21E+02	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Pentachlorophenol	1.00E+00	(2)	---	< 20	< 20	< 20	< 20	< 21	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 22	< 20	< 20	< 20	< 20
Phenanthrene	1.70E+02	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Phenol	5.00E+00	(3)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Pyrene	1.17E+02	(5)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
Pyridine	3.70E+01	(1)	---	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 10
General Chemistry (mg/l):																						
Fluoride	1.6	(3)	---	0.35	0.37	0.39	0.4	0.54	0.55	0.51	0.59	0.52	0.49	0.43	0.85	0.69	0.76	0.11	< 0.10	0.4	0.22	0.29
Chloride	250	(3)	---	3.7	6.6	8	12	15	9.6	7.6	12	14	820	670	720	690	600	1000	620	960	920	840
Nitrite	1	(2)	---	< 0.10	< 0.10	< 0.10	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Bromide	-	-	---	< 0.10	< 0.10	< 0.10	< 0.10	0.12	< 0.10	< 0.1	< 0.10	< 0.10	2.0	1.8	1.5	1.70	1.70	2.2	2.1	1.7	1.80	1.80
Nitrate	10	(3)	---	0.16	< 0.10	0.21	0.14	1.4	0.82	0.25	0.70	0.14	18	20	19	15	3	6.8	14	12	11	8.10
Phosphorus	-	-	---	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5	< 0.50	< 0.50	< 0.50	< 10	< 10	< 0.50	< 0.50	< 0.50	< 10	< 0.5	< 0.50	< 0.50
Sulfate	600	(3)	---	41	26	38.0	66	76	47	35	67	61	1700	1200	1300	1200	1700	1300	1200	1000	1000	990
Carbon Dioxide (CO ₂)	-	-	---	250	220	200	210	250	220	210	210	250	220	190	240	250	190	310	310	320	330	350
Alkalinity (CaCO ₃)	-	-	---	280	240	230	210	270	250	230	240	250	170	200	220	270	190	330	350	340	370	350
Bicarbonate (CaCO ₃)	-	-	---	280	240	230	210	270	250	230	240	250	170	200	220	270	190	330	350	340	370	350

TABLE 6
RCRA Wells Analytical Summary
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			MW-50					MW-51					MW-52					MW-53				
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10
Total Metals (mg/l):																						
Arsenic	0.01	(2)	---	< 0.020	<0.02	<0.02	<0.02	< 0.020	< 0.020	<0.02	<0.02	<0.02	< 0.020	< 0.10	< 0.02	<0.02	<0.02	< 0.020	< 0.020	< 0.020	<0.02	<0.02
Barium	1	(3)	---	0.088	0.096	0.11	0.13	0.095	0.099	0.076	0.13	0.12	0.052	0.27	0.22	0.087	0.11	0.041	0.039	0.038	0.15	0.078
Cadmium	0.005	(2)	---	< 0.0020	<0.002	<0.002	<0.002	< 0.0020	< 0.0020	<0.002	<0.002	<0.002	< 0.0020	< 0.0020	<0.002	<0.002	<0.002	< 0.0020	< 0.0020	<0.002	<0.002	<0.002
Chromium	0.05	(3)	---	< 0.0060	<0.006	<0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	<0.006
Lead	0.015	(2)	---	< 0.0050	<0.005	<0.005	<0.005	< 0.0050	< 0.0050	<0.005	0.0086	<0.005	< 0.0050	< 0.025	<0.005	<0.005	<0.005	< 0.0050	< 0.0050	<0.005	<0.005	<0.005
Selenium	0.05	(2)	---	< 0.050	<0.05	<0.05	<0.05	< 0.050	< 0.050	<0.05	<0.05	<0.05	< 0.050	< 0.050	<0.05	<0.05	<0.05	< 0.050	< 0.050	<0.05	<0.05	<0.05
Silver	0.05	(3)	---	< 0.025	<0.005	<0.005	<0.005	< 0.0050	< 0.0050	<0.05	<0.005	<0.05	< 0.0050	< 0.025	<0.005	<0.005	<0.005	< 0.0050	< 0.025	<0.005	<0.005	<0.005
Mercury	0.002	(3)	---	< 0.00020	<0.0002	<0.0002	<0.0002	< 0.00020	< 0.00020	<0.0002	<0.0002	<0.0002	< 0.00020	< 0.00020	<0.0002	<0.0002	<0.0002	< 0.00020	< 0.00020	<0.0002	<0.0002	<0.0002
Dissolved Metals (mg/l):																						
Arsenic	0.1	(3)	---	0.0036	0.004	0.0033	<0.02	< 0.020	0.0032	0.0032	0.003	<0.02	< 0.020	0.0052	0.0031	0.0031	<0.02	< 0.020	0.0042	0.0027	0.0034	<0.02
Barium	1	(3)	---	0.083	0.071	0.055	0.059	0.056	0.058	0.053	0.06	0.076	< 0.020	0.018	0.020	0.021	0.038	< 0.020	0.02	0.018	0.024	0.025
Cadmium	0.01	(3)	---	< 0.0020	<0.002	<0.002	<0.002	< 0.0020	< 0.0020	< 0.002	<0.002	<0.002	< 0.0020	< 0.0020	<0.002	<0.002	<0.002	< 0.0020	< 0.0020	<0.002	<0.002	<0.002
Calcium	-	-	---	65	54	51	68	76	65	58	68	71	430	300	320	300	250	340	330	340	310	290
Chromium	0.05	(3)	---	< 0.0060	<0.006	<0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	<0.006
Copper	1	(3)	---	0.0013	<0.006	<0.006	<0.006	< 0.0060	0.0015	<0.006	<0.006	<0.006	< 0.0060	0.017	<0.006	<0.006	<0.006	< 0.0060	0.022	<0.006	<0.006	<0.006
Iron	1	(3)	---	< 0.020	<0.02	<0.02	0.035	< 0.020	< 0.020	<0.02	<0.02	0.2	4.1	0.39	2.3	0.12	0.7	0.029	< 0.020	< 0.02	0.036	0.13
Lead	0.05	(3)	---	< 0.0010	<0.005	<0.005	<0.005	< 0.0050	< 0.0010	< 0.001	<0.005	<0.005	< 0.0050	< 0.0010	< 0.001	<0.005	<0.005	< 0.0050	< 0.0010	< 0.001	<0.005	<0.005
Magnesium	-	-	---	14	13	12	14	15	13	12	14	15	110	76	82	76	70	59	55	54	51	48
Manganese	0.2	(3)	---	2.3	2.2	2.3	3.7	1.2	1.0	0.99	1.3	2	8.8	2.3	2.9	3.1	3.6	0.10	0.18	0.520	0.5	0.96
Mercury	-	-	---	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0002	<0.0002	<0.0002
Potassium	-	-	---	2.1	1.6	1.8	1.9	1.9	2.1	1.8	2	2	5.6	5.7	5.1	4.4	4.4	5.1	5.9	4.7	4.8	5.3
Selenium	0.05	(3)	---	< 0.0010	0.001	0.001	<0.05	< 0.050	< 0.0010	< 0.001	0.001	<0.05	< 0.050	0.052	0.053	0.036	<0.05	< 0.050	0.021	0.010	0.02	<0.05
Silver	0.05	(3)	---	< 0.025	<0.005	<0.005	<0.005	< 0.0050	< 0.025	< 0.005	<0.005	<0.005	< 0.0050	< 0.025	<0.005	<0.005	<0.005	< 0.0050	< 0.025	<0.005	<0.005	<0.005
Sodium	-	-	---	37	39	40	42	55	43	43	51	48	590	590	630	600	560	750	740	780	750	700
Uranium	0.03	(3)	---	< 0.0010	<0.001	<0.001	<0.001	< 0.10	0.0015	0.0013	0.0023	0.0018	< 0.10	0.0099	0.0093	0.0094	0.0072	< 0.10	0.018	0.016	0.015	0.0108
Zinc	10	(3)	---	< 0.010	0.07	0.25	<0.05	< 0.020	0.011	0.043	0.16	<0.05	0.13	0.014	0.11	0.099	<0.05	< 0.020	< 0.010	0.073	0.17	<0.05
Total Petroleum Hydrocarbons (mg/l):																						
Diesel Range Organics	0.2	(4)	---	< 0.20	<0.2	<0.20	<0.20	< 0.20	< 0.20	<0.2	<0.20	<0.2	< 0.20	< 0.20	< 0.2	<0.20	<0.20	< 0.20	< 0.20	<0.20	<0.20	<0.20
Gasoline Range Organics	-	-	---	< 0.050	< 0.05	<0.05	0.48	< 0.050	< 0.050	< 0.05	<0.05	1.8	< 0.050	< 0.050	<0.05	<0.05	<0.05	< 0.050	< 0.050	<0.05	<0.05	<0.05
Motor Oil Range Organics	-	-	---	< 2.5	< 2.5	<2.5	<2.5	< 2.5	< 2.5	< 2.5	<2.5	<2.5	< 2.5	< 2.5	<2.5	<2.5	<2.5	< 2.5	< 2.5	<2.5	<2.5	<2.5

Notes:

(1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water

(2) EPA - Regional Screening Levels (April 2009) - MCL

(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or less

(4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening levels

(5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013. "2014 Background Document for Development of Soil Screening Levels" for analysis beginning in 2014.

-	= No screening level available
*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required and/or well contains separate phase
	= Analytical result exceeds the respective screening level.

TABLE 6
RCRA Wells Analytical Summary
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			MW-55					MW-58					MW-59					MW-60				
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10
Volatile Organic Compounds (ug/L)																						
1,1,1,2-Tetrachloroethane	5.72E+00	(5)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,1,1-Trichloroethane	6.00E+01	(3)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	1.00E+01	(3)	---	---	---	< 40	< 40	---	---	---	---	< 40	< 2.0	< 2.0	< 2.0	< 2.0	< 10	---	---	---	< 2.0	< 2.0
1,1,2-Trichloroethane	5.00E+00	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,1-Dichloroethane	2.50E+01	(3)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,1-Dichloroethene	5.00E+00	(3)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,1-Dichloropropene	-	-	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,2,3-Trichlorobenzene	-	-	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,2,3-Trichloropropane	7.47E-03	(5)	---	---	---	< 40	< 40	---	---	---	---	< 40	< 2.0	< 2.0	< 2.0	< 2.0	< 10	---	---	---	< 2.0	< 2.0
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,2,4-Trimethylbenzene	1.50E+01	(1)	---	---	---	420	1100	---	---	---	---	<20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	2.00E-01	(2)	---	---	---	< 40	< 40	---	---	---	---	< 40	< 2.0	< 2.0	< 2.0	< 2.0	< 10	---	---	---	< 2.0	< 2.0
1,2-Dibromoethane (EDB)	5.00E-02	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,2-Dichloroethane (EDC)	5.00E+00	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	10	15	4.2	13	< 5.0	---	---	---	< 1.0	< 1.0
1,2-Dichloropropane	5.00E+00	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,3,5-Trimethylbenzene	1.20E+01	(1)	---	---	---	110	350	---	---	---	---	<20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,3-Dichlorobenzene	-	-	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,3-Dichloropropane	7.30E+02	(1)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
1-Methylnaphthalene	2.30E+00	(1)	---	---	---	120	140	---	---	---	---	<20	< 4.0	5.7	< 4.0	37	26	---	---	---	< 4.0	< 4.0
2,2-Dichloropropane	-	-	---	---	---	< 40	< 40	---	---	---	---	< 40	< 2.0	< 2.0	< 2.0	< 2.0	< 10	---	---	---	< 2.0	< 2.0
2-Butanone	5.56E+03	(5)	---	---	---	< 200	< 200	---	---	---	---	< 200	< 10	< 10	< 10	< 10	< 50	---	---	---	< 10	< 10
2-Chlorotoluene	7.30E+02	(1)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
2-Hexanone	-	-	---	---	---	< 200	< 200	---	---	---	---	< 200	< 10	< 10	< 10	< 10	< 50	---	---	---	< 10	< 10
2-Methylnaphthalene	1.50E+02	(1)	---	---	---	190	240	---	---	---	---	240	< 4.0	< 4.0	< 4.0	< 4.0	<20	---	---	---	< 4.0	< 4.0
4-Chlorotoluene	2.60E+03	(1)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
4-Isopropyltoluene	-	-	---	---	---	20	30	---	---	---	---	<20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
4-Methyl-2-pentanone	-	-	---	---	---	< 200	< 200	---	---	---	---	< 200	< 10	< 10	< 10	< 10	< 50	---	---	---	< 10	< 10
Acetone	1.41E+04	(5)	---	---	---	< 200	< 200	---	---	---	---	< 200	< 10	< 10	< 10	< 10	< 50	---	---	---	< 10	< 10
Benzene	5.00E+00	(2)	---	---	---	7800	11000	---	---	---	---	4500	13	13	4.2	38	42	---	---	---	< 1.0	< 1.0
Bromobenzene	2.00E+01	(1)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Bromodichloromethane	1.34E+00	(5)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Bromoform	8.50E+00	(1)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Bromomethane	7.54E+00	(5)	---	---	---	< 60	< 60	---	---	---	---	< 60	< 3.0	< 3.0	< 3.0	< 3.0	< 15	---	---	---	< 3.0	< 3.0
Carbon disulfide	8.10E+02	(5)	---	---	---	< 200	< 200	---	---	---	---	< 200	< 10	< 10	< 10	< 10	< 50	---	---	---	< 10	< 10
Carbon Tetrachloride	5.00E+00	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Chlorobenzene	1.00E+02	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Chloroethane	-	-	---	---	---	< 40	< 40	---	---	---	---	< 40	< 2.0	< 2.0	< 2.0	< 2.0	< 10	---	---	---	< 2.0	< 2.0
Chloroform	1.00E+02	(3)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Chloromethane	2.03E+01	(5)	---	---	---	< 60	< 60	---	---	---	---	< 60	< 3.0	< 3.0	< 3.0	< 3.0	< 15	---	---	---	< 3.0	< 3.0
cis-1,2-DCE	7.00E+01	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
cis-1,3-Dichloropropene	-	-	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Dibromochloromethane	1.68E+00	(5)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Dibromomethane	3.70E+02	(1)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Dichlorodifluoromethane	1.97E+02	(5)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Ethylbenzene	7.00E+02	(2)	---	---	---	2000	2600	---	---	---	---	140	58	89	29	260	100	---	---	---	< 1.0	< 1.0
Hexachlorobutadiene	8.60E-01	(1)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Isopropylbenzene	4.47E+02	(5)	---	---	---	160	180	---	---	---	---	110	7.8	13	4	32	15	---	---	---	< 1.0	< 1.0

TABLE 6
RCRA Wells Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

			MW-55					MW-58					MW-59					MW-60				
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10
Methyl tert-butyl ether (MTBE)	1.43E+02	(5)	---	---	---	7800	7000	---	---	---	---	15000	750	530	140	330	< 5.0	---	---	---	< 1.0	< 1.0
Methylene Chloride	5.00E+00	(2)	---	---	---	< 60	< 60	---	---	---	---	< 60	< 3.0	< 3.0	< 3.0	< 3.0	< 15	---	---	---	< 3.0	< 3.0
Naphthalene	1.65E+00	(5)	---	---	---	520	660	---	---	---	---	120	3.6	15	8.8	69	51	---	---	---	< 2.0	< 2.0
n-Butylbenzene	-	-	---	---	---	30	62	---	---	---	---	<20	< 3.0	3.1	< 3.0	11	8.3	---	---	---	< 1.0	< 1.0
n-Propylbenzene	-	-	---	---	---	390	490	---	---	---	---	110	7.3	9.8	3.8	32	12	---	---	---	< 1.0	< 1.0
sec-Butylbenzene	-	-	---	---	---	27	29	---	---	---	---	<20	3.8	5.2	1.5	9.4	6.4	---	---	---	< 1.0	< 1.0
Styrene	1.00E+02	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
tert-Butylbenzene	-	-	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Tetrachloroethene (PCE)	5.00E+00	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Toluene	7.50E+02	(3)	---	---	---	< 20	29	---	---	---	---	<20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
trans-1,2-DCE	1.00E+02	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
trans-1,3-Dichloropropene	4.30E-01	(1)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Trichloroethene (TCE)	5.00E+00	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Trichlorofluoromethane	1.14E+03	(5)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Vinyl chloride	1.00E+00	(3)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	---	---	---	< 1.0	< 1.0
Xylenes, Total	6.20E+02	(3)	---	---	---	620	1700	---	---	---	---	<30	< 1.5	< 1.5	< 1.5	< 1.5	< 7.5	---	---	---	< 1.5	< 1.5
Semi Volatile Organic Compounds (ug/l):																						
1,2,4-Trichlorobenzene	7.00E+01	(2)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
1,2-Dichlorobenzene	6.00E+02	(2)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
1,3-Dichlorobenzene	-	-	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
1,4-Dichlorobenzene	7.50E+01	(2)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
1-Methylnaphthalene	2.30E+00	(1)	---	---	---	73	<10	---	---	---	---	<10	< 10	< 10	< 10	13	< 10	---	---	---	< 10	< 10
2,4,5-Trichlorophenol	1.17E+03	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
2,4,6-Trichlorophenol	1.19E+01	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
2,4-Dichlorophenol	4.53E+01	(5)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 20	< 20	< 20	< 20	< 20	---	---	---	< 20	< 20
2,4-Dimethylphenol	3.54E+02	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
2,4-Dinitrophenol	3.88E+01	(5)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 20	< 20	< 20	< 20	< 20	---	---	---	< 20	< 20
2,4-Dinitrotoluene	2.37E+00	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
2,6-Dinitrotoluene	3.70E+01	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
2-Chloronaphthalene	2.90E+03	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
2-Chlorophenol	9.10E+01	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
2-Methylnaphthalene	1.50E+02	(1)	---	---	---	110	150	---	---	---	---	90	< 20	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
2-Methylphenol	1.80E+03	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
2-Nitroaniline	1.10E+02	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
2-Nitrophenol	-	-	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
3,3'-Dichlorobenzidine	1.50E-01	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
3+4-Methylphenol	1.80E+02	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
3-Nitroaniline	-	-	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
4,6-Dinitro-2-methylphenol	-	-	---	---	---	< 20	< 20	---	---	---	---	< 20	< 20	< 20	< 20	< 20	< 20	---	---	---	< 20	< 20
4-Bromophenyl phenyl ether	-	-	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
4-Chloro-3-methylphenol	-	-	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
4-Chloroaniline	3.40E-01	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
4-Chlorophenyl phenyl ether	-	-	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
4-Nitroaniline	3.40E+00	(1)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 10	< 10	< 20	< 20	< 20	---	---	---	< 20	< 20
4-Nitrophenol	-	-	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Acenaphthene	5.35E+02	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Acenaphthylene	-	-	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Aniline	1.20E+01	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Anthracene	1.72E+03	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Azobenzene	1.20E-01	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10

TABLE 6
RCRA Wells Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

			MW-55					MW-58					MW-59					MW-60				
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10
Benzo(a)anthracene	3.43E-01	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Benzo(a)pyrene	2.00E-01	(2)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Benzo(b)fluoranthene	3.43E-01	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Benzo(g,h,i)perylene	-	-	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Benzo(k)fluoranthene	3.43E+00	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Benzoic acid	1.50E+05	(1)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 20	< 40	< 20	< 20	< 20	---	---	---	< 20	< 20
Benzyl alcohol	1.80E+04	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Bis(2-chloroethoxy)methane	1.10E+02	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Bis(2-chloroethyl)ether	1.36E-01	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Bis(2-chloroisopropyl)ether	9.76E+00	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Bis(2-ethylhexyl)phthalate	6.00E+00	(2)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Butyl benzyl phthalate	3.50E+01	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Carbazole	-	-	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Chrysene	3.43E+01	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Dibenz(a,h)anthracene	1.06E-01	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Dibenzofuran	-	-	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Diethyl phthalate	1.48E+04	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Dimethyl phthalate	5.56E+01	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Di-n-butyl phthalate	8.85E+02	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Di-n-octyl phthalate	-	-	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Fluoranthene	8.02E+02	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Fluorene	2.88E+02	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Hexachlorobenzene	1.00E+00	(2)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Hexachlorobutadiene	8.60E-01	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Hexachlorocyclopentadiene	5.00E+01	(2)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Hexachloroethane	6.80E+00	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Indeno(1,2,3-cd)pyrene	2.90E-02	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Isophorone	7.79E+02	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Naphthalene	1.65E+00	(5)	---	---	---	200	290	---	---	---	---	76	< 10	< 10	17	22	12	---	---	---	< 10	< 10
Nitrobenzene	1.40E+00	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
N-Nitrosodimethylamine	4.90E-03	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
N-Nitrosodi-n-propylamine	9.60E-03	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
N-Nitrosodiphenylamine	1.21E+02	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Pentachlorophenol	1.00E+00	(2)	---	---	---	< 20	< 20	---	---	---	---	< 20	< 20	< 20	< 20	< 20	< 20	---	---	---	< 20	< 20
Phenanthrene	1.70E+02	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Phenol	5.00E+00	(3)	---	---	---	< 10	16	---	---	---	---	11	14	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Pyrene	1.17E+02	(5)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
Pyridine	3.70E+01	(1)	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10	< 10	< 10	< 10	< 10	---	---	---	< 10	< 10
General Chemistry (mg/l):																						
Fluoride	1.6	(3)	---	---	---	<0.10	0.35	---	---	---	---	0.31	0.20	< 0.50	< 0.5	0.33	0.34	---	---	---	0.26	<0.10
Chloride	250	(3)	---	---	---	420	470	---	---	---	---	270	210	180	150	140	120	---	---	---	210	110
Nitrite	1	(2)	---	---	---	<0.10	*6.1	---	---	---	---	*5.5	< 0.10	< 0.50	< 0.5	<0.10	*1.3	---	---	---	<0.10	<2.0
Bromide	-	-	---	---	---	4.20	4.40	---	---	---	---	5.00	2.0	2.7	2.5	0.31	1.40	---	---	---	4.40	2.30
Nitrate	10	(3)	---	---	---	<0.10	*6.1	---	---	---	---	*5.5	< 2.0	< 0.50	< 0.5	0.26	*1.3	---	---	---	26	31
Phosphorus	-	-	---	---	---	<0.50	<0.50	---	---	---	---	<0.50	< 0.50	< 2.5	< 2.5	<0.50	<0.50	---	---	---	<0.50	<0.50
Sulfate	600	(3)	---	---	---	<0.50	1	---	---	---	---	2	830	510	310	320	210	---	---	---	1000	730
Carbon Dioxide (CO ₂)	-	-	---	---	---	1000	1000	---	---	---	---	1100	910	920	960	940	860	---	---	---	730	590
Alkalinity (CaCO ₃)	-	-	---	---	---	1100	1000	---	---	---	---	1100	950	970	990	940	860	---	---	---	780	590
Bicarbonate (CaCO ₃)	-	-	---	---	---	1100	1000	---	---	---	---	1100	950	970	990	940	860	---	---	---	780	590

TABLE 6
RCRA Wells Analytical Summary
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			MW-55					MW-58					MW-59					MW-60				
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10
Total Metals (mg/l):																						
Arsenic	0.01	(2)	---	---	---	<0.02	0.06	---	---	---	---	<0.02	< 0.020	< 0.020	<0.02	<0.02	<0.02	---	---	---	<0.02	<0.02
Barium	1	(3)	---	---	---	2.6	5.9	---	---	---	---	1.6	0.26	0.10	0.640	0.087	0.095	---	---	---	0.07	0.089
Cadmium	0.005	(2)	---	---	---	<0.002	<0.002	---	---	---	---	<0.002	< 0.0020	< 0.0020	<0.002	<0.002	<0.002	---	---	---	<0.002	<0.002
Chromium	0.05	(3)	---	---	---	<0.006	0.054	---	---	---	---	<0.006	0.011	< 0.0060	0.017	<0.006	<0.006	---	---	---	<0.006	0.0063
Lead	0.015	(2)	---	---	---	0.023	0.3	---	---	---	---	0.034	0.011	0.0052	0.035	<0.005	<0.005	---	---	---	0.0063	0.0051
Selenium	0.05	(2)	---	---	---	<0.05	<0.05	---	---	---	---	<0.05	< 0.050	< 0.050	<0.05	<0.05	<0.05	---	---	---	<0.05	<0.05
Silver	0.05	(3)	---	---	---	<0.005	<0.005	---	---	---	---	<0.005	< 0.0050	< 0.0050	<0.005	<0.005	<0.005	---	---	---	<0.005	<0.005
Mercury	0.002	(3)	---	---	---	<0.0002	<0.001	---	---	---	---	<0.001	< 0.00020	< 0.00020	<0.0002	<0.0002	<0.001	---	---	---	<0.0002	<0.0002
Dissolved Metals (mg/l):																						
Arsenic	0.1	(3)	---	---	---	0.0068	<0.02	---	---	---	---	<0.02	< 0.020	0.017	0.014	0.019	<0.02	---	---	---	0.0046	<0.02
Barium	1	(3)	---	---	---	2.6	2.5	---	---	---	---	1.6	0.059	0.072	0.085	0.076	0.073	---	---	---	0.048	0.038
Cadmium	0.01	(3)	---	---	---	<0.002	<0.002	---	---	---	---	<0.002	< 0.0020	< 0.0020	<0.002	<0.002	<0.002	---	---	---	<0.002	<0.002
Calcium	-	-	---	---	---	170	180	---	---	---	---	150	260	210	200	190	150	---	---	---	230	220
Chromium	0.05	(3)	---	---	---	<0.006	<0.006	---	---	---	---	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	<0.006	---	---	---	<0.006	<0.006
Copper	1	(3)	---	---	---	<0.006	<0.006	---	---	---	---	<0.006	< 0.0060	< 0.020	<0.006	<0.006	<0.006	---	---	---	<0.006	<0.006
Iron	1	(3)	---	---	---	9.8	12	---	---	---	---	8.9	7.9	7.3	6.1	4.9	2.7	---	---	---	<0.02	<0.02
Lead	0.05	(3)	---	---	---	0.0061	<0.005	---	---	---	---	0.0085	< 0.0050	< 0.0010	< 0.001	<0.005	<0.005	---	---	---	<0.005	<0.005
Magnesium	-	-	---	---	---	55	64	---	---	---	---	49	69	56	51	43	32	---	---	---	75	69
Manganese	0.2	(3)	---	---	---	5.6	6.8	---	---	---	---	4.3	3.0	3.2	3.3	3.4	2.9	---	---	---	0.048	0.33
Mercury	-	-	---	---	---	<0.0002	<0.001	---	---	---	---	<0.001	<0.00020	<0.00020	<0.0002	<0.0002	<0.001	---	---	---	<0.0002	<0.0002
Potassium	-	-	---	---	---	10	11	---	---	---	---	4.9	3.4	3.0	3.0	2.7	3.2	---	---	---	3.5	2.9
Selenium	0.05	(3)	---	---	---	0.016	<0.05	---	---	---	---	<0.05	< 0.050	0.011	0.0061	0.0084	<0.25	---	---	---	0.023	<0.05
Silver	0.05	(3)	---	---	---	<0.005	0.005	---	---	---	---	<0.005	< 0.0050	< 0.0050	<0.005	<0.005	<0.005	---	---	---	<0.005	<0.005
Sodium	-	-	---	---	---	500	400	---	---	---	---	390	440	380	390	370	340	---	---	---	560	320
Uranium	0.03	(3)	---	---	---	<0.001	<0.001	---	---	---	---	<0.001	< 0.10	0.0036	0.0024	0.0023	0.0023	---	---	---	0.012	0.0086
Zinc	10	(3)	---	---	---	0.18	<0.05	---	---	---	---	<0.05	< 0.020	0.037	0.10	0.046	<0.05	---	---	---	0.085	<0.05
Total Petroleum Hydrocarbons (mg/l):																						
Diesel Range Organics	0.2	(4)	---	---	---	5.5	13	---	---	---	---	6.6	0.62	0.68	0.55	0.84	0.61	---	---	---	<0.20	<0.20
Gasoline Range Organics	-	-	---	---	---	40.0	59	---	---	---	---	29	0.72	0.96	1.2	1.6	1.3	---	---	---	<0.05	0.43
Motor Oil Range Organics	-	-	---	---	---	<2.5	<2.5	---	---	---	---	<2.5	<2.5	< 2.5	< 2.5	<2.5	<2.5	---	---	---	<2.5	<2.5

Notes:
(1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water
(2) EPA - Regional Screening Levels (April 2009) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or less
(4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening levels
(5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013. "2014 Background Document for Development of Soil Screening Levels" for analysis beginning in 2014.

-	= No screening level available
*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required and/or well contains separate phase
	= Analytical result exceeds the respective screening level.

TABLE 6
RCRA Wells Analytical Summary
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			MW-62					MW-63					MW-64					MW-65				
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10
Volatile Organic Compounds (ug/L)																						
1,1,1,2-Tetrachloroethane	5.72E+00	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
1,1,1-Trichloroethane	6.00E+01	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
1,1,2,2-Tetrachloroethane	1.00E+01	(3)	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 20	< 40	< 40	< 40	< 40	
1,1,2-Trichloroethane	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
1,1-Dichloroethane	2.50E+01	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
1,1-Dichloroethene	5.00E+00	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
1,1-Dichloropropene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
1,2,3-Trichlorobenzene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
1,2,3-Trichloropropane	7.47E-03	(5)	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 20	< 40	< 40	< 40	< 40	
1,2,4-Trichlorobenzene	7.00E+01	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
1,2,4-Trimethylbenzene	1.50E+01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1400	1800	1500	1900	2000	
1,2-Dibromo-3-chloropropane	2.00E-01	(2)	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 20	< 40	< 40	< 40	< 40	
1,2-Dibromoethane (EDB)	5.00E-02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
1,2-Dichlorobenzene	6.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
1,2-Dichloroethane (EDC)	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.3	1.2	3.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	140	160	170	260	120	
1,2-Dichloropropane	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
1,3,5-Trimethylbenzene	1.20E+01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	17	36	90	280	260	
1,3-Dichlorobenzene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
1,3-Dichloropropane	7.30E+02	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
1,4-Dichlorobenzene	7.50E+01	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
1-Methylnaphthalene	2.30E+00	(1)	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	110	120	130	160	<200	
2,2-Dichloropropane	-	-	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 20	< 40	< 40	< 40	< 40	
2-Butanone	5.56E+03	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 100	< 200	< 200	< 200	< 200	
2-Chlorotoluene	7.30E+02	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
2-Hexanone	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 100	< 200	< 200	< 200	< 200	
2-Methylnaphthalene	1.50E+02	(1)	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	50	190	210	300	<200	
4-Chlorotoluene	2.60E+03	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
4-Isopropyltoluene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
4-Methyl-2-pentanone	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 100	< 200	< 200	< 200	< 200	
Acetone	1.41E+04	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 100	< 200	< 200	1400	2800	
Benzene	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	5100	6800	7200	6300	3600	
Bromobenzene	2.00E+01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
Bromodichloromethane	1.34E+00	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
Bromoform	8.50E+00	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
Bromomethane	7.54E+00	(5)	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 30	< 60	< 60	< 60	< 60	
Carbon disulfide	8.10E+02	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 100	< 200	< 200	< 200	< 200	
Carbon Tetrachloride	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
Chlorobenzene	1.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
Chloroethane	-	-	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 20	< 40	< 40	< 40	< 40	
Chloroform	1.00E+02	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
Chloromethane	2.03E+01	(5)	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 30	< 60	< 60	< 60	< 60	
cis-1,2-DCE	7.00E+01	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
cis-1,3-Dichloropropene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
Dibromochloromethane	1.68E+00	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
Dibromomethane	3.70E+02	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
Dichlorodifluoromethane	1.97E+02	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
Ethylbenzene	7.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1400	1700	1700	2100	2100	
Hexachlorobutadiene	8.60E-01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20	
Isopropylbenzene	4.47E+02	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	84	75	79	85	82	

TABLE 6
RCRA Wells Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

			MW-62					MW-63					MW-64					MW-65				
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10
Methyl tert-butyl ether (MTBE)	1.43E+02	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.9	11	110	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	480	950	790	1600	960
Methylene Chloride	5.00E+00	(2)	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 30	< 60	< 60	< 60	< 60
Naphthalene	1.65E+00	(5)	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	240	430	400	620	550
n-Butylbenzene	-	-	< 3.0	< 3.0	< 3.0	< 1.0	< 1.0	< 3.0	< 3.0	< 1.0	< 1.0	< 1.0	< 3.0	< 3.0	< 1.0	< 1.0	< 1.0	< 30	< 60	< 60	< 20	< 20
n-Propylbenzene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	190	200	230	260	250
sec-Butylbenzene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	12	< 20	< 20	< 20	< 20
Styrene	1.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20
tert-Butylbenzene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20
Tetrachloroethene (PCE)	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20
Toluene	7.50E+02	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20
trans-1,2-DCE	1.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20
trans-1,3-Dichloropropene	4.30E-01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20
Trichloroethene (TCE)	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20
Trichlorofluoromethane	1.14E+03	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20
Vinyl chloride	1.00E+00	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 20	< 20	< 20	< 20
Xylenes, Total	6.20E+02	(3)	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	280	330	590	4400	9900
Semi Volatile Organic Compounds (ug/l):																						
1,2,4-Trichlorobenzene	7.00E+01	(2)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dichlorobenzene	6.00E+02	(2)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,3-Dichlorobenzene	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,4-Dichlorobenzene	7.50E+01	(2)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1-Methylnaphthalene	2.30E+00	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	150	80	98	91	<10
2,4,5-Trichlorophenol	1.17E+03	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4,6-Trichlorophenol	1.19E+01	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4-Dichlorophenol	4.53E+01	(5)	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
2,4-Dimethylphenol	3.54E+02	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	210	18	17	32	54
2,4-Dinitrophenol	3.88E+01	(5)	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
2,4-Dinitrotoluene	2.37E+00	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,6-Dinitrotoluene	3.70E+01	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Chloronaphthalene	2.90E+03	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Chlorophenol	9.10E+01	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Methylnaphthalene	1.50E+02	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	150	130	150	140	97
2-Methylphenol	1.80E+03	(1)	< 20	< 10	< 10	< 10	< 10	< 20	< 10	< 10	< 10	< 10	< 20	< 10	< 10	< 10	< 10	< 20	< 10	< 10	< 10	< 10
2-Nitroaniline	1.10E+02	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Nitrophenol	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
3,3'-Dichlorobenzidine	1.50E-01	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
3+4-Methylphenol	1.80E+02	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	14	< 10	< 10	< 10	< 10
3-Nitroaniline	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4,6-Dinitro-2-methylphenol	-	-	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
4-Bromophenyl phenyl ether	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Chloro-3-methylphenol	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Chloroaniline	3.40E-01	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Chlorophenyl phenyl ether	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Nitroaniline	3.40E+00	(1)	< 10	< 10	< 20	< 20	< 20	< 10	< 10	< 20	< 20	< 20	< 10	< 10	< 20	< 20	< 20	< 10	< 10	< 20	< 20	< 20
4-Nitrophenol	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthene	5.35E+02	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthylene	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Aniline	1.20E+01	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Anthracene	1.72E+03	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Azobenzene	1.20E-01	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

TABLE 6
RCRA Wells Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

			MW-62					MW-63					MW-64					MW-65				
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10
Benzo(a)anthracene	3.43E-01	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(a)pyrene	2.00E-01	(2)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(b)fluoranthene	3.43E-01	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(g,h,i)perylene	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	3.43E+00	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzoic acid	1.50E+05	(1)	< 20	< 40	< 20	< 20	< 20	< 20	< 40	< 20	< 20	< 20	< 20	< 40	< 20	< 20	< 20	< 20	110	< 20	< 20	< 20
Benzyl alcohol	1.80E+04	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Bis(2-chloroethoxy)methane	1.10E+02	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Bis(2-chloroethyl)ether	1.36E-01	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Bis(2-chloroisopropyl)ether	9.76E+00	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Bis(2-ethylhexyl)phthalate	6.00E+00	(2)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Butyl benzyl phthalate	3.50E+01	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Carbazole	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chrysene	3.43E+01	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dibenz(a,h)anthracene	1.06E-01	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzofuran	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Diethyl phthalate	1.48E+04	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dimethyl phthalate	5.56E+01	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Di-n-butyl phthalate	8.85E+02	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Di-n-octyl phthalate	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Fluoranthene	8.02E+02	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Fluorene	2.88E+02	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachlorobenzene	1.00E+00	(2)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	8.60E-01	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachlorocyclopentadiene	5.00E+01	(2)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachloroethane	6.80E+00	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	2.90E-02	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isophorone	7.79E+02	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Naphthalene	1.65E+00	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	430	310	260	330	260
Nitrobenzene	1.40E+00	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodimethylamine	4.90E-03	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodi-n-propylamine	9.60E-03	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodiphenylamine	1.21E+02	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 20	< 10	< 10
Pentachlorophenol	1.00E+00	(2)	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 10	< 20	< 20
Phenanthrene	1.70E+02	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Phenol	5.00E+00	(3)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	39	52	13	<10
Pyrene	1.17E+02	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pyridine	3.70E+01	(1)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	260	< 10	< 10
General Chemistry (mg/l):																						
Fluoride	1.6	(3)	< 2.0	< 0.10	< 0.5	0.14	<0.10	< 0.10	0.14	< 0.5	0.2	0.16	< 0.10	0.35	< 0.50	0.27	0.18	< 0.10	< 0.50	< 0.5	0.26	<0.50
Chloride	250	(3)	14	14	12	15.00	16	390	370	250	180	290	1100	920	940	830	840	290	180	160	180	220
Nitrite	1	(2)	< 0.10	< 0.10	*< 1	<0.10	<0.10	< 0.10	< 2.0	110*	<2.0	<2.0	< 2.0	< 2.0	*43	<2.0	*52	< 0.10	< 0.50	*< 1	<1.0	*<1.0
Bromide	-	-	< 0.10	< 0.10	< 0.5	<0.10	<0.10	7.3	6.6	5.2	2.90	4.60	2.6	2.4	5.7	3.80	2.90	0.69	3.6	4.3	4.00	3.70
Nitrate	10	(3)	0.38	< 0.10	*< 1	*<1.0	0.29	170	150	*110	67	110	36	32	*43	60	*52	1.2	< 0.50	*< 1	<1.0	*<1.0
Phosphorus	-	-	< 10	< 10	< 2.5	<0.50	<0.50	< 10	< 10	< 2.5	<0.50	<0.50	< 0.50	< 10	< 2.5	<0.50	<0.50	< 0.50	< 2.5	< 2.5	<0.50	<2.5
Sulfate	600	(3)	4100	3600	3600	3700	5100	2400	2100	1800	1400	2200	1600	1400	1600	1600	1600	530	1500	1600	460	620
Carbon Dioxide (CO ₂)	-	-	470	580	580	530	550	380	420	530	540	580	270	280	300	310	340	1400	1200	1100	1100	1100
Alkalinity (CaCO ₃)	-	-	500	620	610	550	550	400	430	520	560	580	290	290	300	330	340	1500	1300	1200	1200	1100
Bicarbonate (CaCO ₃)	-	-	500	620	610	550	550	400	430	520	560	580	290	290	300	330	340	1500	1300	1200	1200	1100

TABLE 6
RCRA Wells Analytical Summary
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			MW-62					MW-63					MW-64					MW-65				
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10	Aug-14	Aug-13	Aug-12	Aug-11	Aug-10
Total Metals (mg/l):																						
Arsenic	0.01	(2)	< 0.020	< 0.020	<0.02	<0.02	0.024	< 0.020	< 0.020	<0.02	<0.02	<0.02	< 0.020	< 0.020	<0.020	<0.02	<0.02	< 0.020	< 0.020	<0.02	<0.02	0.03
Barium	1	(3)	< 0.020	0.31	0.021	0.048	0.032	0.093	0.04	0.110	0.05	0.029	0.11	0.21	0.056	0.26	0.6	0.17	0.07	0.058	0.062	0.076
Cadmium	0.005	(2)	< 0.0020	< 0.0020	<0.002	<0.002	<0.002	< 0.0020	< 0.0020	<0.002	<0.002	<0.002	< 0.0020	< 0.0020	<0.0020	<0.002	<0.002	< 0.0020	< 0.0020	<0.002	<0.002	<0.002
Chromium	0.05	(3)	< 0.0060	0.015	<0.006	<0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	<0.006	< 0.0060	0.0063	<0.0060	0.0094	0.029	< 0.0060	< 0.0060	<0.006	<0.006	<0.006
Lead	0.015	(2)	< 0.0050	0.0097	<0.005	<0.005	<0.005	< 0.0050	< 0.0050	<0.005	<0.005	<0.005	< 0.0050	< 0.0050	<0.0050	<0.005	0.005	< 0.0050	0.0064	<0.005	<0.005	<0.005
Selenium	0.05	(2)	< 0.050	< 0.050	<0.05	<0.05	<0.05	< 0.050	< 0.050	<0.05	<0.05	<0.05	< 0.050	< 0.050	<0.050	<0.05	<0.05	< 0.050	< 0.050	<0.05	<0.05	<0.05
Silver	0.05	(3)	< 0.0050	< 0.0050	<0.005	<0.005	<0.005	< 0.0050	< 0.0050	<0.005	<0.005	<0.005	< 0.0050	< 0.0050	<0.0050	<0.005	<0.005	< 0.0050	< 0.0050	<0.005	<0.005	<0.005
Mercury	0.002	(3)	< 0.00020	< 0.00020	<0.0002	<0.0002	<0.0002	< 0.00020	< 0.00020	<0.0002	<0.0002	<0.0002	< 0.00020	< 0.00020	<0.00020	<0.0002	<0.0002	< 0.00020	< 0.00020	<0.0002	<0.0002	<0.0002
Dissolved Metals (mg/l):																						
Arsenic	0.1	(3)	< 0.020	< 0.010	< 0.001	0.001	<0.02	< 0.020	< 0.020	0.0068	0.0034	<0.02	< 0.020	0.0045	0.0029	0.0046	<0.02	< 0.020	0.023	0.020	0.024	<0.02
Barium	1	(3)	< 0.020	0.013	0.015	0.017	<0.02	< 0.020	0.015	0.017	0.013	<0.02	< 0.020	0.011	0.012	0.012	<0.02	0.17	0.057	0.053	0.069	0.069
Cadmium	0.01	(3)	< 0.0020	< 0.0020	<0.002	<0.002	<0.002	< 0.0020	< 0.0020	<0.002	<0.002	<0.002	< 0.0020	< 0.0020	< 0.0020	<0.002	<0.002	< 0.0020	< 0.0020	<0.002	<0.002	<0.002
Calcium	-	-	440	440	450	430	430	560	550	460	350	430	470	490	490	450	430	250	350	410	170	180
Chromium	0.05	(3)	< 0.0060	< 0.0060	<0.006	<0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	<0.006	< 0.0060	< 0.0060	< 0.0060	<0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	<0.006
Copper	1	(3)	< 0.0060	< 0.010	<0.006	<0.006	<0.006	< 0.0060	< 0.020	<0.006	<0.006	<0.006	< 0.0060	< 0.050	< 0.0060	<0.006	<0.006	< 0.0060	< 0.020	<0.006	<0.006	<0.006
Iron	1	(3)	< 0.020	0.026	0.089	0.97	0.87	0.022	< 0.020	<0.02	<0.02	<0.02	0.045	0.038	0.029	<0.02	0.03	3.4	8.9	12	4.1	6.2
Lead	0.05	(3)	< 0.0050	< 0.0010	< 0.001	< 0.002	<0.005	< 0.0050	< 0.0010	< 0.001	<0.005	<0.005	< 0.0050	< 0.0010	<0.0010	<0.005	<0.005	< 0.0050	< 0.0010	< 0.001	<0.005	<0.005
Magnesium	-	-	39	38	39	39	37	180	180	180	91	150	69	69	75	72	67	73	99	110	52	56
Manganese	0.2	(3)	0.49	1.7	1.8	1.8	1.2	1.4	1.5	2.20	1.7	3.7	< 0.0020	< 0.0020	< 0.0020	<0.002	0.013	2.7	3.7	5.3	3.2	3.5
Mercury	-	-	<0.00020	<0.00020	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020	<0.00020	<0.0002	<0.0002	<0.00020	<0.00020	<0.0002	<0.0002	<0.0002
Potassium	-	-	9.7	9.1	10	11	10	5.7	4.9	4.7	4.4	5	5.4	4.5	4.9	5	4.9	4.3	3.8	4.3	3.6	3.8
Selenium	0.05	(3)	< 0.050	< 0.010	<0.005	<0.006	<0.05	< 0.050	0.057	<0.05	0.031	<0.05	< 0.050	0.029	< 0.050	0.041	<0.05	< 0.050	0.021	< 0.01	0.016	<0.05
Silver	0.05	(3)	< 0.0050	< 0.0050	<0.005	<0.005	<0.005	< 0.0050	< 0.0050	<0.005	<0.005	<0.005	< 0.0050	< 0.0050	< 0.0050	<0.005	<0.005	< 0.0050	< 0.0050	<0.005	<0.005	<0.005
Sodium	-	-	1400	1400	1500	1400	1400	680	650	580	570	660	840	790	890	750	780	650	700	860	530	490
Uranium	0.03	(3)	< 0.10	0.008	0.0075	0.0077	0.0066	< 0.10	0.055	0.067	0.041	0.056	< 0.10	0.017	0.016	0.017	0.0143	< 0.10	0.0073	0.010	0.0077	0.0067
Zinc	10	(3)	< 0.020	< 0.010	0.066	0.075	<0.05	< 0.020	< 0.010	0.17	0.15	<0.05	< 0.020	< 0.010	0.096	0.062	<0.05	< 0.020	< 0.010	0.052	0.026	<0.05
Total Petroleum Hydrocarbons (mg/l):																						
Diesel Range Organics	0.2	(4)	< 0.2	< 0.20	<0.20	<0.20	<0.20	< 0.20	0.71	<0.20	<0.20	<0.20	< 0.20	< 0.20	<0.20	<0.20	<0.20	7.4	5.2	2.3	9.8	9.8
Gasoline Range Organics	-	-	< 0.050	< 0.050	<0.05	<0.050	<0.05	< 0.050	< 0.050	<0.05	<0.05	0.13	< 0.050	< 0.050	<0.05	<0.05	<0.05	21	26	22	40.0	40
Motor Oil Range Organics	-	-	< 2.5	< 2.5	<2.5	<2.5	<2.5	< 2.5	< 2.5	<2.5	<2.5	<2.5	< 2.5	< 2.5	<2.5	<2.5	<2.5	< 2.5	< 2.5	<2.5	<2.5	<2.5

Notes:

(1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water

(2) EPA - Regional Screening Levels (April 2009) - MCL

(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or less

(4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening levels

(5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013. "2014 Background Document for Development of Soil Screening Levels" for analysis beginning in 2014.

-	= No screening level available
*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required and/or well contains separate phase
	= Analytical result exceeds the respective screening level.

TABLE 6
RCRA Wells Analytical Summary
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			MW-67				MW-68				MW-70	
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13
Volatile Organic Compounds (ug/L)												
1,1,1,2-Tetrachloroethane	5.72E+00	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,1,1-Trichloroethane	6.00E+01	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,1,2,2-Tetrachloroethane	1.00E+01	(3)	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0
1,1,2-Trichloroethane	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,1-Dichloroethane	2.50E+01	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,1-Dichloroethene	5.00E+00	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,1-Dichloropropene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,2,3-Trichlorobenzene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,2,3-Trichloropropane	7.47E-03	(5)	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0
1,2,4-Trichlorobenzene	7.00E+01	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,2,4-Trimethylbenzene	1.50E+01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,2-Dibromo-3-chloropropane	2.00E-01	(2)	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0
1,2-Dibromoethane (EDB)	5.00E-02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,2-Dichlorobenzene	6.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,2-Dichloroethane (EDC)	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,2-Dichloropropane	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,3,5-Trimethylbenzene	1.20E+01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,3-Dichlorobenzene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,3-Dichloropropane	7.30E+02	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1,4-Dichlorobenzene	7.50E+01	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
1-Methylnaphthalene	2.30E+00	(1)	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	<4.0
2,2-Dichloropropane	-	-	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0
2-Butanone	5.56E+03	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<10
2-Chlorotoluene	7.30E+02	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
2-Hexanone	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<10
2-Methylnaphthalene	1.50E+02	(1)	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	<4.0
4-Chlorotoluene	2.60E+03	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
4-Isopropyltoluene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
4-Methyl-2-pentanone	-	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<10
Acetone	1.41E+04	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<10
Benzene	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Bromobenzene	2.00E+01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Bromodichloromethane	1.34E+00	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Bromoform	8.50E+00	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Bromomethane	7.54E+00	(5)	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	<3.0
Carbon disulfide	8.10E+02	(5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<10
Carbon Tetrachloride	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Chlorobenzene	1.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Chloroethane	-	-	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0
Chloroform	1.00E+02	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Chloromethane	2.03E+01	(5)	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	<3.0
cis-1,2-DCE	7.00E+01	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
cis-1,3-Dichloropropene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Dibromochloromethane	1.68E+00	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Dibromomethane	3.70E+02	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Dichlorodifluoromethane	1.97E+02	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Ethylbenzene	7.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Hexachlorobutadiene	8.60E-01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Isopropylbenzene	4.47E+02	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0

TABLE 6
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			MW-67				MW-68				MW-70	
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13
Methyl tert-butyl ether (MTBE)	1.43E+02	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Methylene Chloride	5.00E+00	(2)	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	<3.0
Naphthalene	1.65E+00	(5)	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0
n-Butylbenzene	-	-	< 3.0	< 3.0	< 1.0	< 1.0	< 3.0	< 3.0	< 1.0	< 1.0	< 3.0	<3.0
n-Propylbenzene	-	-	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	<1.0
sec-Butylbenzene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Styrene	1.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
tert-Butylbenzene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Tetrachloroethene (PCE)	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Toluene	7.50E+02	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
trans-1,2-DCE	1.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
trans-1,3-Dichloropropene	4.30E-01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Trichloroethene (TCE)	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Trichlorofluoromethane	1.14E+03	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Vinyl chloride	1.00E+00	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0
Xylenes, Total	6.20E+02	(3)	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	<1.5
Semi Volatile Organic Compounds (ug/l):												
1,2,4-Trichlorobenzene	7.00E+01	(2)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
1,2-Dichlorobenzene	6.00E+02	(2)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
1,3-Dichlorobenzene	-	-	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
1,4-Dichlorobenzene	7.50E+01	(2)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
1-Methylnaphthalene	2.30E+00	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
2,4,5-Trichlorophenol	1.17E+03	(5)	< 11	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 12	<10
2,4,6-Trichlorophenol	1.19E+01	(5)	< 11	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 12	<10
2,4-Dichlorophenol	4.53E+01	(5)	< 23	< 20	< 20	< 20	< 22	< 20	< 20	< 20	< 25	<20
2,4-Dimethylphenol	3.54E+02	(5)	< 11	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 12	<10
2,4-Dinitrophenol	3.88E+01	(5)	< 23	< 20	< 20	< 20	< 22	< 20	< 20	< 20	< 25	<20
2,4-Dinitrotoluene	2.37E+00	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
2,6-Dinitrotoluene	3.70E+01	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
2-Chloronaphthalene	2.90E+03	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
2-Chlorophenol	9.10E+01	(5)	< 11	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 12	<10
2-Methylnaphthalene	1.50E+02	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
2-Methylphenol	1.80E+03	(1)	< 23	< 10	< 10	< 10	< 22	< 10	< 10	< 10	< 25	<10
2-Nitroaniline	1.10E+02	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
2-Nitrophenol	-	-	< 11	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 12	<10
3,3'-Dichlorobenzidine	1.50E-01	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
3+4-Methylphenol	1.80E+02	(1)	< 11	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 12	<10
3-Nitroaniline	-	-	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
4,6-Dinitro-2-methylphenol	-	-	< 23	< 20	< 20	< 20	< 22	< 20	< 20	< 20	< 25	<20
4-Bromophenyl phenyl ether	-	-	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
4-Chloro-3-methylphenol	-	-	< 11	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 12	<10
4-Chloroaniline	3.40E-01	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
4-Chlorophenyl phenyl ether	-	-	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
4-Nitroaniline	3.40E+00	(1)	< 11	< 10	< 20	< 20	< 10	< 10	< 20	< 20	< 12	<10
4-Nitrophenol	-	-	< 11	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 12	<10
Acenaphthene	5.35E+02	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Acenaphthylene	-	-	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Aniline	1.20E+01	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Anthracene	1.72E+03	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Azobenzene	1.20E-01	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10

TABLE 6
RCRA Wells Analytical Summary
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			MW-67				MW-68				MW-70	
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13
Benzo(a)anthracene	3.43E-01	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Benzo(a)pyrene	2.00E-01	(2)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Benzo(b)fluoranthene	3.43E-01	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Benzo(g,h,i)perylene	-	-	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Benzo(k)fluoranthene	3.43E+00	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Benzoic acid	1.50E+05	(1)	< 23	< 40	< 20	< 20	< 20	< 40	< 20	< 20	< 25	<20
Benzyl alcohol	1.80E+04	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Bis(2-chloroethoxy)methane	1.10E+02	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Bis(2-chloroethyl)ether	1.36E-01	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Bis(2-chloroisopropyl)ether	9.76E+00	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Bis(2-ethylhexyl)phthalate	6.00E+00	(2)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Butyl benzyl phthalate	3.50E+01	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Carbazole	-	-	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Chrysene	3.43E+01	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Dibenz(a,h)anthracene	1.06E-01	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Dibenzofuran	-	-	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Diethyl phthalate	1.48E+04	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Dimethyl phthalate	5.56E+01	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Di-n-butyl phthalate	8.85E+02	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Di-n-octyl phthalate	-	-	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Fluoranthene	8.02E+02	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Fluorene	2.88E+02	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Hexachlorobenzene	1.00E+00	(2)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Hexachlorobutadiene	8.60E-01	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Hexachlorocyclopentadiene	5.00E+01	(2)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Hexachloroethane	6.80E+00	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Indeno(1,2,3-cd)pyrene	2.90E-02	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Isophorone	7.79E+02	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Naphthalene	1.65E+00	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Nitrobenzene	1.40E+00	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
N-Nitrosodimethylamine	4.90E-03	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
N-Nitrosodi-n-propylamine	9.60E-03	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
N-Nitrosodiphenylamine	1.21E+02	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Pentachlorophenol	1.00E+00	(2)	< 23	< 20	< 20	< 20	< 22	< 20	< 20	< 20	< 25	<20
Phenanthrene	1.70E+02	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Phenol	5.00E+00	(3)	< 11	< 10	< 10	< 10	< 11	< 10	< 10	< 10	< 12	<10
Pyrene	1.17E+02	(5)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
Pyridine	3.70E+01	(1)	< 11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 12	<10
General Chemistry (mg/l):												
Fluoride	1.6	(3)	0.63	0.92	0.77	0.82	0.45	0.47	< 0.5	0.41	0.69	0.91
Chloride	250	(3)	12	15	6.5	22	34	43	62	72	440	360
Nitrite	1	(2)	2.7	< 0.10	*5.5	<0.10	< 0.10	< 0.10	*6	<0.10	< 0.10	<1.0
Bromide	-	-	0.11	0.11	< 0.5	0.16	0.23	0.25	< 0.5	0.25	0.99	---
Nitrate	10	(3)	2.7	3.7	*5.5	4.30	8.6	8.2	*6	6.70	< 0.10	<1.0
Phosphorus	-	-	< 0.50	< 0.50	< 2.5	<0.50	< 0.50	< 0.50	< 2.5	<0.50	< 0.50	---
Sulfate	600	(3)	210	140	200.0	190	300	250	280	470	2500	---
Carbon Dioxide (CO ₂)	-	-	380	340	460	360	200	190	190	190	730	---
Alkalinity (CaCO ₃)	-	-	410	370	470	390	220	210	200	210	780	850
Bicarbonate (CaCO ₃)	-	-	410	370	470	390	220	210	200	210	780	850

TABLE 6
RCRA Wells Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

			MW-67				MW-68				MW-70	
			Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13	Aug-12	Aug-11	Aug-14	Aug-13
Total Metals (mg/l):												
Arsenic	0.01	(2)	< 0.020	< 0.020	<0.02	<0.02	< 0.020	< 0.020	<0.02	<0.02	< 0.020	0.0098
Barium	1	(3)	0.047	0.049	0.052	0.051	0.16	0.039	0.065	0.065	0.22	0.17
Cadmium	0.005	(2)	< 0.0020	< 0.0020	<0.002	<0.002	< 0.0020	< 0.0020	<0.002	<0.002	< 0.0020	<0.0020
Chromium	0.05	(3)	< 0.0060	< 0.0060	<0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	0.008	<0.0060
Lead	0.015	(2)	0.0058	< 0.025	<0.005	<0.005	< 0.0050	< 0.0050	<0.005	<0.005	< 0.0050	0.0073
Selenium	0.05	(2)	< 0.050	< 0.050	<0.05	<0.05	< 0.050	< 0.050	<0.05	<0.05	< 0.050	0.011
Silver	0.05	(3)	< 0.0050	< 0.0050	<0.005	<0.005	< 0.0050	< 0.025	<0.005	<0.005	< 0.0050	0.028
Mercury	0.002	(3)	< 0.00020	< 0.00020	<0.0002	<0.0002	< 0.00020	< 0.00020	<0.0002	<0.0002	< 0.00020	<0.00020
Dissolved Metals (mg/l):												
Arsenic	0.1	(3)	< 0.020	< 0.0010	<0.001	<0.0010	< 0.020	< 0.0010	<0.001	<0.0010	< 0.020	---
Barium	1	(3)	0.034	0.035	0.040	0.034	< 0.020	0.019	0.022	0.026	< 0.020	---
Cadmium	0.01	(3)	< 0.0020	< 0.0020	<0.002	<0.002	< 0.0020	< 0.0020	<0.002	<0.002	< 0.0020	---
Calcium	-	-	130	120	160	120	90	90	88	100	600	---
Chromium	0.05	(3)	< 0.0060	< 0.0060	<0.006	<0.006	< 0.0060	< 0.0060	<0.006	<0.006	< 0.0060	---
Copper	1	(3)	< 0.0060	0.0029	<0.006	<0.006	< 0.0060	0.004	<0.006	<0.006	< 0.0060	0.0170
Iron	1	(3)	< 0.020	< 0.020	<0.02	<0.02	0.031	< 0.020	<0.02	<0.02	18	31.0
Lead	0.05	(3)	< 0.0050	< 0.0010	<0.001	<0.005	< 0.0050	< 0.0010	<0.001	<0.005	< 0.0050	---
Magnesium	-	-	25	23	33	27	24	22	22	25	170	---
Manganese	0.2	(3)	0.088	0.068	0.170	0.45	0.059	0.045	0.120	0.21	3.0	4.900
Mercury	-	-	<0.00020	<0.00020	<0.0002	<0.0002	<0.00020	<0.00020	<0.0002	<0.0002	<0.00020	<0.00020
Potassium	-	-	3.2	3.4	3.3	3.4	3	3.5	3.0	3.1	5.0	4.7
Selenium	0.05	(3)	< 0.050	0.0037	0.0018	0.0035	< 0.050	0.0038	0.0035	0.0048	< 0.050	---
Silver	0.05	(3)	< 0.0050	< 0.025	<0.005	<0.005	< 0.0050	< 0.025	<0.005	<0.005	< 0.0050	---
Sodium	-	-	55	67	90	100	120	110	110	130	720	720
Uranium	0.03	(3)	< 0.10	0.0064	0.0077	0.0083	< 0.10	0.0057	0.0039	0.0052	< 0.50	0.0070
Zinc	10	(3)	< 0.020	< 0.010	0.062	0.074	< 0.020	< 0.010	0.011	0.27	< 0.020	---
Total Petroleum Hydrocarbons (mg/l):												
Diesel Range Organics	0.2	(4)	0.64	< 0.20	< 0.2	0.26	< 0.20	< 0.20	<0.20	<0.20	< 0.20	<1.0
Gasoline Range Organics	-	-	< 0.050	< 0.050	0.053	<0.05	< 0.050	< 0.050	<0.05	<0.05	< 0.050	<0.050
Motor Oil Range Organics	-	-	< 2.5	< 2.5	<2.5	<2.5	< 2.5	< 2.5	<2.5	<2.5	< 2.5	<5.0

Notes:

- (1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water
(2) EPA - Regional Screening Levels (April 2009) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or less
(4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening levels
(5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013.
"2014 Background Document for Development of Soil Screening Levels" for analysis beginning in 2014.

-	= No screening level available
*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required and/or well contains separate phase
	= Analytical result exceeds the respective screening level.

TABLE 7
Collection and Observation Wells Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

			CW 0+60							CW 25+95							OW 0+60													
			Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11				
Volatile Organic Compounds (mg/l)																														
Benzene	0.005	(2)	0.002	0.0056	0.071	0.014	0.0079	0.014	<0.001	0.019	0.33	0.280	0.210	0.81	2.000	2.2	3.6	6.7	<0.001	---	---	---	---	---	---	---				
Toluene	0.750	(3)	<0.001	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	<0.001	<0.050	<0.010	<0.010	<0.010	0.013	0.022	0.16	0.16	<0.001	---	---	---	---	---	---	---				
Ethylbenzene	0.700	(2)	0.0018	<0.001	0.0029	<0.010	0.0043	0.0028	0.003	0.0016	<0.050	<0.010	<0.010	0.045	0.120	0.41	0.58	0.8	<0.001	---	---	---	---	---	---	---				
Xylene	0.620	(3)	<0.0015	<0.0015	<0.002	<0.020	<0.002	<0.002	<0.002	<0.003	<0.075	<0.0015	<0.010	<0.010	0.023	0.042	0.33	0.32	<0.0015	---	---	---	---	---	---	---				
MTBE	0.143	(5)	<0.001	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	<0.001	<0.050	<0.010	<0.020	<0.020	<0.010	<0.010	<0.002	<0.005	<0.001	---	---	---	---	---	---	---				
Total Petroleum Hydrocarbons (mg/l):																														
Diesel Range Organics	0.2	(4)	0.74	1.7	1.3	1.7	0.34	0.76	0.77	2.8	0.24	<0.20	<0.20	0.23	<0.2	0.23	0.31	0.31	1.5	---	---	---	---	---	---	---				
Gasoline Range Organics	-	-	2.9	---	---	---	---	1.1	1.90	---	0.80	---	---	---	6.1	16	---	---	0.23	---	---	---	---	---	---	---				
Motor Oil Range Organics	-	-	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	---	---	---	---	---	---	---				
			OW 1+50							OW 3+85							OW 5+50													
			Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11				
Volatile Organic Compounds (mg/l)																														
Benzene	0.005	(2)	---	---	---	---	---	---	---	---	---	<0.010	---	<0.010	---	---	---	---	---	---	---	---	---	---	---	---				
Toluene	0.750	(3)	---	---	---	---	---	---	---	---	---	<0.010	---	<0.010	---	---	---	---	---	---	---	---	---	---	---	---				
Ethylbenzene	0.700	(2)	---	---	---	---	---	---	---	---	---	0.025	---	0.039	---	---	---	---	---	---	---	---	---	---	---	---				
Xylene	0.620	(3)	---	---	---	---	---	---	---	---	---	<0.0015	---	<0.020	---	---	---	---	---	---	---	---	---	---	---	---				
MTBE	0.143	(5)	---	---	---	---	---	---	---	---	---	<0.010	---	<0.010	---	---	---	---	---	---	---	---	---	---	---	---				
Total Petroleum Hydrocarbons (mg/l):																														
Diesel Range Organics	0.2	(4)	---	---	---	---	---	---	---	---	---	110	---	43	---	---	---	---	---	---	---	---	---	---	---	---				
Gasoline Range Organics	-	-	---	---	---	---	---	---	---	---	---	5.0	---	7.7	---	---	---	---	---	---	---	---	---	---	---	---				
Motor Oil Range Organics	-	-	---	---	---	---	---	---	---	---	---	<25	---	5.1	---	---	---	---	---	---	---	---	---	---	---	---				
			OW 6+70							OW 8+10							OW 11+15													
			Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11				
Volatile Organic Compounds (mg/l)																														
Benzene	0.005	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.84	---	---	---	---	---	0.22	---				
Toluene	0.750	(3)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.010	---	---	---	---	---	<0.01	---				
Ethylbenzene	0.700	(2)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.010	---	---	---	---	---	<0.01	---				
Xylene	0.620	(3)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.015	---	---	---	---	---	<0.03	---				
MTBE	0.143	(5)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.87	---	---	---	---	---	0.69	---				
Total Petroleum Hydrocarbons (mg/l):																														
Diesel Range Organics	0.2	(4)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	34	---	---	---	---	---	33	---				
Gasoline Range Organics	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3.7	---	---	---	---	---	2.8	---				
Motor Oil Range Organics	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<2.5	---	---	---	---	---	<2.5	---				
			OW 14+10							OW 16+60							OW 19+50													
			Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11				
Volatile Organic Compounds (mg/l)																														
Benzene	0.005	(2)	---	---	---	---	---	---	---	---	<0.005	<0.002	<0.010	<0.01	0.017	0.022	0.082	0.079	---	---	---	---	---	---	---	---				
Toluene	0.750	(3)	---	---	---	---	---	---	---	---	<0.005	<0.002	<0.010	<0.01	<0.01	<0.01	<0.01	<0.010	---	---	---	---	---	---	---					
Ethylbenzene	0.700	(2)	---	---	---	---	---	---	---	---	0.0056	0.082	0.011	0.014	0.027	0.026	0.045	0.044	---	---	---	---	---	---	---					
Xylene	0.620	(3)	---	---	---	---	---	---	---	---	<0.0075	<0.003	<0.02	<0.02	<0.02	<0.02	0.058	<0.003	---	---	---	---	---	---	---					
MTBE	0.143	(5)	---	---	---	---	---	---	---	---	0.73	0.660	0.70	0.81	0.610	0.530	0.81	1.1	---	---	---	---	---	---	---					
Total Petroleum Hydrocarbons (mg/l):																														
Diesel Range Organics	0.2	(4)	---	---	---	---	---	---	---	---	35	40	7.5	3.5	110	22.0	20	65	---	---	---	---	---	---	---	---				
Gasoline Range Organics	-	-	---	---	---	---	---	---	---	---	2.7	2.9	1.8	2.2	4.1	3.8	4.8	7.8	---	---	---	---	---	---	---	---				
Motor Oil Range Organics	-	-	---	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	<2.5	<25	<2.5	<2.5	<2.5	---	---	---	---	---	---	---					
			OW 22+00							OW 23+10							OW 23+90													
			Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	12-Aug	Apr-12	Aug-11	Apr-11				
Volatile Organic Compounds (mg/l)																														
Benzene	0.005	(2)	<0.001	<0.001	<0.001	<0.001	---	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0012	<0.001	<0.001	<0.001	0.003				
Toluene	0.750	(3)	<0.001	<0.001	<0.001	<0.001	---	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001					
Ethylbenzene	0.700	(2)	<0.001	<0.001	<0.001	<0.001	---	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001					
Xylene	0.620	(3)	<0.0015	<0.0015	<0.002	<0.002	---	<0.002	<0.002	<0.003	<0.0015	<0.0015	<0.002	<0.002	<0.002	<0.002	<0.002	<0.003	<0.0015	<0.0015	<0.002	<0.002	<0.002	<0.002	<0.003					
MTBE	0.143	(5)	0.0017	<0.001	0.02	0.023	---	0.051	0.17	0.061	<0.001	<0.001	0.001	<0.001	0.002	<0.001	0.0032	0.0015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001					
Total Petroleum Hydrocarbons (mg/l):																														
Diesel Range Organics	0.2	(4)	<0.20	<0.20	0.60	<0.20	---	<0.2	0.36	<0.20	2.1	1.0	1.2	<0.20	<0.2	<0.2	<0.20	0.63	<0.20	<0.20	0.32	0.71	<0.2	<0.2	<0.20	<0.20				
Gasoline Range Organics	-	-	<0.050	<0.050	<0.050	<0.050	---	0.09	0.25	0.11	0.16	0.15	0.28	0.19	0.35	0.17	0.25	0.31	<0.050	<0.050	0.091	<0.05	0.31	<0.05	0.34	0.11				
Motor Oil Range Organics	-	-	<2.5	<2.5	<2.5	<2.5	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5					
			OW 25+70							Notes: (1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels, Tap Water (2) EPA - Regional Screening Levels (April 2009) - MCL (3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or less (4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening levels (5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013. "2014 Background Document for Development of Soil Screening Levels" for analysis beginning in 2014.																				
			Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11																		Apr-11			
Volatile Organic Compounds (mg/l)																														
Benzene	0.005	(2)	<0.001	<0.001	<0.001	<0.001	<0.001	0.11	4.4																					
Toluene	0.750	(3)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	<0.1																					
Ethylbenzene	0.700	(2)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	0.3																					
Xylene	0.620	(3)	<0.0015	<0.0015	<0.002	<0.002	<0.002	<0.040	<0.3																					
MTBE	0.143	(5)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	<0.1																					
Total Petroleum Hydrocarbons (mg/l):																														
Diesel Range Organics	0.2	(4)	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	0.4																					
Gasoline Range Organics	-	-	0.14	0.20	0.083	0.11	0.21	0.24	0.85	12																				
Motor																														

TABLE 8
Outfalls Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

			East Outfall #2								East Outfall #3							
			Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11
Volatile Organic Compounds (mg/L)																		
Benzene	0.005	(2)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Toluene	0.75	(3)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Ethylbenzene	0.7	(2)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Xylene	0.62	(3)	<0.002	<0.0015	<0.002	<0.002	<0.002	<0.002	<0.003	<0.002	<0.002	<0.0015	<0.002	<0.002	<0.002	<0.002	<0.003	<0.002
MTBE	0.125	(5)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0015	<0.001
General Chemistry (mg/l):																		
Fluoride	1.6	(3)	0.50	0.56	0.57	0.51	0.22	0.55	<0.50	0.57	0.19	0.39	<0.50	0.39	0.2	0.41	0.22	0.42
Chloride	250	(3)	9.2	7.6	15	8.1	2.5	8.7	3.80	11.00	3.3	13	4.0	12	2.8	16.0	3.10	21.00
Nitrite	1	(2)	< 0.10	< 0.10	2.5	< 0.10*	< 0.10	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10	24.0	1.6*	< 0.1	< 0.1	< 0.10	< 0.10
Bromide	-	-	0.11	0.10	< 0.10	< 0.10	< 0.10	< 0.1	< 0.10	0.21	< 0.10	0.11	< 0.50	< 0.10	< 0.1	0.14	< 0.10	0.15
Nitrate	10	(3)	0.37	3.7	2.5	< 0.10*	< 0.10	0.54	< 0.50	1.40	0.12	3.3	24.0	1.6*	0.13	2.8	< 0.10	3.20
Phosphorus	-	-	< 0.50	< 0.50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.5	< 0.5	< 0.50	< 0.50
Sulfate	600	(3)	98	77	77	74	46	71	46.00	76.00	43	120	56.0	93	46	120	51	170
Carbon Dioxide (CO ₂)	-	-	320	320	310	320	91	330	93	350	86	330	110.0	290	80	310	86	300
Alkalinity (CaCO ₃)	-	-	350	340	330	340	100	360	100	390	95	350	120	300	89	340	96	330
Bicarbonate (CaCO ₃)	-	-	350	340	330	340	100	360	100	390	95	350	120	300	89	340	96	330
Total Metals (mg/l):																		
Arsenic	0.01	(2)	< 0.020	< 0.020	< 0.020	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.020	< 0.020	< 0.020	< 0.020	< 0.02	< 0.02	< 0.02	< 0.02
Barium	1	(3)	0.19	0.080	0.084	0.16	0.05	0.15	0.012	0.085	0.073	0.06	0.068	0.064	0.062	0.057	0.069	0.058
Cadmium	0.005	(2)	< 0.0020	< 0.0020	< 0.0020	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.002	< 0.002	< 0.002
Chromium	0.05	(3)	0.0072	< 0.0060	< 0.0060	< 0.006	< 0.006	0.0061	< 0.006	< 0.006	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.006	< 0.006	< 0.006
Lead	0.015	(2)	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	0.0056	< 0.005	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005
Selenium	0.05	(2)	< 0.050	< 0.050	< 0.050	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.05	< 0.05	< 0.05
Silver	0.05	(3)	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005
Mercury	0.002	(3)	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002
Dissolved Metals (mg/l):																		
Arsenic	0.1	(3)	< 0.020	< 0.020	< 0.020	0.0014	< 0.001	< 0.001	< 0.02	< 0.001	< 0.020	< 0.020	< 0.020	< 0.0010	< 0.0010	< 0.0010	< 0.02	< 0.0010
Barium	1	(3)	0.089	0.079	0.081	0.11	0.047	0.100	0.064	0.085	0.071	0.060	0.063	0.060	0.053	0.060	0.066	0.059
Cadmium	0.01	(3)	< 0.0020	< 0.0020	< 0.0020	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.002	< 0.002	< 0.002
Calcium	-	-	100	94	87	92	34	84	36	100	35	110	39	86	32	90	37	110
Chromium	0.05	(3)	< 0.0060	< 0.0060	< 0.0060	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.006	< 0.006	< 0.006
Copper	1	(3)	< 0.0060	< 0.0060	< 0.0060	< 0.006	< 0.006	< 0.006	< 0.006	< 0.030	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.006	< 0.006	< 0.030
Iron	1	(3)	< 0.020	< 0.020	< 0.020	0.076	0.082	0.17	< 0.02	< 0.02	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.02	< 0.02	< 0.02
Lead	0.05	(3)	< 0.0050	< 0.0050	< 0.0050	< 0.001	< 0.005	< 0.001	< 0.005	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0010	< 0.0050	< 0.001	< 0.005	< 0.005
Magnesium	-	-	22	20	20	19	6.1	18	6.8	22	6.1	21	7.1	17	5.7	18	6.8	23
Manganese	0.2	(3)	< 0.0020	0.0053	0.010	0.072	0.029	0.045	0.014	0.0032	< 0.0022	< 0.0020	< 0.0020	< 0.010	< 0.010	< 0.002	0.0025	< 0.002
Mercury	-	-	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002
Potassium	-	-	1.7	1.3	1.8	2.0	1.2	1.6	1.5	1.9	1.9	1.9	1.6	2.2	1.5	1.6	1.7	2.1
Selenium	0.05	(3)	< 0.050	< 0.050	< 0.050	0.0016	< 0.001	0.0013	< 0.05	0.0031	< 0.050	< 0.050	< 0.050	0.0028	< 0.0010	0.0035	< 0.05	0.0054
Silver	0.05	(3)	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.005	< 0.005	< 0.005
Sodium	-	-	60	54	59	55	16	66	17	62	17	68	21	60	15.0	64	17	82
Uranium	0.03	(3)	< 0.10	< 0.10	< 0.10	---	< 0.001	0.0045	0.001	0.0049	< 0.10	< 0.10	< 0.10	0.0034	< 0.0010	0.0046	< 0.001	0.0045
Zinc	10	(3)	< 0.020	< 0.020	< 0.020	< 0.01	0.012	0.13	0.18	< 0.05	< 0.020	0.034	< 0.020	< 0.010	0.024	0.02	0.075	< 0.010

Notes:
(1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels Tap Water.
(2) EPA - Regional Screening Levels (April 2009) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or
(4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening levels
(5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013. "2014 Background Document for Development of Soil Screening Levels" for analysis beginning in 2014.

-	= No screening level available
*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required and/or well contains separate phase
	= Analytical result exceeds the respective screening level.

TABLE 9
Seeps Analytical Summary - 2014 Groundwater Remediation Monitoring Annual Report

			Seep #1								Seep #2					Seep #3								
			Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Aug-13	Aug-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	
Volatile Organic Compounds (mg/l):																								
Benzene	0.005	(2)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	---	<0.001	---	---	<0.005	---	---	<0.001	<0.001	---	<0.001	---	<0.005	
Toluene	0.750	(3)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	---	<0.001	---	---	<0.005	---	---	<0.001	<0.001	---	<0.001	---	<0.005	
Ethylbenzene	0.700	(2)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	---	<0.001	---	---	<0.005	---	---	<0.001	<0.001	---	<0.001	---	<0.005	
Xylene	0.620	(3)	<0.002	<0.0015	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	---	<0.002	---	---	<0.01	---	---	<0.002	<0.002	---	<0.002	---	<0.01	
MTBE	0.125	(5)	<0.001	0.066	<0.001	0.047	<0.001	0.027	<0.001	0.062	---	<0.001	---	---	<0.005	---	---	<0.001	0.0017	---	0.0037	---	0.013	
General Chemistry (mg/l):																								
Fluoride	1.6	(3)	0.23	0.30	<1.0	< 0.50	0.22	0.17	0.43	0.49	---	0.57	---	---	1.4	---	---	<0.50	< 0.50	---	0.14	---	0.39	
Chloride	250	(3)	230	150	190	220	310	190	380	230	---	15	---	---	890	---	---	4.0	220	---	220	---	280	
Nitrite	1.0	(2)	< 0.10	< 0.10	<1.0	< 0.50	<0.10	<0.1	<2.0	<0.10	---	2.5*	---	---	<2.0	---	---	24*	< 0.50	---	<0.10	---	<2.0	
Bromide	-	-	2.7	1.9	2.3	2.1	2.8	1.7	2.70	1.70	---	<0.10	---	---	9.40	---	---	<0.50	2.2	---	1.9	---	2.00	
Nitrate	10	(3)	< 0.10	< 0.1	<1.0	< 0.50	<0.10	<0.1	<2.0	<2.0	---	2.5*	---	---	2.60	---	---	24*	< 0.50	---	<0.10	---	<0.10	
Phosphorus	-	-	< 10	< 0.50	<5.0	< 2.5	<10	<0.5	<0.50	<0.50	---	<0.50	---	---	<0.50	---	---	<2.5	< 10	---	<10.0	---	<0.50	
Sulfate	600	(6)	1600	1200	1200	1700	1600	1700	1900	1700	---	77	---	---	7300	---	---	56	2000	---	2100	---	50	
Carbon Dioxide (CO ₂)	-	-	350	390	250	430	220	360	250	400	---	310	---	---	150	---	---	110	320	---	290	---	360	
Alkalinity (CaCO ₃)	-	-	380	430	280	470	250	400	280	440	---	330	---	---	170	---	---	120	360	---	330	---	400	
Bicarbonate (CaCO ₃)	-	-	380	430	280	470	250	400	280	440	---	330	---	---	170	---	---	120	360	---	330	---	400	

			Seep #6								Seep #9			
			Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Apr-14	Apr-13	Apr-12	Apr-11
Volatile Organic Compounds (mg/l):														
Benzene	0.005	(2)	---	<0.001	<0.001	<0.001	---	<0.001	---	<0.005	<0.001	<0.001	<0.001	<0.005
Toluene	0.750	(3)	---	<0.001	<0.001	<0.001	---	<0.001	---	<0.005	<0.001	<0.001	<0.001	<0.005
Ethylbenzene	0.700	(2)	---	<0.001	<0.001	<0.001	---	<0.001	---	<0.005	<0.001	<0.001	<0.001	<0.005
Xylene	0.620	(3)	---	<0.0015	<0.002	<0.002	---	<0.002	---	<0.01	<0.0015	<0.002	<0.002	<0.01
MTBE	0.125	(5)	---	0.0058	<0.001	0.0019	---	0.0026	---	0.007	0.024	0.07	0.071	0.039
General Chemistry (mg/l):														
Fluoride	1.6	(3)	---	< 0.10	<1.0	< 0.50	---	<2.0	---	<0.50	0.50	< 0.50	0.26	0.36
Chloride	250	(3)	---	1600	8700	2500	---	3000	---	2800	550	600	680	660
Nitrite	1.0	(2)	---	< 2.0	<10	< 0.50	---	<0.1	---	<2.0	< 2.0	< 0.50	<2.0	<2.0
Bromide	-	-	---	< 2.0	5.6	1.8	---	<2.0	---	1.4	2.0	2.0	1.6	1.40
Nitrate	10	(3)	---	< 0.10	<1.0	< 0.50	---	<0.1	---	<0.10	< 0.10	< 0.50	<0.10	<0.10
Phosphorus	-	-	---	< 0.50	<5.0	< 2.5	---	<10.0	---	<0.50	< 10	< 2.5	<10	<0.50
Sulfate	600	(6)	---	1500	2800	1600	---	2100	---	1400	2000	2000	2400	2100
Carbon Dioxide (CO ₂)	-	-	---	390	150	300	---	320	---	320	290	340	320	360
Alkalinity (CaCO ₃)	-	-	---	420	160	330	---	350	---	350	320	360	320	390
Bicarbonate (CaCO ₃)	-	-	---	420	160	330	---	350	---	350	320	360	320	390

Notes:
(1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water
(2) EPA - Regional Screening Levels (April 2009) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS
(4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific
(5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013. "2014 Background Document for Development of Soil Screening Levels" for analysis beginning in 2014.

*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
-	= No screening level available
---	= Analysis not required and/or no water present
	= Analytical result exceeds the respective screening level.

TABLE 10
San Juan River Terrace: San Juan River Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

			North of MW-46								North of MW-45							
			Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11
Volatile Organic Compounds (mg/l)																		
Benzene	0.005	(2)	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001
Toluene	0.750	(3)	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001
Ethylbenzene	0.700	(2)	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001
Xylene	0.620	(3)	<0.002	<0.0015	<0.002	<0.002	<0.002	<0.002	<0.003	<0.003	<0.002	<0.0015	<0.002	<0.002	<0.002	<0.002	<0.003	<0.003
MTBE	0.012	(5)	<0.001	<0.001	<0.004	<0.001	<0.001	<0.001	<0.0015	<0.0015	<0.001	<0.001	<0.004	<0.001	<0.001	<0.001	<0.0015	<0.0015
Total Petroleum Hydrocarbons (mg/l):																		
Diesel Range Organics	0.2	(4)	< 0.20	< 0.20	< 0.20	< 0.20	< 0.2	<0.2	<0.2	<0.2	< 0.20	< 0.02	< 0.20	<0.2	<0.2	<0.2	<0.2	<0.2
Gasoline Range Organics	-	-	< 0.050	< 0.050	<0.10	< 0.05	< 0.05	<0.050	<2.5	<2.5	< 0.050	< 0.050	<0.10	<0.05	<0.05	<0.050	<0.050	<0.050
Motor Oil Range Organics	-	-	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	<2.5	<0.050	<0.050	< 2.5	< 2.5	< 2.5	<2.5	<2.5	<2.5	<2.5	<2.5
General Chemistry (mg/l):																		
Fluoride	1.6	(3)	0.18	0.20	<0.50	0.17	0.16	0.17	0.16	0.19	0.18	0.20	<0.50	0.17	0.16	0.19	0.17	0.19
Chloride	250	(3)	3.2	3.8	3.4	4.3	2.5	2.7	2.60	3.00	3.2	3.8	3.2	3.7	2.5	2.70	2.80	2.90
Nitrite	1.0	(2)	< 1.0	< 0.10	<0.50	< 0.10	< 0.1	<0.10	<0.10	<0.10	< 1.0	< 0.10	<0.50	< 1.0*	< 0.1	<0.10	<0.10	<0.10
Bromide	-	-	< 0.10	< 0.10	<0.50	< 0.10	< 0.1	<0.10	<0.10	<0.10	< 0.10	< 0.10	<0.50	< 0.10	< 0.1	<0.10	<0.10	<0.10
Nitrate	10	(3)	< 1.0	< 0.10	<0.50	< 0.10	< 0.1	<0.10	<0.10	0.14	< 1.0	< 0.10	<0.50	< 1.0*	< 0.1	<0.10	<0.10	<0.10
Phosphorus	-	-	< 0.50	< 0.50	<2.5	< 0.50	< 0.5	<0.50	<0.50	<0.50	< 0.50	< 0.50	<2.5	< 0.50	<0.5	<0.50	<0.50	<0.50
Sulfate	600	-3	58	87	69	73	47	60	49	66	59	92	69	71	46	61	51	65
Carbon Dioxide (CO2)	-	-	---	89	---	83	74	76	---	87	---	89	---	83	74	76	---	84
Alkalinity (CaCO3)	-	-	95	100	96	93	83	86	---	87	95	100	96	93	83	85	---	88
Total Dissolved Solids	1000	(3)	260	262	390	235	189	187	---	198	345	259	440	233	197	187	---	186
Electric Conductivity	-	-	330	390	350	350	280	320	---	330	340	380	350	350	280	320	---	330
Total Metals (mg/l):																		
Arsenic	0.01	(2)	< 0.020	< 0.020	<0.10	< 0.020	< 0.02	<0.020	<0.020	<0.020	< 0.020	< 0.020	<0.10	< 0.020	< 0.02	<0.020	<0.020	<0.020
Barium	1.0	(3)	0.17	0.090	2.0	0.084	0.087	0.063	0.17	0.076	0.18	0.086	2.2	0.081	0.11	0.06	0.12	0.076
Cadmium	0.005	(2)	< 0.0020	< 0.0020	<0.010	< 0.0020	< 0.002	<0.002	<0.002	<0.002	< 0.0020	< 0.0020	<0.010	< 0.0020	< 0.002	<0.002	<0.002	<0.002
Chromium	0.05	(3)	0.0060	< 0.0060	0.26	< 0.0060	< 0.006	<0.006	<0.006	<0.006	< 0.0060	< 0.0060	0.28	< 0.0060	< 0.006	<0.006	<0.006	<0.006
Lead	0.015	(2)	< 0.0050	< 0.0050	0.059	< 0.0050	< 0.005	<0.005	<0.005	<0.005	< 0.0050	< 0.0050	0.050	< 0.0050	< 0.005	<0.005	<0.005	<0.005
Selenium	0.05	(2)	< 0.050	< 0.050	<0.25	< 0.050	<0.05	<0.050	<0.050	<0.050	< 0.050	< 0.050	<0.25	< 0.050	< 0.05	<0.050	<0.005	<0.050
Silver	0.05	(3)	< 0.0050	< 0.0050	<0.025	< 0.0050	< 0.005	<0.005	<0.005	<0.005	< 0.0050	< 0.0050	<0.025	< 0.0050	< 0.005	<0.005	<0.005	<0.005
Mercury	0.002	(3)	< 0.00020	---	0.00031	< 0.00020	<0.0002	<0.0002	<0.0002	<0.0002	< 0.00020	< 0.00020	0.0003	< 0.00020	<0.0002	<0.0002	<0.0002	<0.0002
Dissolved Metals (mg/l):																		
Arsenic	0.1	(3)	0.0011	< 0.020	<0.020	<0.0010	<0.001	<0.001	<0.001	<0.001	< 0.0010	< 0.020	<0.020	< 0.0010	<0.001	<0.001	<0.001	<0.001
Barium	1	(3)	0.078	0.071	0.13	0.073	0.049	0.058	0.06	0.58	0.076	0.071	0.13	0.073	0.049	0.057	0.06	0.058
Cadmium	0.01	(3)	< 0.0020	< 0.0020	<0.0020	< 0.0020	<0.002	<0.002	<0.002	<0.002	< 0.0020	< 0.0020	< 0.0020	< 0.0020	<0.002	<0.002	<0.002	<0.002
Calcium	-	-	37	41	35	38	31	34	32	33	37	42	34	38	31	34	33	33
Chromium	0.05	(3)	< 0.0060	< 0.0060	< 0.0060	< 0.0060	<0.006	<0.006	<0.006	<0.006	< 0.0060	< 0.0060	< 0.0060	< 0.0060	<0.006	<0.006	<0.006	<0.006
Copper	1.0	(3)	< 0.0060	< 0.0060	< 0.0060	< 0.0060	<0.006	<0.0065	<0.006	<0.006	< 0.0060	< 0.0060	< 0.0060	< 0.0060	<0.006	0.0071	<0.006	<0.006
Iron	1.0	(3)	0.35	0.030	11	< 0.020	<0.02	<0.02	<0.02	<0.02	0.27	0.033	9.7	< 0.020	<0.02	<0.02	<0.02	<0.02
Lead	0.05	(3)	< 0.0010	< 0.0050	<0.0050	< 0.0010	< 0.005	<0.005	<0.005	<0.005	< 0.0010	< 0.0050	<0.0050	< 0.0010	< 0.005	<0.005	<0.005	<0.005
Magnesium	-	-	6.1	6.8	5.2	6.4	5	5.8	5.8	6.1	6.0	6.9	5.1	6.3	5.2	5.9	5.8	6.1
Manganese	0.2	(3)	0.020	0.015	0.096	0.027	0.0045	0.016	0.0087	0.015	0.014	0.022	0.06	0.023	0.0047	0.016	0.0079	0.015
Mercury	-	-	< 0.00020	< 0.00020	<0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Potassium	-	-	2.0	1.9	3.2	2.0	1.6	1.5	1.6	1.6	2.0	2.0	3.4	2.0	1.6	1.6	1.6	1.8
Selenium	0.05	(3)	< 0.0010	< 0.050	<0.050	< 0.0010	<0.001	<0.001	<0.001	<0.001	< 0.0010	< 0.050	<0.050	< 0.0010	<0.001	<0.001	<0.001	<0.001
Silver	0.05	(3)	< 0.0050	< 0.0050	<0.005	< 0.0050	<0.005	<0.0050	<0.0050	<0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0050	<0.005	<0.0050	<0.0050	<0.0050
Sodium	-	-	21	31	35	26	17	21	16	21	21	32	39	26	17	22	16	21
Uranium	0.03	(3)	< 0.0010	< 0.10	<0.10	< 0.0010	<0.001	<0.001	<0.001	<0.001	< 0.0010	< 0.10	<0.10	< 0.0010	<0.001	<0.001	<0.001	<0.001
Zinc	10.0	(3)	< 0.010	< 0.020	<0.020	0.26	0.013	0.011	0.068	<0.01	< 0.010	< 0.020	<0.020	0.48	0.018	0.011	0.035	<0.01

Notes:

- (1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water
- (2) EPA - Regional Screening Levels (April 2009) - MCL
- (3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or less
- (4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening levels
- (5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013. "2014 Background Document for Development of Soil Screening Levels" for analysis beginning in 2014.

*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
-	= No screening level available
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required
	= Analytical result exceeds the respective screening level.

TABLE 10
San Juan River Terrace: San Juan River Analytical Summary
2014 Groundwater Remediation Monitoring Annual Report

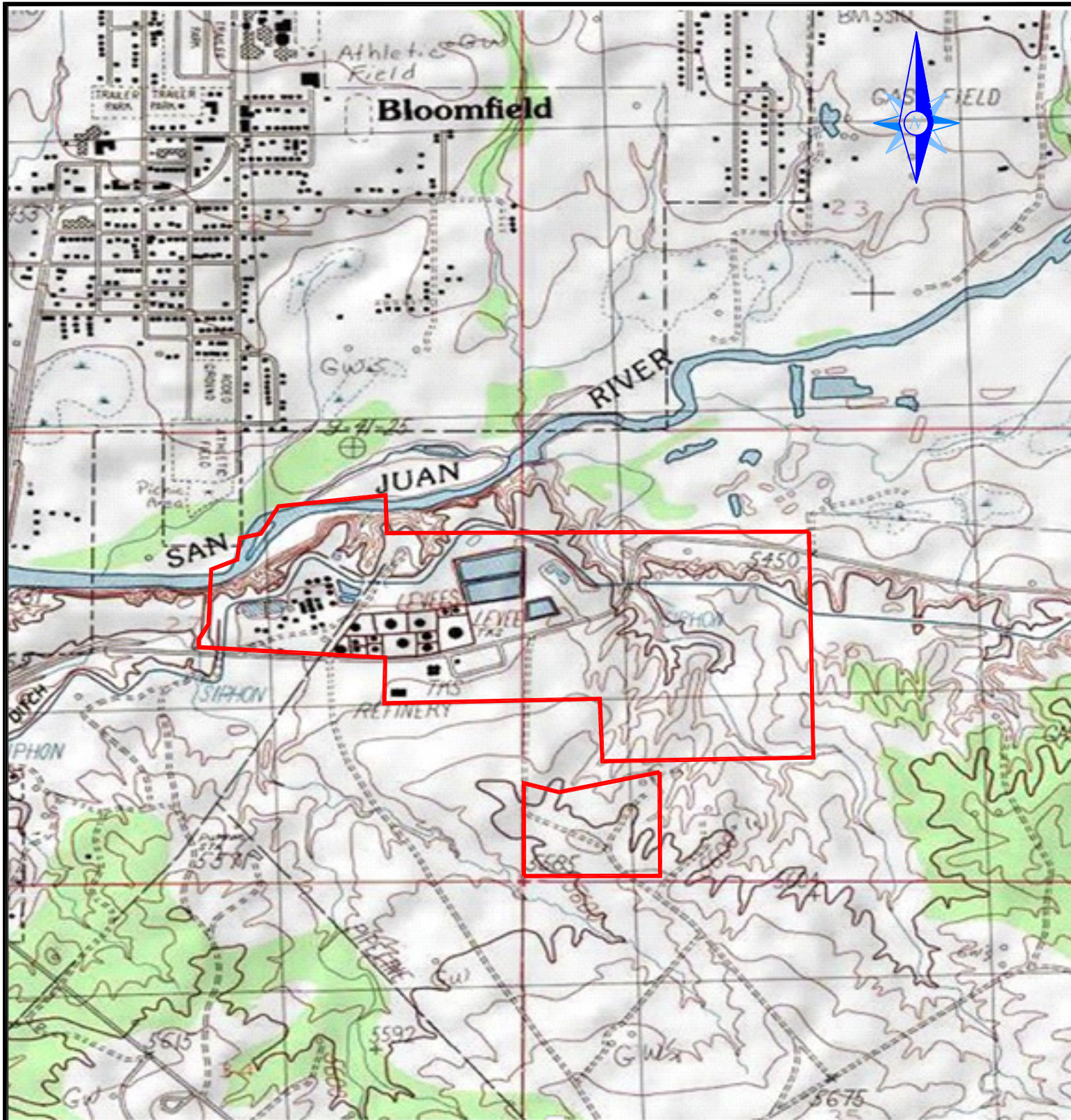
		Upstream								Downstream							
		Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11	Aug-14	Apr-14	Aug-13	Apr-13	Aug-12	Apr-12	Aug-11	Apr-11
Volatile Organic Compounds (mg/l)																	
Benzene	0.005	<0.001	<0.001	<0.002	<0.001	<0.001	< 0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	< 0.001	<0.001	<0.001
Toluene	0.750	<0.001	<0.001	<0.002	<0.001	<0.001	< 0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	< 0.001	<0.001	<0.001
Ethylbenzene	0.700	<0.001	<0.001	<0.002	<0.001	<0.001	< 0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	< 0.001	<0.001	<0.001
Xylene	0.620	<0.002	<0.0015	<0.002	<0.002	<0.002	< 0.002	<0.003	<0.003	<0.002	<0.0015	<0.002	<0.002	<0.002	< 0.002	<0.003	<0.003
MTBE	0.012	<0.001	<0.001	<0.004	<0.001	<0.001	< 0.001	<0.0015	<0.0015	<0.001	<0.001	<0.004	<0.001	<0.001	< 0.002	<0.0015	<0.0015
Total Petroleum Hydrocarbons (mg/l):																	
Diesel Range Organics	0.2	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.2	<0.2	<0.2	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.2	<0.2	<0.2
Gasoline Range Organics	-	< 0.050	< 0.050	<0.10	< 0.050	< 0.050	< 0.050	<2.5	<2.5	< 0.050	< 0.050	<0.10	< 0.050	< 0.050	< 0.05	<2.5	<2.5
Motor Oil Range Organics	-	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	<0.050	<0.050	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	<0.050	<0.050
General Chemistry (mg/l):																	
Fluoride	1.6	0.18	0.20	<0.50	0.18	0.17	0.10	0.17	0.19	0.18	0.20	<0.50	0.18	0.16	0.1	0.17	0.2
Chloride	250	3.3	3.9	3.6	4.0	2.70	2.70	2.60	2.90	3.3	4.2	3.5	4.2	2.6	3.2	2.60	3.30
Nitrite	1.0	< 1.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	<0.10	<0.10	< 1.0	< 0.10	<0.50	< 0.10	< 0.10	*< 0.1	<0.10	<0.10
Bromide	-	< 0.10	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	<0.10	<0.10	< 0.10	< 0.10	<0.50	< 0.10	< 0.10	< 0.1	<0.10	<0.10
Nitrate	10	< 1.0	0.12	< 0.50	< 0.10	< 0.10	< 0.10	<0.10	<0.10	< 1.0	< 0.10	<0.50	< 0.10	< 0.10	*< 0.1	<0.10	<0.10
Phosphorus	-	< 0.50	< 0.50	<2.5	< 0.50	< 0.50	< 0.50	<0.50	<0.50	< 0.50	< 0.50	<2.5	< 0.50	< 0.50	< 0.5	<0.50	<0.50
Sulfate	600	66	96	79	86	53	62	47	66	60	91	74	98	51	90	50	87
Carbon Dioxide (CO ₂)	-	---	89	---	86	74	76	---	87	---	91	---	89	74	83	---	90
Alkalinity (CaCO ₃)	-	96	99	97	96	83	85	---	87	96	100	97	99	83	92	---	90
Total Dissolved Solids	1000	225	269	450	256	201	190	---	200	220	272	480	273	201	232	---	234
Electric Conductivity	-	350	400	370	390	290	320	---	320	340	400	360	410	300	390	---	380
Total Metals (mg/l):																	
Arsenic	0.01	< 0.020	< 0.020	<0.10	< 0.020	<0.020	< 0.02	<0.020	<0.020	< 0.020	< 0.020	<0.10	< 0.020	<0.020	< 0.02	<0.020	<0.020
Barium	1.0	0.18	0.086	2.5	0.082	0.099	0.064	0.11	0.071	0.17	0.089	2.2	0.084	0.08	0.065	0.1	0.073
Cadmium	0.005	< 0.0020	< 0.0020	<0.010	< 0.0020	<0.002	< 0.002	<0.002	<0.002	< 0.0020	< 0.0020	<0.010	< 0.0020	<0.002	< 0.002	<0.002	<0.002
Chromium	0.05	0.0074	< 0.0060	0.32	< 0.0060	<0.006	< 0.006	<0.006	<0.006	0.006	< 0.0060	0.29	< 0.0060	<0.006	< 0.006	<0.006	<0.006
Lead	0.015	< 0.0050	< 0.0050	0.075	< 0.0050	<0.005	<0.0050	<0.005	<0.005	< 0.0050	< 0.0050	0.078	< 0.0050	<0.005	< 0.005	<0.005	<0.005
Selenium	0.05	< 0.050	< 0.050	<0.25	< 0.050	<0.050	< 0.05	<0.050	<0.050	< 0.050	< 0.050	<0.25	< 0.050	<0.005	< 0.05	<0.005	<0.005
Silver	0.05	< 0.0050	< 0.0050	<0.025	< 0.0050	<0.005	< 0.005	<0.005	<0.005	< 0.0050	< 0.0050	<0.025	< 0.0050	<0.005	< 0.005	<0.005	<0.005
Mercury	0.002	< 0.00020	< 0.00020	0.00038	< 0.00020	<0.0002	< 0.0002	<0.0002	<0.0002	< 0.00020	< 0.00020	0.00034	< 0.00020	<0.0002	< 0.0002	<0.0002	<0.0002
Dissolved Metals (mg/l):																	
Arsenic	0.1	0.0011	< 0.020	<0.020	< 0.0010	< 0.001	< 0.001	<0.001	<0.001	0.0010	< 0.020	<0.020	< 0.0010	<0.001	< 0.001	<0.001	<0.001
Barium	1	0.079	0.072	0.11	0.074	0.049	0.058	0.059	0.058	0.081	0.071	0.21	0.073	0.049	0.059	0.061	0.057
Cadmium	0.01	< 0.0020	< 0.0020	<0.0020	< 0.0020	<0.002	< 0.002	<0.002	<0.002	< 0.0020	< 0.0020	<0.0020	< 0.0020	<0.002	< 0.002	<0.002	<0.002
Calcium	-	39	41	33	37	31	32	32	33	38	45	41	45	32	41	34	39
Chromium	0.05	< 0.0060	< 0.0060	<0.0060	< 0.0060	<0.006	< 0.006	<0.006	<0.006	< 0.0060	< 0.0060	<0.0060	< 0.0060	<0.006	< 0.006	<0.006	<0.006
Copper	1.0	< 0.0060	< 0.0060	<0.0060	< 0.0060	<0.006	0.0072	<0.006	<0.006	< 0.0060	< 0.0060	0.0085	< 0.0060	<0.006	< 0.006	<0.006	<0.006
Iron	1.0	0.34	0.024	8.0	< 0.020	<0.02	< 0.02	<0.02	<0.02	0.44	0.023	40	< 0.020	<0.02	< 0.02	<0.02	<0.02
Lead	0.05	< 0.0010	< 0.0050	<0.0050	< 0.0010	<0.005	< 0.005	<0.005	<0.005	< 0.0010	< 0.0050	< 0.0010	<0.005	< 0.005	< 0.005	<0.005	<0.005
Magnesium	-	6.3	7.1	4.8	6.5	5.2	5.8	5.9	6	6.0	7.1	5.9	6.9	5.2	6	6.00	6.7
Manganese	0.2	0.028	0.028	0.073	0.033	0.0093	0.020	0.011	0.019	0.022	0.060	0.27	0.084	0.016	0.100	0.013	0.044
Mercury	-	< 0.00020	< 0.00020	<0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00020	< 0.00020	<0.00020	< 0.00020	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Potassium	-	2.0	2.0	3.1	2.2	1.6	1.5	1.6	1.7	2.0	1.9	3.6	2.1	1.6	1	1.7	1.8
Selenium	0.05	< 0.0010	< 0.050	<0.050	< 0.0010	<0.001	< 0.001	<0.001	<0.001	< 0.0010	< 0.050	<0.050	< 0.0010	<0.001	< 0.001	<0.001	<0.001
Silver	0.05	< 0.0050	< 0.0050	<0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	<0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0050	< 0.0050	< 0.005	<0.0050	<0.0050
Sodium	-	22	36	41	29	19	23	16	22	21	34	38	31	18	30	17	26
Uranium	0.03	< 0.0010	< 0.10	<0.10	< 0.0010	<0.001	< 0.001	<0.001	<0.001	< 0.0010	< 0.10	<0.10	< 0.0010	<0.001	< 0.001	<0.001	<0.001
Zinc	10.0	< 0.010	0.023	<0.020	< 0.010	0.064	0.011	0.045	<0.01	< 0.010	0.021	0.037	< 0.010	0.03	0.01	0.06	<0.01

Notes:

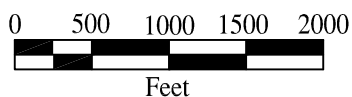
- (1) EPA - Regional Screening Levels (April 2009) - EPA Screening Levels.Tap Water
(2) EPA - Regional Screening Levels (April 2009) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or less
(4) NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5 and 7 for use on location specific screening levels
(5) NMED TAP Water Screening Levels - "2009 Background Document for Development of Soil Screening Levels" for analysis though 2013. "2014 Background Document for Development of Soil Screening Levels" for analysis beginning in 2014.

*	= Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet hold time
-	= No screening level available
---	= Analyte inadvertently not included in sample analysis.
---	= Analysis not required
	= Analytical result exceeds the respective screening level.

Figures



— Approximate Property Boundary



Bloomfield Terminal Facility Site Map

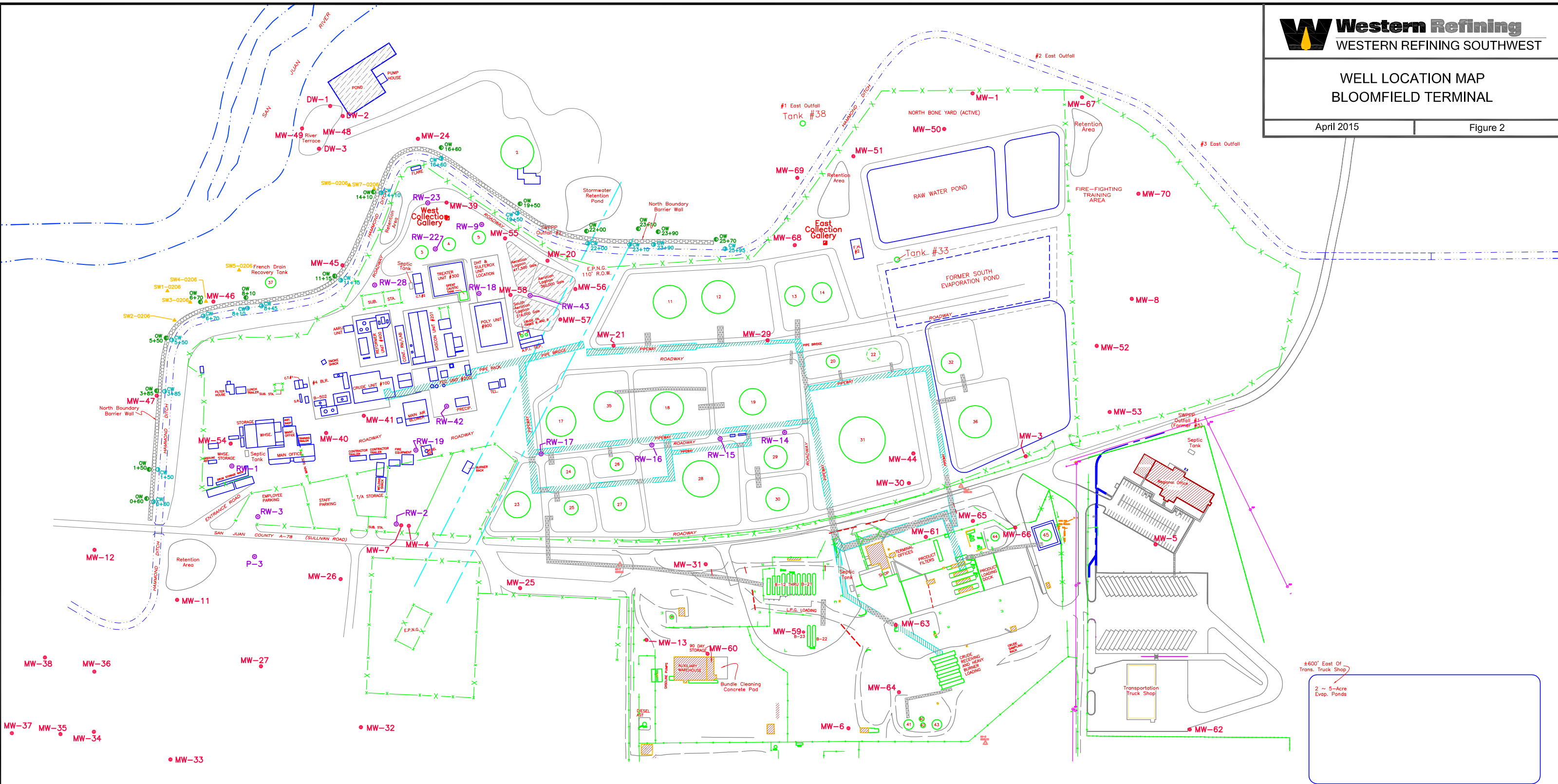
April 2015

Figure 1

WELL LOCATION MAP
BLOOMFIELD TERMINAL

April 2015

Figure 2



LEGEND

- MW-1 • MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- RW-1 • RECOVERY WELL LOCATION AND IDENTIFICATION NUMBER
- OW 1+50 • OBSERVATION WELL LOCATION AND IDENTIFICATION NUMBER
- CW 1+50 • COLLECTION WELL LOCATION AND IDENTIFICATION NUMBER
- SW1-0206 ▲ SUMP WELL LOCATION AND IDENTIFICATION NUMBER
- P-2 • PIEZOMETER IDENTIFICATION
- SURFACE WATER DRAINAGE PATTERN

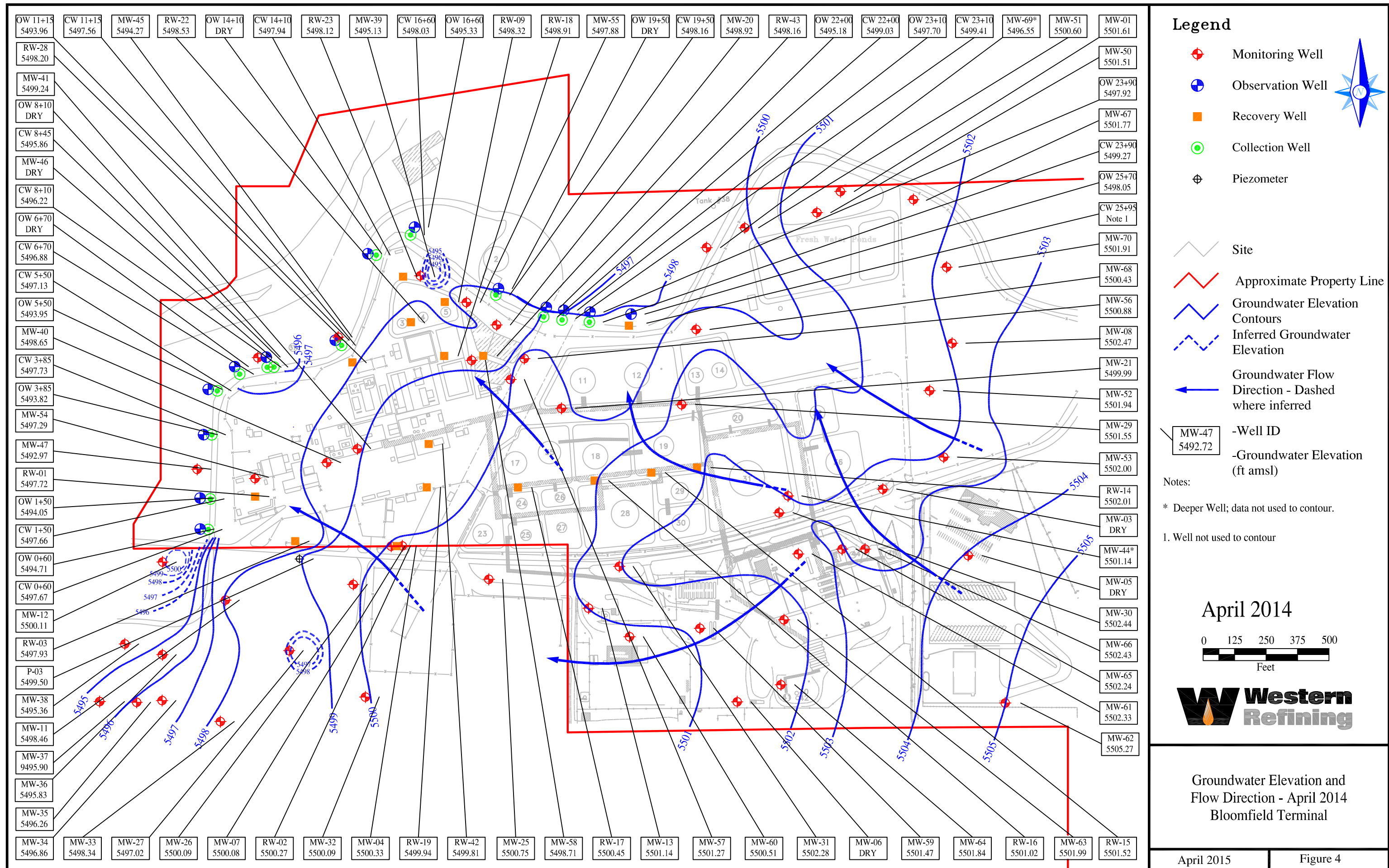
- UNDER GROUND PIPE-WAY
- ABOVE GROUND PIPE-WAY
- SLURRY BARRIER WALL
- FORMER TANK LOCATION

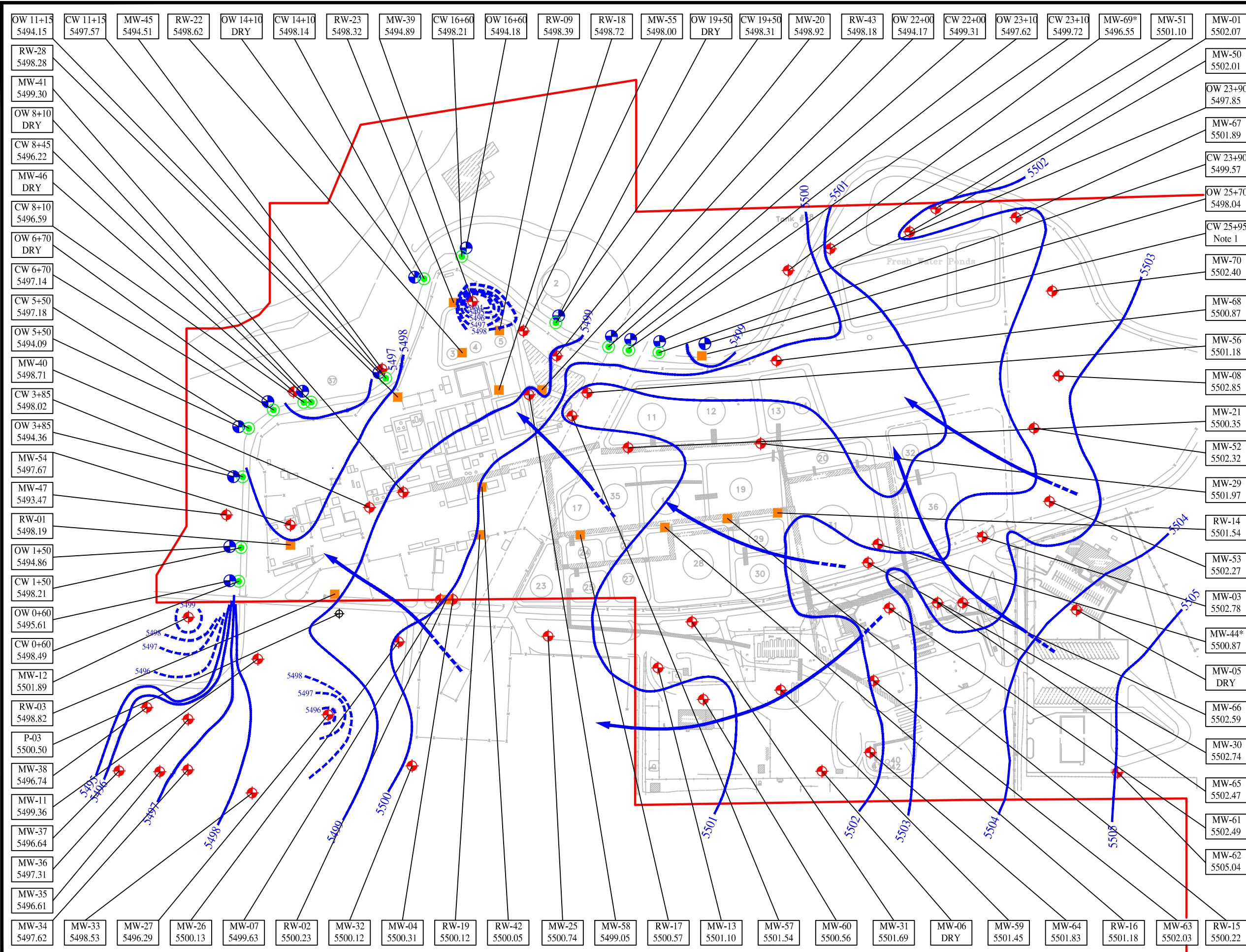


0 300
SCALE IN FEET

±600' East Of
Trans. Truck Shop
2 ~ 5-Acre
Evap. Ponds







Legend

- Monitoring Well
- Observation Well
- Recovery Well
- Collection Well
- Piezometer
- Site
- Approximate Property Line
- Groundwater Elevation Contours
- Inferred Groundwater Elevation
- Groundwater Flow Direction - Dashed where inferred

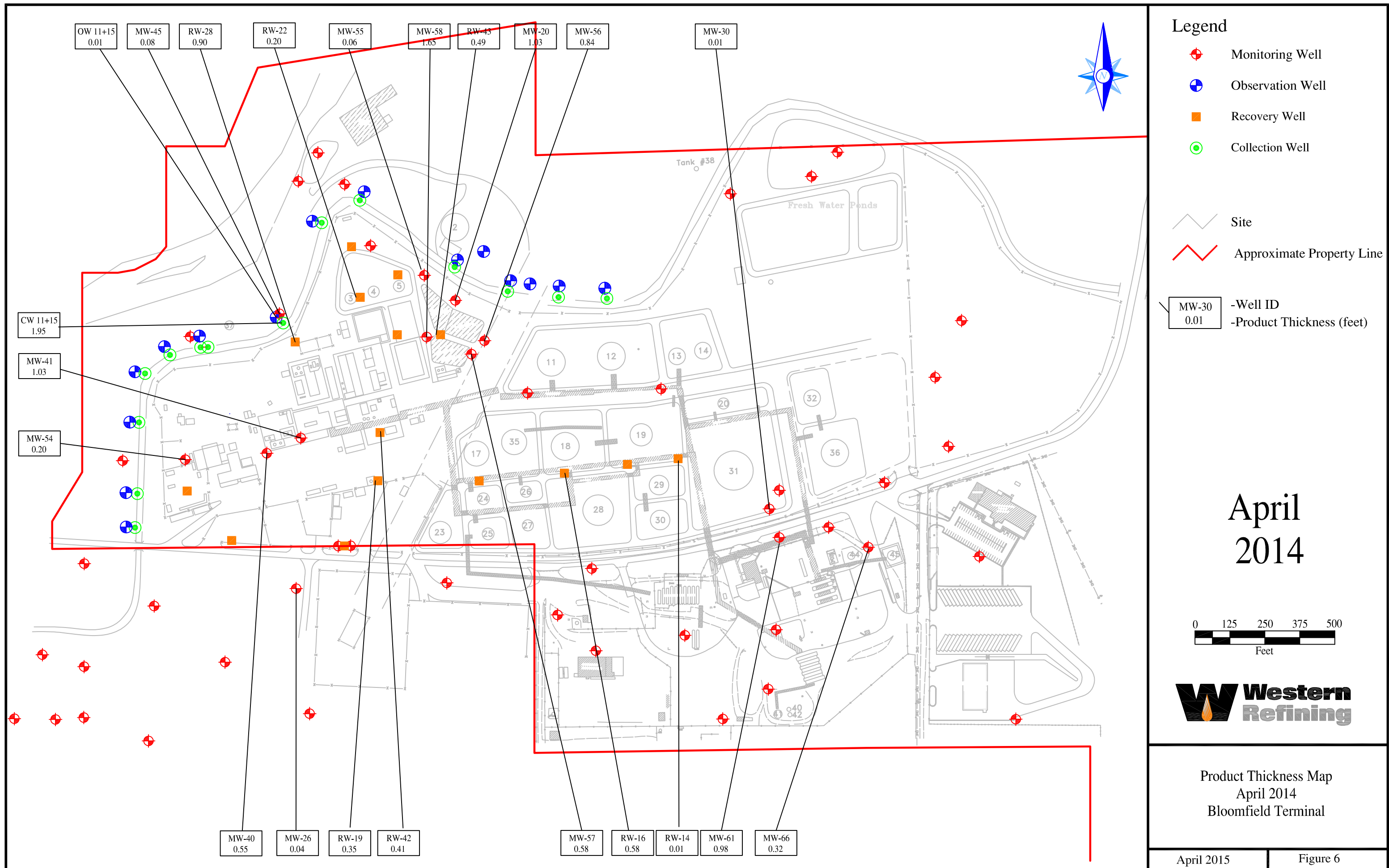
MW-47
5493.80

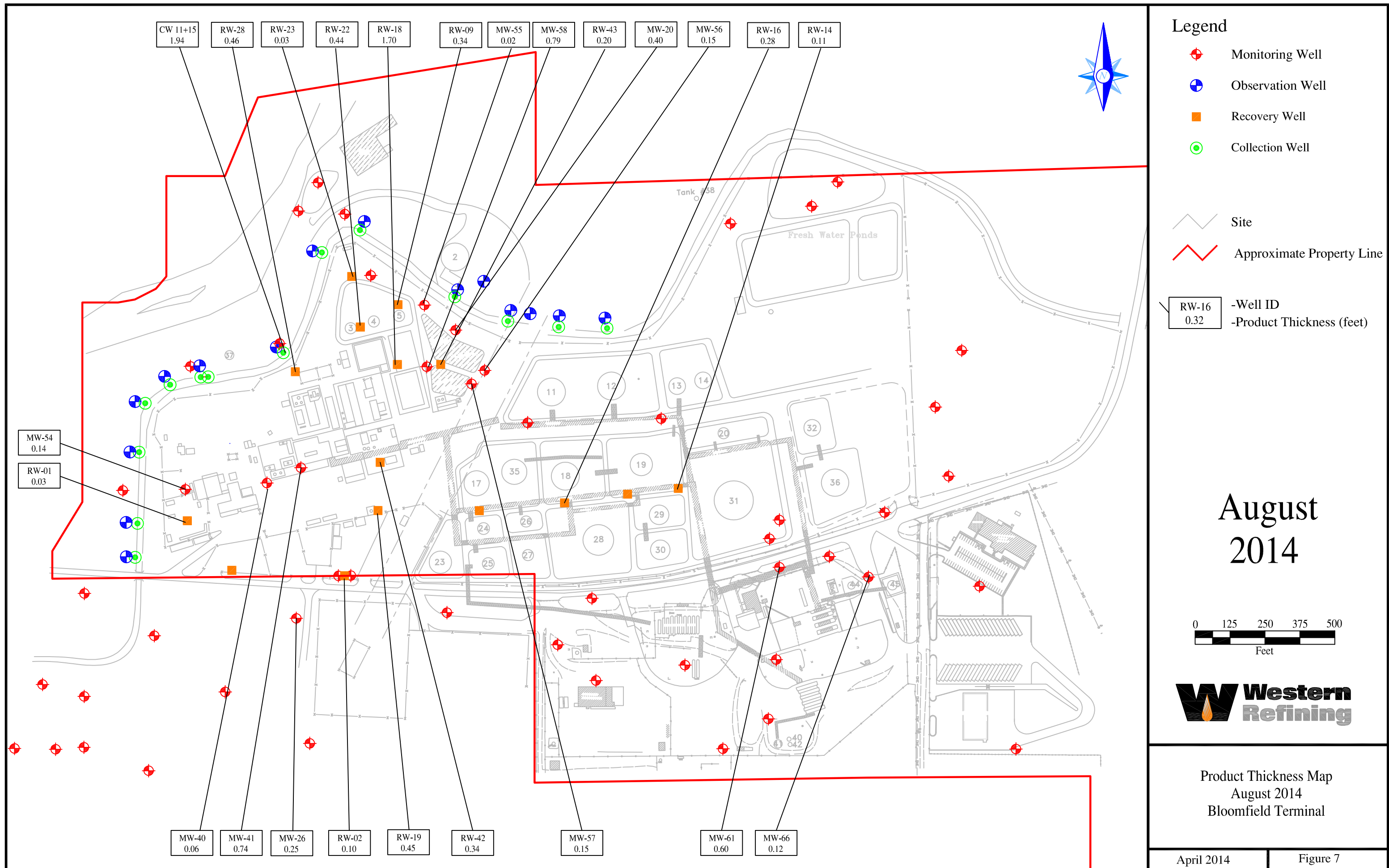
-Well ID
-Groundwater Elevation (ft amsl)

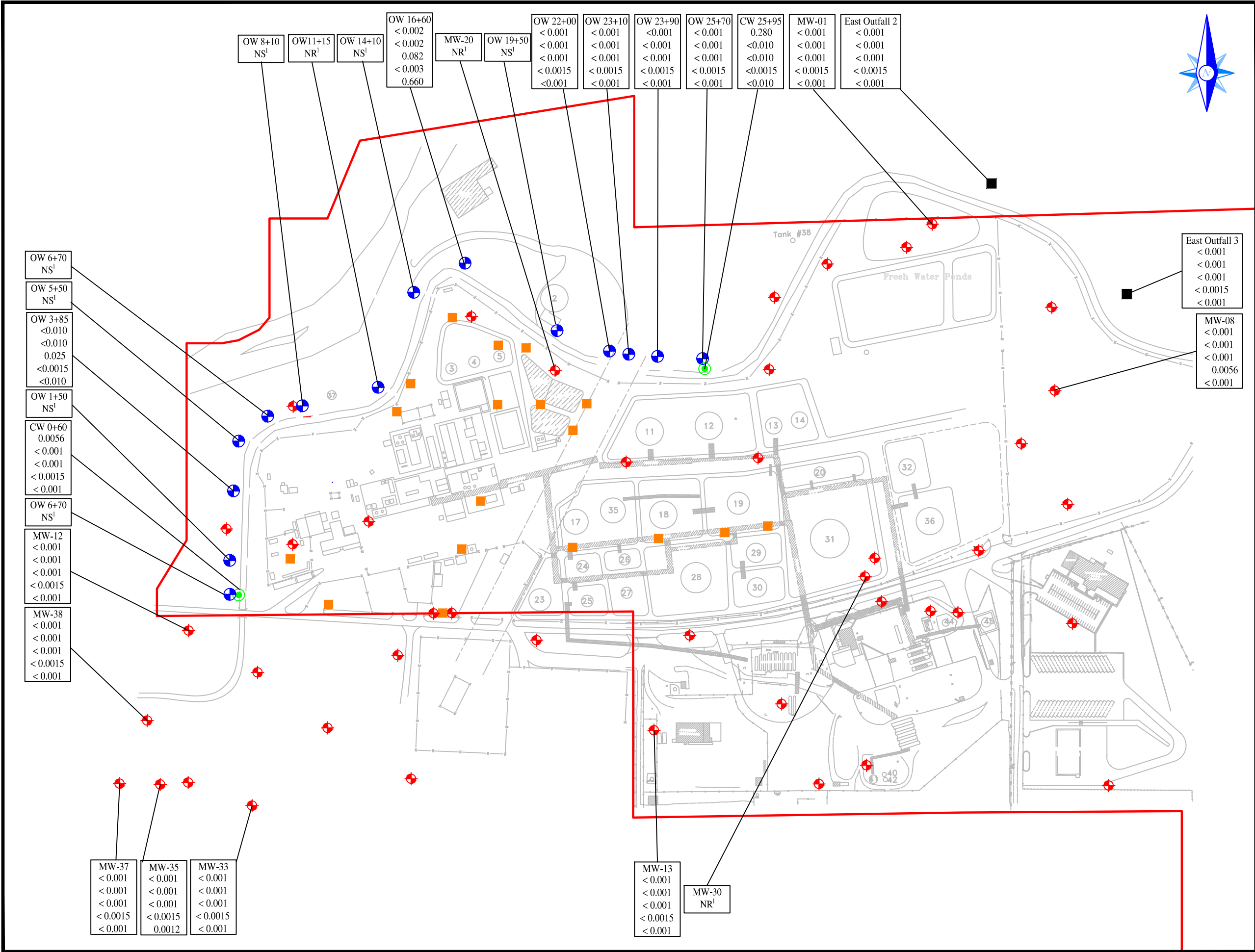
Notes:
* Deeper Well; data not used to contour.
1. Well not used to contour.

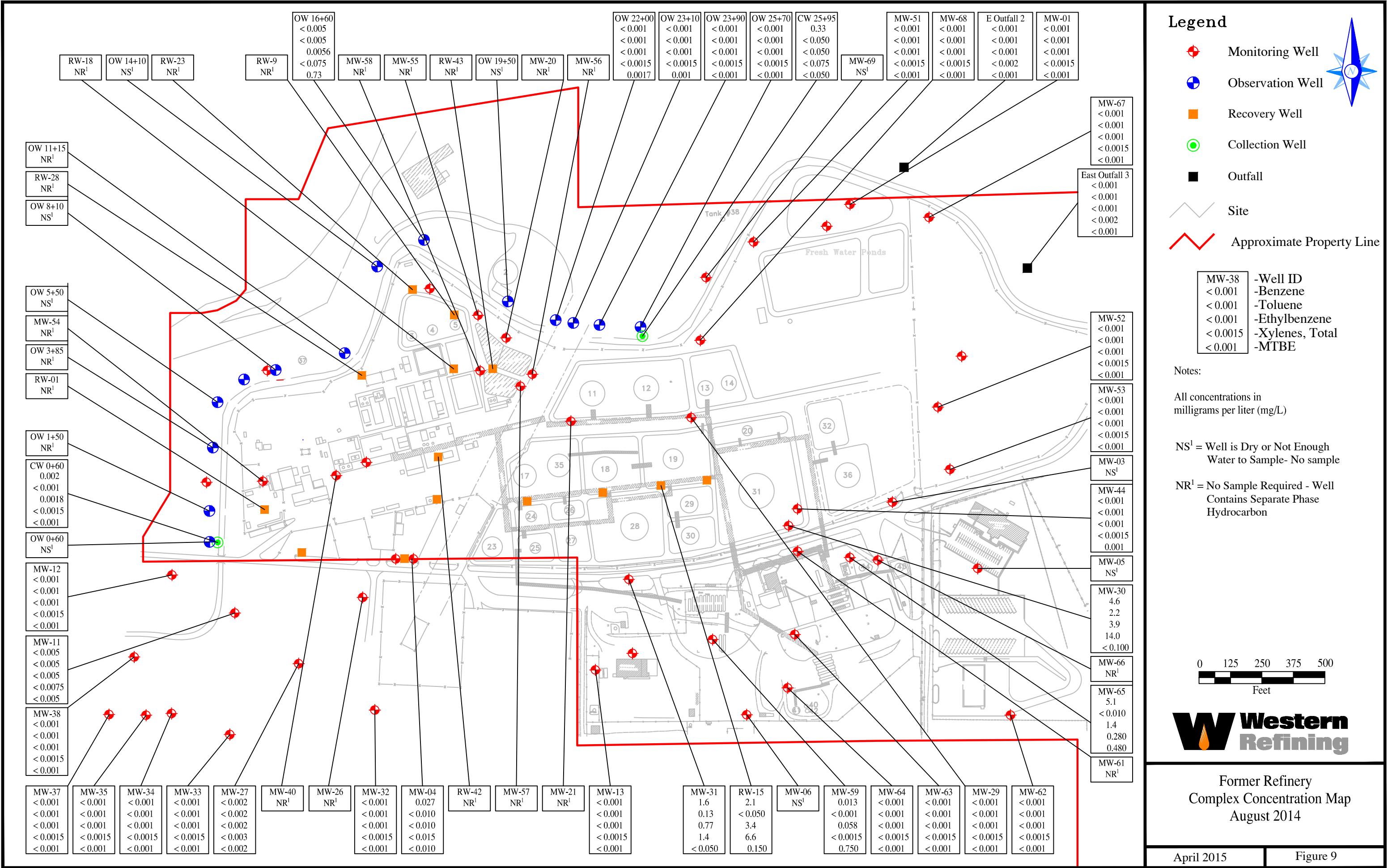
August 2014

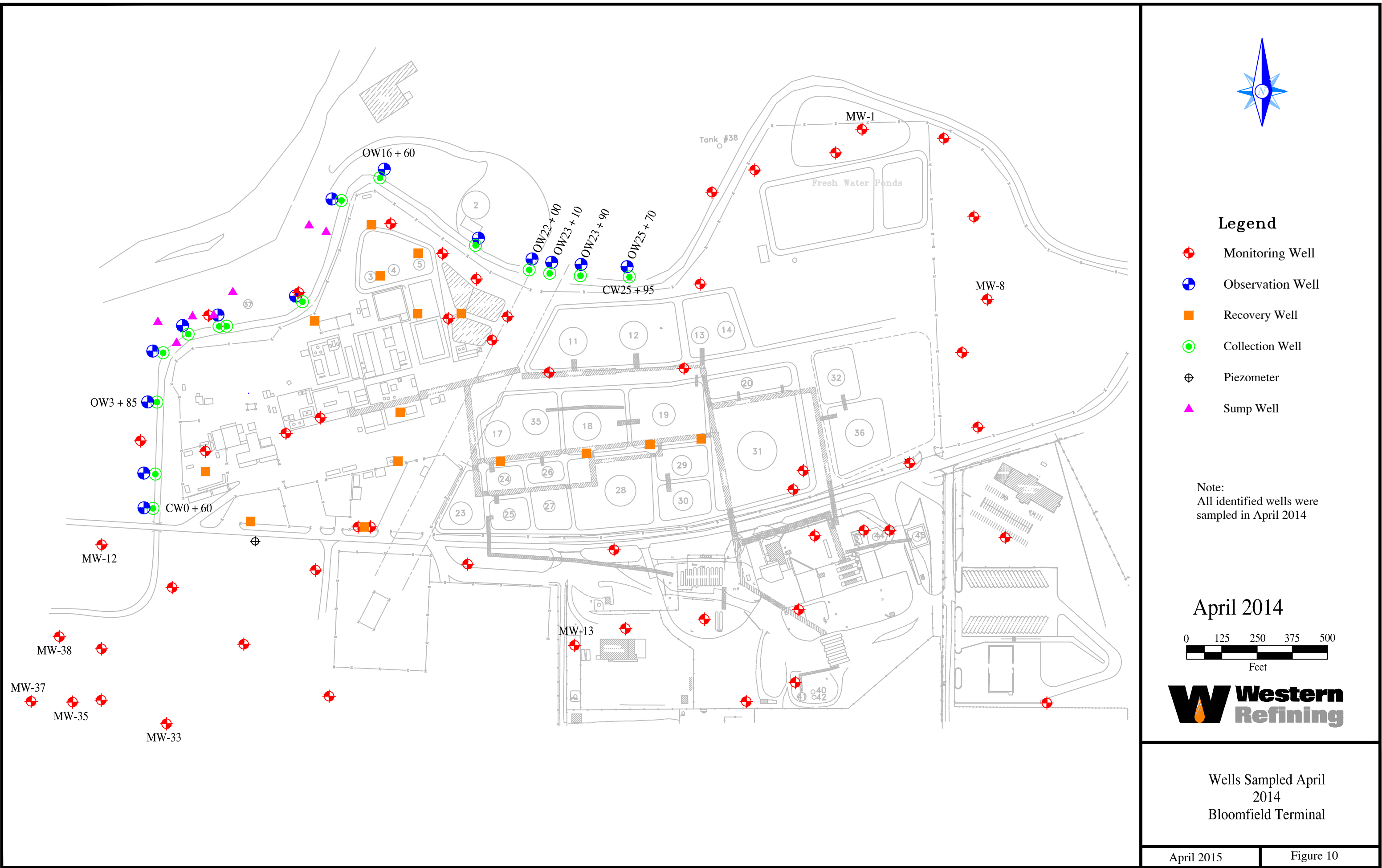
Groundwater Elevation and Flow Direction - August 2014
Bloomfield Terminal

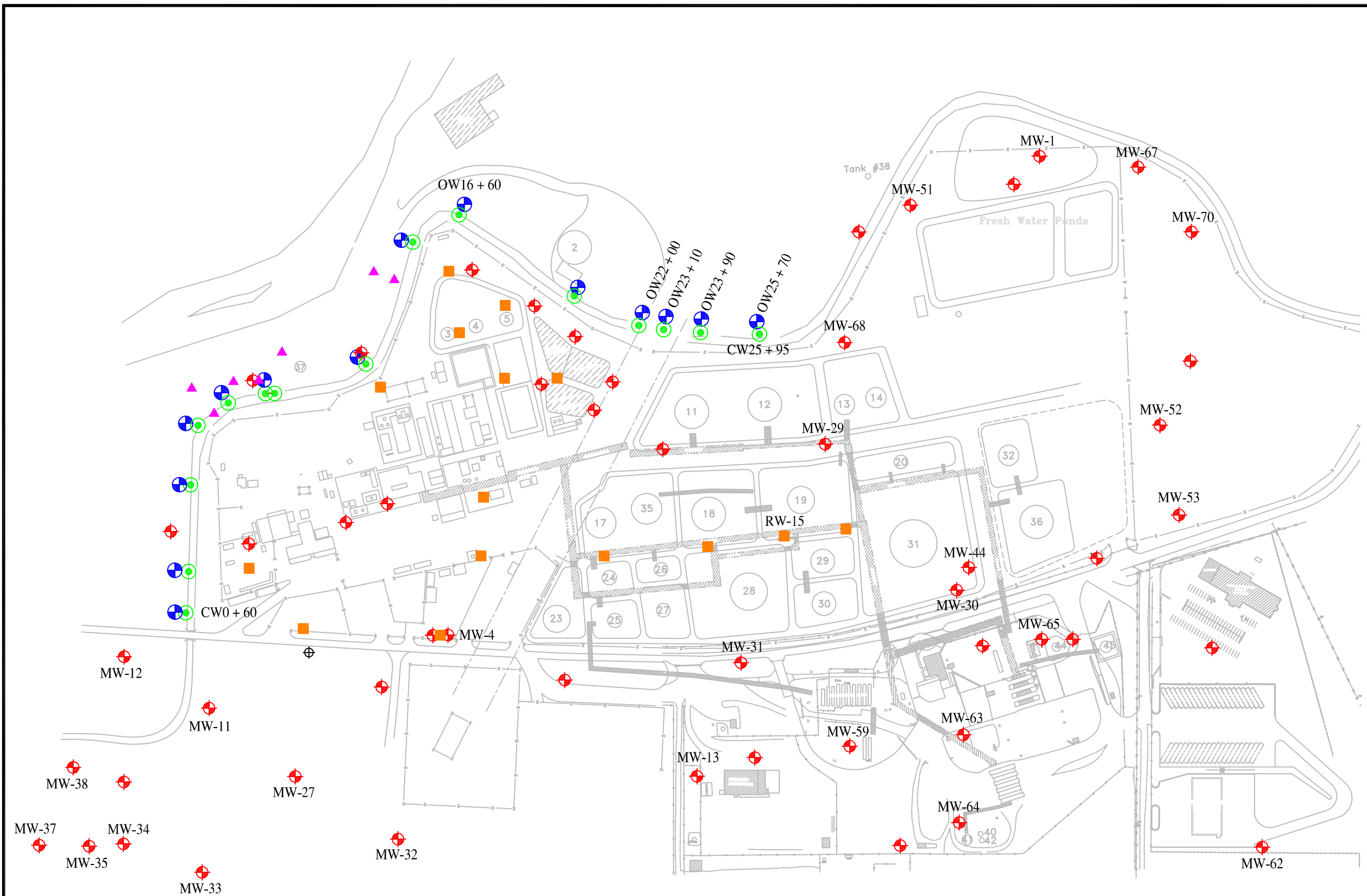








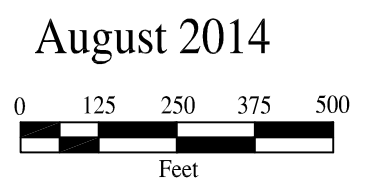




Legend

- Monitoring Well
- Observation Well
- Recovery Well
- Collection Well
- Piezometer
- Sump Well

Note:
All identified wells were
sampled in August 2014



Wells Sampled
August 2014
Bloomfield Terminal

Appendix A

Field Methods

Appendix A

Groundwater Elevation

All facility monitoring wells, recovery wells, observation and collection wells were measured for groundwater elevation in April, and August. Terminal personnel followed the guidelines of the *Facility-Wide Groundwater Monitoring Plan June 2011* to collect groundwater levels and SPH thickness measurements in April. In August terminal personnel followed the revisions received in June 2012.

All water/product levels are determined to an accuracy of 0.01 foot using a Geotech Interface Meter. The technician records separate phase hydrocarbon, depth to water, and total well depth using this probe.

Water Quality/Groundwater Sampling

An YSI ProComm II is used to determine dissolved Oxygen (DO), electrical conductance, oxidation-reduction potential (ORP), Total Dissolved Solids (TDS), pH, and temperature are monitored during purging.

Well Purging Technique

After determining water levels initial well volumes are calculated. Total purge volume is determined by monitoring electrical conductance, pH, temperature, after every two gallons or each well volume, whichever is less, has been purged from the well. The wells were considered satisfactorily purged when the field parameter values did not vary by more than 10 percent for at least three measurements.

Well volumes are determined using the following equation:

Well Depth – Casing Height – Depth to Liquid X Conversion Factor X Three.

The conversion factor is determined by the diameter of the well casing.

Casing	Conversion Factor
6"	1.50 gal/ft
5"	1.02 gal/ft
4"	0.74 gal/ft
3"	0.367 gal/ft
2"	0.163 gal/ft

Disposable bailers are used for purging and sampling. Each bailer holds one liter of liquid. Three well volumes can be calculated by counting the number of times a well is bailed.

Well Sampling and Sample Handling Procedure

Equipment and supplies needed for collecting representative groundwater samples include:

- Interface Meter
- YSI ProComm II

- Distilled Water
- Disposable Latex Gloves
- Disposable Bailers
- String/Twine
- Cooler with Ice
- Bottle kits with Preservatives (provided by the contract laboratory)
- Disposable 0.45 micron Field Filters and Syringes
- Glass Jar (usually 4 oz.)
- Sharpie Permanent Marker
- Field Paperwork/Logsheet
- Two 5-gallon buckets
- Trash container (plastic garbage bag)
- Ziploc Bags
- Paper towels

After sufficient purging, samples are collected with the bailer and poured into the appropriate sample containers. Two people are usually utilized for sampling. Sampling takes place over a bucket to insure that spills are contained

For dissolved metals, sample water is poured into a jar and then extracted with a syringe. The syringe is then used to push water through a field filter into the proper sample bottle to collect the dissolved metals sample. Volatile organic analysis samples are collected as to allow no head space in the container.

Samples are labeled immediately with location, date, time, analysis, preservative, and sampler. Then they are put in a Ziploc bag and placed in a cooler holding sufficient ice to keep them cool. The field logsheet is reviewed to verify all entries.

Purge and Decontamination Water Disposal

YSI ProComm II and the interface probe are rinsed with distilled water after every well. The rinse procedure takes place over a bucket to insure that spills are contained.

All rinse and purge water is contained and then disposed of through the terminal wastewater system.

Any glassware used is washed with Alconox and water and rinsed with distilled water. Wastewater runs through the terminal wastewater system.

Instrument Calibration

The YSI ProComm II is used to measure Dissolved Oxygen (DO), electrical conductance, oxidation-reduction potential (ORP), Total Dissolved Solids (TDS), pH and is calibrated before each sampling event per the manufacture instruction manual.

Remediation System Measurement

Recovery well flows are measured using a 1000 ml graduated cylinder. The sample port on the discharge line of the pump is opened and effluent flows into the graduated cylinder. During a pump cycle, a measurement is taken over time and then calculated to a gallon per day rate.

Recovery rates at Tk #37 (Hammond Ditch French Drain) and Tk #38 (#1 East Outfall) are determined through flow meters installed in those systems. Refinery personnel record the rates periodically.

Appendix B



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 25, 2014

Kelly Robinson

Western Refining Southwest, Inc.

#50 CR 4990

Bloomfield, NM 87413

TEL: (505) 632-4135

FAX (505) 632-3911

RE: Refinery Wells 4-15-14

OrderNo.: 1404736

Dear Kelly Robinson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/16/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Workorder Sample Summary

WO#: 1404736

25-Apr-14

CLIENT: Western Refining Southwest, Inc.

Project: Refinery Wells 4-15-14

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1404736-001	MW-8		4/15/2014 1:30:00 PM	4/16/2014 10:10:00 AM	Aqueous

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1404736**

Date Reported: **4/25/2014**

CLIENT: Western Refining Southwest, Inc.

Client Sample ID: MW-8

Project: Refinery Wells 4-15-14

Collection Date: 4/15/2014 1:30:00 PM

Lab ID: 1404736-001

Matrix: AQUEOUS

Received Date: 4/16/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: KJH	
Benzene	ND	1.0		µg/L	1	4/18/2014 2:38:50 PM	R18099
Toluene	ND	1.0		µg/L	1	4/18/2014 2:38:50 PM	R18099
Ethylbenzene	ND	1.0		µg/L	1	4/18/2014 2:38:50 PM	R18099
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/18/2014 2:38:50 PM	R18099
Xylenes, Total	1.9	1.5		µg/L	1	4/18/2014 2:38:50 PM	R18099
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%REC	1	4/18/2014 2:38:50 PM	R18099
Surr: 4-Bromofluorobenzene	92.1	70-130		%REC	1	4/18/2014 2:38:50 PM	R18099
Surr: Dibromofluoromethane	93.9	70-130		%REC	1	4/18/2014 2:38:50 PM	R18099
Surr: Toluene-d8	90.6	70-130		%REC	1	4/18/2014 2:38:50 PM	R18099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404736

25-Apr-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 4-15-14

Sample ID	5mL-rb	SampType:	MBLK	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	PBW	Batch ID:	R18099	RunNo:	18099					
Prep Date:		Analysis Date:	4/18/2014	SeqNo:	522548	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.3	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.1	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.0	70	130			
Surr: Toluene-d8	9.1		10.00		90.9	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: Western Refining Southw

Work Order Number: 1404736

RcptNo: 1

Received by/date:

Jim 04/16/14

Logged By: Ashley Gallegos

4/16/2014 10:10:00 AM

Completed By: Ashley Gallegos

4/16/2014 10:45:33 AM

Reviewed By:

A 04/16/14

Chain of Custody

1. Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

2. Is Chain of Custody complete?

Yes ☒

No ☐

Not Present ☐

3. How was the sample delivered?

Courier

Log In

4. Was an attempt made to cool the samples?

Yes ☒

No ☐

NA ☐

5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C

Yes ☒

No ☐

NA ☐

6. Sample(s) in proper container(s)?

Yes ☒

No ☐

7. Sufficient sample volume for indicated test(s)?

Yes ☒

No ☐

8. Are samples (except VOA and ONG) properly preserved?

Yes ☒

No ☐

9. Was preservative added to bottles?

Yes ☐

No ☒

NA ☐

10. VOA vials have zero headspace?

Yes ☒

No ☐

No VOA Vials ☐

11. Were any sample containers received broken?

Yes ☐

No ☒

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

12. Does paperwork match bottle labels?

(Note discrepancies on chain of custody)

Yes ☒

No ☐

Adjusted? ☐

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

(If no, notify customer for authorization.)

Yes ☒

No ☐

Checked by: ☐

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?

Yes ☐

No ☐

NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Yes			

www.hallenvironmental.com

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

October 02, 2014

Kelly Robinson

Western Refining Southwest, Inc.

#50 CR 4990

Bloomfield, NM 87413

TEL: (505) 632-4166

FAX (505) 632-3911

RE: Refinery Wells 8-25-14

OrderNo.: 1408C99

Dear Kelly Robinson:

Hall Environmental Analysis Laboratory received 9 sample(s) on 8/26/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-001A

Client Sample ID: MW-29
Collection Date: 8/25/2014 10:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
Benzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Toluene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Ethylbenzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Naphthalene	ND	2.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1-Methylnaphthalene	ND	4.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
2-Methylnaphthalene	ND	4.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Acetone	ND	10		µg/L	1	9/2/2014 4:56:06 PM	R20949
Bromobenzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Bromodichloromethane	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Bromoform	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Bromomethane	ND	3.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
2-Butanone	ND	10		µg/L	1	9/2/2014 4:56:06 PM	R20949
Carbon disulfide	ND	10		µg/L	1	9/2/2014 4:56:06 PM	R20949
Carbon Tetrachloride	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Chlorobenzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Chloroethane	ND	2.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Chloroform	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Chloromethane	ND	3.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
2-Chlorotoluene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
4-Chlorotoluene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
cis-1,2-DCE	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Dibromochloromethane	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Dibromomethane	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,1-Dichloroethane	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,1-Dichloroethene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,2-Dichloropropane	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,3-Dichloropropane	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
2,2-Dichloropropane	ND	2.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,1-Dichloropropene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Hexachlorobutadiene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical Report

Lab Order: 1408C99

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-001A

Client Sample ID: MW-29
Collection Date: 8/25/2014 10:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
2-Hexanone	ND	10		µg/L	1	9/2/2014 4:56:06 PM	R20949
Isopropylbenzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
4-Isopropyltoluene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
4-Methyl-2-pentanone	ND	10		µg/L	1	9/2/2014 4:56:06 PM	R20949
Methylene Chloride	ND	3.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
n-Butylbenzene	ND	3.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
n-Propylbenzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
sec-Butylbenzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Styrene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
tert-Butylbenzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
trans-1,2-DCE	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Trichlorofluoromethane	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Vinyl chloride	ND	1.0		µg/L	1	9/2/2014 4:56:06 PM	R20949
Xylenes, Total	ND	1.5		µg/L	1	9/2/2014 4:56:06 PM	R20949
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	9/2/2014 4:56:06 PM	R20949
Surr: 4-Bromofluorobenzene	98.9	70-130		%REC	1	9/2/2014 4:56:06 PM	R20949
Surr: Dibromofluoromethane	99.5	70-130		%REC	1	9/2/2014 4:56:06 PM	R20949
Surr: Toluene-d8	96.8	70-130		%REC	1	9/2/2014 4:56:06 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-001B

Client Sample ID: MW-29
Collection Date: 8/25/2014 10:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/27/2014 2:11:35 PM	R20843
Surr: BFB	95.4	70.9-130		%REC	1	8/27/2014 2:11:35 PM	R20843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-001C

Client Sample ID: MW-29
Collection Date: 8/25/2014 10:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	8/27/2014 8:37:10 AM	14963
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/27/2014 8:37:10 AM	14963
Surr: DNOP	109	75.2-161		%REC	1	8/27/2014 8:37:10 AM	14963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-001D

Client Sample ID: MW-29
Collection Date: 8/25/2014 10:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.27	0.10		mg/L	1	8/26/2014 12:47:14 PM	R20831
Chloride	48	10		mg/L	20	8/26/2014 1:24:29 PM	R20831
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/26/2014 12:47:14 PM	R20831
Bromide	0.34	0.10		mg/L	1	8/26/2014 12:47:14 PM	R20831
Nitrogen, Nitrate (As N)	0.48	0.10		mg/L	1	8/26/2014 12:47:14 PM	R20831
Phosphorus, Orthophosphate (As P _i)	ND	0.50		mg/L	1	8/26/2014 12:47:14 PM	R20831
Sulfate	210	10		mg/L	20	8/26/2014 1:24:29 PM	R20831
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	260	1.0	H	mg CO ₂ /L	1	9/2/2014 12:13:28 PM	R20962
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	1100	0.010		µmhos/cm	1	9/2/2014 12:13:28 PM	R20962
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	280	20		mg/L CaCO ₃	1	9/2/2014 12:13:28 PM	R20962
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	9/2/2014 12:13:28 PM	R20962
Total Alkalinity (as CaCO ₃)	280	20		mg/L CaCO ₃	1	9/2/2014 12:13:28 PM	R20962
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	720	20.0	*	mg/L	1	9/2/2014 10:07:00 AM	14989

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-001E

Client Sample ID: MW-29
Collection Date: 8/25/2014 10:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.021	0.0020		mg/L	1	8/28/2014 6:25:26 PM	R20883
Cadmium	ND	0.0020		mg/L	1	8/28/2014 6:25:26 PM	R20883
Calcium	83	1.0		mg/L	1	8/28/2014 6:25:26 PM	R20883
Chromium	ND	0.0060		mg/L	1	8/28/2014 6:25:26 PM	R20883
Iron	ND	0.020		mg/L	1	8/28/2014 6:25:26 PM	R20883
Magnesium	19	1.0		mg/L	1	8/28/2014 6:25:26 PM	R20883
Manganese	1.7	0.010	*	mg/L	5	8/29/2014 3:11:23 PM	R20915
Potassium	2.2	1.0		mg/L	1	8/28/2014 6:25:26 PM	R20883
Silver	ND	0.0050		mg/L	1	8/28/2014 6:25:26 PM	R20883
Sodium	130	5.0		mg/L	5	8/29/2014 3:11:23 PM	R20915
Zinc	ND	0.010		mg/L	1	8/28/2014 6:25:26 PM	R20883
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Arsenic	0.0013	0.0010		mg/L	1	9/8/2014 5:16:53 PM	R21084
Copper	0.0022	0.0010		mg/L	1	9/8/2014 5:16:53 PM	R21084
Lead	ND	0.0010		mg/L	1	9/8/2014 5:16:53 PM	R21084
Selenium	0.0025	0.0010		mg/L	1	9/8/2014 5:16:53 PM	R21084
Uranium	0.0034	0.0010		mg/L	1	9/8/2014 5:16:53 PM	R21084
EPA METHOD 7470: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	8/30/2014 1:28:45 PM	15037

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-001F

Client Sample ID: MW-29
Collection Date: 8/25/2014 10:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	9/5/2014 5:48:34 PM	15120
Barium	0.026	0.0020		mg/L	1	9/5/2014 5:48:34 PM	15120
Cadmium	ND	0.0020		mg/L	1	9/5/2014 5:48:34 PM	15120
Chromium	ND	0.0060		mg/L	1	9/5/2014 5:48:34 PM	15120
Lead	ND	0.0050		mg/L	1	9/5/2014 5:48:34 PM	15120
Selenium	ND	0.050		mg/L	1	9/5/2014 5:48:34 PM	15120
Silver	ND	0.0050		mg/L	1	9/9/2014 4:43:22 PM	15187
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	9/4/2014 2:49:14 PM	15109

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408C99****Hall Environmental Analysis Laboratory, Inc.**Date Reported: **10/2/2014****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-30**Project:** Refinery Wells 8-25-14**Collection Date:** 8/25/2014 11:45:00 AM**Lab ID:** 1408C99-002A**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
Benzene	4600	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Toluene	2200	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Ethylbenzene	3900	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,2,4-Trimethylbenzene	3400	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,3,5-Trimethylbenzene	840	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,2-Dichloroethane (EDC)	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Naphthalene	860	200		µg/L	100	9/2/2014 6:25:19 PM	R20949
1-Methylnaphthalene	ND	400		µg/L	100	9/2/2014 6:25:19 PM	R20949
2-Methylnaphthalene	ND	400		µg/L	100	9/2/2014 6:25:19 PM	R20949
Acetone	ND	1000		µg/L	100	9/2/2014 6:25:19 PM	R20949
Bromobenzene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Bromodichloromethane	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Bromoform	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Bromomethane	ND	300		µg/L	100	9/2/2014 6:25:19 PM	R20949
2-Butanone	ND	1000		µg/L	100	9/2/2014 6:25:19 PM	R20949
Carbon disulfide	ND	1000		µg/L	100	9/2/2014 6:25:19 PM	R20949
Carbon Tetrachloride	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Chlorobenzene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Chloroethane	ND	200		µg/L	100	9/2/2014 6:25:19 PM	R20949
Chloroform	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Chloromethane	ND	300		µg/L	100	9/2/2014 6:25:19 PM	R20949
2-Chlorotoluene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
4-Chlorotoluene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
cis-1,2-DCE	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
cis-1,3-Dichloropropene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,2-Dibromo-3-chloropropane	ND	200		µg/L	100	9/2/2014 6:25:19 PM	R20949
Dibromochloromethane	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Dibromomethane	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,2-Dichlorobenzene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,3-Dichlorobenzene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,4-Dichlorobenzene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Dichlorodifluoromethane	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,1-Dichloroethane	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,1-Dichloroethene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,2-Dichloropropane	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,3-Dichloropropane	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
2,2-Dichloropropane	ND	200		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,1-Dichloropropene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Hexachlorobutadiene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408C99****Hall Environmental Analysis Laboratory, Inc.**Date Reported: **10/2/2014**

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-002A

Client Sample ID: MW-30
Collection Date: 8/25/2014 11:45:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
2-Hexanone	ND	1000		µg/L	100	9/2/2014 6:25:19 PM	R20949
Isopropylbenzene	150	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
4-Isopropyltoluene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
4-Methyl-2-pentanone	ND	1000		µg/L	100	9/2/2014 6:25:19 PM	R20949
Methylene Chloride	ND	300		µg/L	100	9/2/2014 6:25:19 PM	R20949
n-Butylbenzene	ND	300		µg/L	100	9/2/2014 6:25:19 PM	R20949
n-Propylbenzene	610	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
sec-Butylbenzene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Styrene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
tert-Butylbenzene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,1,1,2-Tetrachloroethane	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,1,2,2-Tetrachloroethane	ND	200		µg/L	100	9/2/2014 6:25:19 PM	R20949
Tetrachloroethene (PCE)	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
trans-1,2-DCE	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
trans-1,3-Dichloropropene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,2,3-Trichlorobenzene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,2,4-Trichlorobenzene	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,1,1-Trichloroethane	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,1,2-Trichloroethane	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Trichloroethene (TCE)	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Trichlorofluoromethane	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
1,2,3-Trichloropropane	ND	200		µg/L	100	9/2/2014 6:25:19 PM	R20949
Vinyl chloride	ND	100		µg/L	100	9/2/2014 6:25:19 PM	R20949
Xylenes, Total	14000	150		µg/L	100	9/2/2014 6:25:19 PM	R20949
Surr: 1,2-Dichloroethane-d4	109	70-130		%REC	100	9/2/2014 6:25:19 PM	R20949
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	100	9/2/2014 6:25:19 PM	R20949
Surr: Dibromofluoromethane	99.8	70-130		%REC	100	9/2/2014 6:25:19 PM	R20949
Surr: Toluene-d8	93.7	70-130		%REC	100	9/2/2014 6:25:19 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 9 of 76

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-002B

Client Sample ID: MW-30
Collection Date: 8/25/2014 11:45:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	73	5.0		mg/L	100	8/27/2014 2:41:50 PM	R20843
Surr: BFB	112	70.9-130		%REC	100	8/27/2014 2:41:50 PM	R20843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-002C

Client Sample ID: MW-30
Collection Date: 8/25/2014 11:45:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	9.4	0.20		mg/L	1	8/28/2014 11:10:59 PM	14963
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/28/2014 11:10:59 PM	14963
Surr: DNOP	117	75.2-161		%REC	1	8/28/2014 11:10:59 PM	14963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-002D

Client Sample ID: MW-30
Collection Date: 8/25/2014 11:45:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	ND	0.50		mg/L	5	8/26/2014 2:01:42 PM	R20831
Chloride	270	10		mg/L	20	8/26/2014 2:14:07 PM	R20831
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	8/26/2014 2:01:42 PM	R20831
Bromide	4.7	0.50		mg/L	5	8/26/2014 2:01:42 PM	R20831
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	8/26/2014 2:01:42 PM	R20831
Phosphorus, Orthophosphate (As P _i)	ND	2.5		mg/L	5	8/26/2014 2:01:42 PM	R20831
Sulfate	47	2.5		mg/L	5	8/26/2014 2:01:42 PM	R20831
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	1200	2.5	H	mg CO ₂ /L	2.5	9/2/2014 6:58:37 PM	R20962
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	2900	0.010		µmhos/cm	1	9/2/2014 12:27:57 PM	R20962
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	1300	50		mg/L CaCO ₃	2.5	9/2/2014 6:58:37 PM	R20962
Carbonate (As CaCO ₃)	ND	5.0		mg/L CaCO ₃	2.5	9/2/2014 6:58:37 PM	R20962
Total Alkalinity (as CaCO ₃)	1300	50		mg/L CaCO ₃	2.5	9/2/2014 6:58:37 PM	R20962
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	2060	100	*	mg/L	1	9/2/2014 10:07:00 AM	14989

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-002E

Client Sample ID: MW-30
Collection Date: 8/25/2014 11:45:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.44	0.0020		mg/L	1	8/28/2014 6:27:19 PM	R20883
Cadmium	ND	0.0020		mg/L	1	8/28/2014 6:27:19 PM	R20883
Calcium	200	10		mg/L	10	8/29/2014 3:13:11 PM	R20915
Chromium	ND	0.0060		mg/L	1	8/28/2014 6:27:19 PM	R20883
Iron	0.35	0.020	*	mg/L	1	8/28/2014 6:27:19 PM	R20883
Magnesium	41	1.0		mg/L	1	8/28/2014 6:27:19 PM	R20883
Manganese	1.1	0.020	*	mg/L	10	8/29/2014 3:13:11 PM	R20915
Potassium	3.2	1.0		mg/L	1	8/28/2014 6:27:19 PM	R20883
Silver	ND	0.0050		mg/L	1	8/28/2014 6:27:19 PM	R20883
Sodium	610	10		mg/L	10	8/29/2014 3:13:11 PM	R20915
Zinc	ND	0.010		mg/L	1	8/28/2014 6:27:19 PM	R20883
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Arsenic	ND	0.010		mg/L	10	9/10/2014 1:14:01 PM	R21134
Copper	ND	0.010		mg/L	10	9/10/2014 1:14:01 PM	R21134
Lead	ND	0.010		mg/L	10	9/10/2014 1:14:01 PM	R21134
Selenium	0.014	0.010		mg/L	10	9/10/2014 1:14:01 PM	R21134
Uranium	ND	0.010		mg/L	10	9/10/2014 1:14:01 PM	R21134
EPA METHOD 7470: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	8/30/2014 1:30:32 PM	15037

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-002F

Client Sample ID: MW-30
Collection Date: 8/25/2014 11:45:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	9/5/2014 5:54:16 PM	15120
Barium	0.66	0.0020		mg/L	1	9/5/2014 5:54:16 PM	15120
Cadmium	ND	0.0020		mg/L	1	9/5/2014 5:54:16 PM	15120
Chromium	ND	0.0060		mg/L	1	9/5/2014 5:54:16 PM	15120
Lead	ND	0.0050		mg/L	1	9/5/2014 5:54:16 PM	15120
Selenium	ND	0.050		mg/L	1	9/5/2014 5:54:16 PM	15120
Silver	ND	0.0050		mg/L	1	9/9/2014 4:49:23 PM	15187
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	9/4/2014 2:51:05 PM	15109

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-003A

Client Sample ID: Trip Blank
Collection Date:
Matrix: Trip Blank

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
Benzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Toluene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Ethylbenzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Naphthalene	ND	2.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1-Methylnaphthalene	ND	4.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
2-Methylnaphthalene	ND	4.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Acetone	ND	10		µg/L	1	9/2/2014 7:24:49 PM	R20949
Bromobenzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Bromodichloromethane	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Bromoform	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Bromomethane	ND	3.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
2-Butanone	ND	10		µg/L	1	9/2/2014 7:24:49 PM	R20949
Carbon disulfide	ND	10		µg/L	1	9/2/2014 7:24:49 PM	R20949
Carbon Tetrachloride	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Chlorobenzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Chloroethane	ND	2.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Chloroform	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Chloromethane	ND	3.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
2-Chlorotoluene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
4-Chlorotoluene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
cis-1,2-DCE	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Dibromochloromethane	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Dibromomethane	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,1-Dichloroethane	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,1-Dichloroethene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,2-Dichloropropane	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,3-Dichloropropane	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
2,2-Dichloropropane	ND	2.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,1-Dichloropropene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Hexachlorobutadiene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical Report

Lab Order: 1408C99

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-003A

Client Sample ID: Trip Blank
Collection Date:
Matrix: Trip Blank

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: KJH
2-Hexanone	ND	10		µg/L	1	9/2/2014 7:24:49 PM	R20949
Isopropylbenzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
4-Isopropyltoluene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
4-Methyl-2-pentanone	ND	10		µg/L	1	9/2/2014 7:24:49 PM	R20949
Methylene Chloride	ND	3.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
n-Butylbenzene	ND	3.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
n-Propylbenzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
sec-Butylbenzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Styrene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
tert-Butylbenzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
trans-1,2-DCE	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Trichlorofluoromethane	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Vinyl chloride	ND	1.0		µg/L	1	9/2/2014 7:24:49 PM	R20949
Xylenes, Total	ND	1.5		µg/L	1	9/2/2014 7:24:49 PM	R20949
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	9/2/2014 7:24:49 PM	R20949
Surr: 4-Bromofluorobenzene	90.9	70-130		%REC	1	9/2/2014 7:24:49 PM	R20949
Surr: Dibromofluoromethane	98.4	70-130		%REC	1	9/2/2014 7:24:49 PM	R20949
Surr: Toluene-d8	91.2	70-130		%REC	1	9/2/2014 7:24:49 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408C99**Date Reported: **10/2/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** Rinsate**Project:** Refinery Wells 8-25-14**Collection Date:** 8/25/2014 12:00:00 PM**Lab ID:** 1408C99-004A**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	1.0		µg/L	1	9/2/2014 7:54:33 PM	R20949
Toluene	ND	1.0		µg/L	1	9/2/2014 7:54:33 PM	R20949
Ethylbenzene	ND	1.0		µg/L	1	9/2/2014 7:54:33 PM	R20949
Xylenes, Total	ND	1.5		µg/L	1	9/2/2014 7:54:33 PM	R20949
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	9/2/2014 7:54:33 PM	R20949
Surr: 4-Bromofluorobenzene	96.8	70-130		%REC	1	9/2/2014 7:54:33 PM	R20949
Surr: Dibromofluoromethane	99.2	70-130		%REC	1	9/2/2014 7:54:33 PM	R20949
Surr: Toluene-d8	90.9	70-130		%REC	1	9/2/2014 7:54:33 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-005A

Client Sample ID: MW-31
Collection Date: 8/25/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
Benzene	1600	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Toluene	130	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Ethylbenzene	770	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,2,4-Trimethylbenzene	1200	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,3,5-Trimethylbenzene	100	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Naphthalene	180	100		µg/L	50	9/2/2014 8:24:17 PM	R20949
1-Methylnaphthalene	ND	200		µg/L	50	9/2/2014 8:24:17 PM	R20949
2-Methylnaphthalene	ND	200		µg/L	50	9/2/2014 8:24:17 PM	R20949
Acetone	ND	500		µg/L	50	9/2/2014 8:24:17 PM	R20949
Bromobenzene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Bromodichloromethane	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Bromoform	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Bromomethane	ND	150		µg/L	50	9/2/2014 8:24:17 PM	R20949
2-Butanone	ND	500		µg/L	50	9/2/2014 8:24:17 PM	R20949
Carbon disulfide	ND	500		µg/L	50	9/2/2014 8:24:17 PM	R20949
Carbon Tetrachloride	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Chlorobenzene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Chloroethane	ND	100		µg/L	50	9/2/2014 8:24:17 PM	R20949
Chloroform	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Chloromethane	ND	150		µg/L	50	9/2/2014 8:24:17 PM	R20949
2-Chlorotoluene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
4-Chlorotoluene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
cis-1,2-DCE	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
cis-1,3-Dichloropropene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	9/2/2014 8:24:17 PM	R20949
Dibromochloromethane	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Dibromomethane	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,2-Dichlorobenzene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,3-Dichlorobenzene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,4-Dichlorobenzene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Dichlorodifluoromethane	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,1-Dichloroethane	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,1-Dichloroethene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,2-Dichloropropane	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,3-Dichloropropane	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
2,2-Dichloropropane	ND	100		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,1-Dichloropropene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Hexachlorobutadiene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408C99**Date Reported: **10/2/2014****Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-005A

Client Sample ID: MW-31
Collection Date: 8/25/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
2-Hexanone	ND	500		µg/L	50	9/2/2014 8:24:17 PM	R20949
Isopropylbenzene	73	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
4-Isopropyltoluene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
4-Methyl-2-pentanone	ND	500		µg/L	50	9/2/2014 8:24:17 PM	R20949
Methylene Chloride	ND	150		µg/L	50	9/2/2014 8:24:17 PM	R20949
n-Butylbenzene	ND	150		µg/L	50	9/2/2014 8:24:17 PM	R20949
n-Propylbenzene	220	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
sec-Butylbenzene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Styrene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
tert-Butylbenzene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	9/2/2014 8:24:17 PM	R20949
Tetrachloroethene (PCE)	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
trans-1,2-DCE	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
trans-1,3-Dichloropropene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,2,3-Trichlorobenzene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,2,4-Trichlorobenzene	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,1,1-Trichloroethane	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,1,2-Trichloroethane	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Trichloroethene (TCE)	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Trichlorofluoromethane	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
1,2,3-Trichloropropane	ND	100		µg/L	50	9/2/2014 8:24:17 PM	R20949
Vinyl chloride	ND	50		µg/L	50	9/2/2014 8:24:17 PM	R20949
Xylenes, Total	1400	75		µg/L	50	9/2/2014 8:24:17 PM	R20949
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	50	9/2/2014 8:24:17 PM	R20949
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	50	9/2/2014 8:24:17 PM	R20949
Surr: Dibromofluoromethane	103	70-130		%REC	50	9/2/2014 8:24:17 PM	R20949
Surr: Toluene-d8	89.4	70-130		%REC	50	9/2/2014 8:24:17 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-005B

Client Sample ID: MW-31
Collection Date: 8/25/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	15	2.5		mg/L	50	8/27/2014 4:42:39 PM	R20843
Surr: BFB	115	70.9-130		%REC	50	8/27/2014 4:42:39 PM	R20843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-005C

Client Sample ID: MW-31
Collection Date: 8/25/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	4.0	0.20		mg/L	1	8/28/2014 11:40:41 PM	14963
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/28/2014 11:40:41 PM	14963
Surr: DNOP	125	75.2-161		%REC	1	8/28/2014 11:40:41 PM	14963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**Lab Order: **1408C99**Date Reported: **10/2/2014**

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-005D

Client Sample ID: MW-31
Collection Date: 8/25/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.14	0.10		mg/L	1	8/26/2014 2:26:31 PM	R20831
Chloride	300	10		mg/L	20	8/26/2014 2:38:55 PM	R20831
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/26/2014 2:26:31 PM	R20831
Bromide	5.5	2.0		mg/L	20	8/26/2014 2:38:55 PM	R20831
Nitrogen, Nitrate (As N)	ND	2.0		mg/L	20	8/26/2014 2:38:55 PM	R20831
Phosphorus, Orthophosphate (As P _i)	ND	0.50		mg/L	1	8/26/2014 2:26:31 PM	R20831
Sulfate	5.4	0.50		mg/L	1	8/26/2014 2:26:31 PM	R20831
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	1100	1.0	H	mg CO ₂ /L	1	9/2/2014 1:02:04 PM	R20962
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	2600	0.010		µmhos/cm	1	9/2/2014 1:02:04 PM	R20962
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	1200	20		mg/L CaCO ₃	1	9/2/2014 1:02:04 PM	R20962
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	9/2/2014 1:02:04 PM	R20962
Total Alkalinity (as CaCO ₃)	1200	20		mg/L CaCO ₃	1	9/2/2014 1:02:04 PM	R20962
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1810	40.0	*	mg/L	1	9/2/2014 10:07:00 AM	14989

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-005E

Client Sample ID: MW-31
Collection Date: 8/25/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.59	0.0020		mg/L	1	8/28/2014 6:29:11 PM	R20883
Cadmium	ND	0.0020		mg/L	1	8/28/2014 6:29:11 PM	R20883
Calcium	98	1.0		mg/L	1	8/28/2014 6:29:11 PM	R20883
Chromium	ND	0.0060		mg/L	1	8/28/2014 6:29:11 PM	R20883
Iron	0.079	0.020		mg/L	1	8/28/2014 6:29:11 PM	R20883
Magnesium	36	1.0		mg/L	1	8/28/2014 6:29:11 PM	R20883
Manganese	0.47	0.0020	*	mg/L	1	8/28/2014 6:29:11 PM	R20883
Potassium	3.3	1.0		mg/L	1	8/28/2014 6:29:11 PM	R20883
Silver	ND	0.0050		mg/L	1	8/28/2014 6:29:11 PM	R20883
Sodium	550	10		mg/L	10	8/29/2014 3:20:50 PM	R20915
Zinc	ND	0.010		mg/L	1	8/28/2014 6:29:11 PM	R20883
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Arsenic	ND	0.010		mg/L	10	9/10/2014 1:19:24 PM	R21134
Copper	ND	0.010		mg/L	10	9/10/2014 1:19:24 PM	R21134
Lead	ND	0.0010		mg/L	1	9/8/2014 5:23:04 PM	R21084
Selenium	0.017	0.010		mg/L	10	9/10/2014 1:19:24 PM	R21134
Uranium	ND	0.0010		mg/L	1	9/8/2014 5:23:04 PM	R21084
EPA METHOD 7470: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	8/30/2014 1:32:18 PM	15037

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-005F

Client Sample ID: MW-31
Collection Date: 8/25/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	9/5/2014 5:56:01 PM	15120
Barium	0.69	0.0020		mg/L	1	9/5/2014 5:56:01 PM	15120
Cadmium	ND	0.0020		mg/L	1	9/5/2014 5:56:01 PM	15120
Chromium	ND	0.0060		mg/L	1	9/5/2014 5:56:01 PM	15120
Lead	ND	0.0050		mg/L	1	9/5/2014 5:56:01 PM	15120
Selenium	ND	0.050		mg/L	1	9/5/2014 5:56:01 PM	15120
Silver	ND	0.0050		mg/L	1	9/9/2014 4:51:14 PM	15187
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	9/4/2014 2:52:49 PM	15109

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.

Client Sample ID: MW-44

Project: Refinery Wells 8-25-14

Collection Date: 8/25/2014 11:00:00 AM

Lab ID: 1408C99-006A

Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Toluene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Ethylbenzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Methyl tert-butyl ether (MTBE)	1.0	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Naphthalene	ND	2.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1-Methylnaphthalene	ND	4.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
2-Methylnaphthalene	ND	4.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Acetone	ND	10		µg/L	1	9/2/2014 8:54:01 PM	R20949
Bromobenzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Bromodichloromethane	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Bromoform	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Bromomethane	ND	3.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
2-Butanone	ND	10		µg/L	1	9/2/2014 8:54:01 PM	R20949
Carbon disulfide	ND	10		µg/L	1	9/2/2014 8:54:01 PM	R20949
Carbon Tetrachloride	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Chlorobenzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Chloroethane	ND	2.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Chloroform	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Chloromethane	ND	3.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
2-Chlorotoluene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
4-Chlorotoluene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
cis-1,2-DCE	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Dibromochloromethane	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Dibromomethane	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,1-Dichloroethane	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,1-Dichloroethene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,2-Dichloropropane	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,3-Dichloropropane	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
2,2-Dichloropropane	ND	2.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,1-Dichloropropene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Hexachlorobutadiene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408C99****Hall Environmental Analysis Laboratory, Inc.**Date Reported: **10/2/2014****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-44**Project:** Refinery Wells 8-25-14**Collection Date:** 8/25/2014 11:00:00 AM**Lab ID:** 1408C99-006A**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: KJH
2-Hexanone	ND	10		µg/L	1	9/2/2014 8:54:01 PM	R20949
Isopropylbenzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
4-Isopropyltoluene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
4-Methyl-2-pentanone	ND	10		µg/L	1	9/2/2014 8:54:01 PM	R20949
Methylene Chloride	ND	3.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
n-Butylbenzene	ND	3.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
n-Propylbenzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
sec-Butylbenzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Styrene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
tert-Butylbenzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
trans-1,2-DCE	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Trichlorofluoromethane	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Vinyl chloride	ND	1.0		µg/L	1	9/2/2014 8:54:01 PM	R20949
Xylenes, Total	ND	1.5		µg/L	1	9/2/2014 8:54:01 PM	R20949
Surr: 1,2-Dichloroethane-d4	99.8	70-130		%REC	1	9/2/2014 8:54:01 PM	R20949
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	9/2/2014 8:54:01 PM	R20949
Surr: Dibromofluoromethane	95.7	70-130		%REC	1	9/2/2014 8:54:01 PM	R20949
Surr: Toluene-d8	89.4	70-130		%REC	1	9/2/2014 8:54:01 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-006B

Client Sample ID: MW-44
Collection Date: 8/25/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/27/2014 5:12:43 PM	R20843
Surr: BFB	101	70.9-130		%REC	1	8/27/2014 5:12:43 PM	R20843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-006C

Client Sample ID: MW-44
Collection Date: 8/25/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	8/27/2014 6:19:22 PM	14963
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/27/2014 6:19:22 PM	14963
Surr: DNOP	114	75.2-161		%REC	1	8/27/2014 6:19:22 PM	14963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-006D

Client Sample ID: MW-44
Collection Date: 8/25/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.26	0.10		mg/L	1	8/26/2014 2:51:20 PM	R20831
Chloride	48	10		mg/L	20	8/26/2014 3:03:45 PM	R20831
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/26/2014 2:51:20 PM	R20831
Bromide	0.20	0.10		mg/L	1	8/26/2014 2:51:20 PM	R20831
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/26/2014 2:51:20 PM	R20831
Phosphorus, Orthophosphate (As P _i)	ND	10		mg/L	20	8/26/2014 3:03:45 PM	R20831
Sulfate	3200	50		mg/L	100	8/28/2014 9:59:14 PM	R20888
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	330	1.0	H	mg CO ₂ /L	1	9/2/2014 1:41:44 PM	R20962
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	4800	0.010		µmhos/cm	1	9/2/2014 1:41:44 PM	R20962
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	360	20		mg/L CaCO ₃	1	9/2/2014 1:41:44 PM	R20962
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	9/2/2014 1:41:44 PM	R20962
Total Alkalinity (as CaCO ₃)	360	20		mg/L CaCO ₃	1	9/2/2014 1:41:44 PM	R20962
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	4820	20.0	*	mg/L	1	9/2/2014 10:07:00 AM	14989

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-006E

Client Sample ID: MW-44
Collection Date: 8/25/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.0094	0.0020		mg/L	1	8/28/2014 6:31:06 PM	R20883
Cadmium	ND	0.0020		mg/L	1	8/28/2014 6:31:06 PM	R20883
Calcium	460	10		mg/L	10	8/29/2014 3:22:38 PM	R20915
Chromium	ND	0.0060		mg/L	1	8/28/2014 6:31:06 PM	R20883
Iron	ND	0.020		mg/L	1	8/28/2014 6:31:06 PM	R20883
Magnesium	65	1.0		mg/L	1	8/28/2014 6:31:06 PM	R20883
Manganese	0.47	0.0020	*	mg/L	1	8/28/2014 6:31:06 PM	R20883
Potassium	7.3	1.0		mg/L	1	8/28/2014 6:31:06 PM	R20883
Silver	ND	0.0050		mg/L	1	8/28/2014 6:31:06 PM	R20883
Sodium	900	10		mg/L	10	8/29/2014 3:22:38 PM	R20915
Zinc	ND	0.010		mg/L	1	8/28/2014 6:31:06 PM	R20883
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Arsenic	ND	0.0010		mg/L	1	9/8/2014 5:26:09 PM	R21084
Copper	ND	0.020		mg/L	20	9/10/2014 4:31:56 PM	R21134
Lead	ND	0.0010		mg/L	1	9/8/2014 5:26:09 PM	R21084
Selenium	0.0012	0.0010		mg/L	1	9/8/2014 5:26:09 PM	R21084
Uranium	0.0013	0.0010		mg/L	1	9/8/2014 5:26:09 PM	R21084
EPA METHOD 7470: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	8/30/2014 1:34:05 PM	15037

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408C99**Date Reported: **10/2/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-44**Project:** Refinery Wells 8-25-14**Collection Date:** 8/25/2014 11:00:00 AM**Lab ID:** 1408C99-006F**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	9/5/2014 5:57:43 PM	15120
Barium	0.012	0.0020		mg/L	1	9/5/2014 5:57:43 PM	15120
Cadmium	ND	0.0020		mg/L	1	9/5/2014 5:57:43 PM	15120
Chromium	ND	0.0060		mg/L	1	9/5/2014 5:57:43 PM	15120
Lead	ND	0.0050		mg/L	1	9/5/2014 5:57:43 PM	15120
Selenium	ND	0.050		mg/L	1	9/5/2014 5:57:43 PM	15120
Silver	ND	0.0050		mg/L	1	9/9/2014 5:01:57 PM	15187
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	9/4/2014 2:54:34 PM	15109

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-007A

Client Sample ID: MW-44D
Collection Date: 8/25/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
Benzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Toluene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Ethylbenzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Methyl tert-butyl ether (MTBE)	1.1	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Naphthalene	ND	2.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1-Methylnaphthalene	ND	4.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
2-Methylnaphthalene	ND	4.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Acetone	ND	10		µg/L	1	9/2/2014 9:23:43 PM	R20949
Bromobenzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Bromodichloromethane	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Bromoform	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Bromomethane	ND	3.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
2-Butanone	ND	10		µg/L	1	9/2/2014 9:23:43 PM	R20949
Carbon disulfide	ND	10		µg/L	1	9/2/2014 9:23:43 PM	R20949
Carbon Tetrachloride	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Chlorobenzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Chloroethane	ND	2.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Chloroform	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Chloromethane	ND	3.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
2-Chlorotoluene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
4-Chlorotoluene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
cis-1,2-DCE	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Dibromochloromethane	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Dibromomethane	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,1-Dichloroethane	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,1-Dichloroethene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,2-Dichloropropane	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,3-Dichloropropane	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
2,2-Dichloropropane	ND	2.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,1-Dichloropropene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Hexachlorobutadiene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 32 of 76

Analytical ReportLab Order: **1408C99****Hall Environmental Analysis Laboratory, Inc.**Date Reported: **10/2/2014****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-44D**Project:** Refinery Wells 8-25-14**Collection Date:** 8/25/2014 11:00:00 AM**Lab ID:** 1408C99-007A**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: KJH
2-Hexanone	ND	10		µg/L	1	9/2/2014 9:23:43 PM	R20949
Isopropylbenzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
4-Isopropyltoluene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
4-Methyl-2-pentanone	ND	10		µg/L	1	9/2/2014 9:23:43 PM	R20949
Methylene Chloride	ND	3.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
n-Butylbenzene	ND	3.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
n-Propylbenzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
sec-Butylbenzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Styrene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
tert-Butylbenzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
trans-1,2-DCE	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Trichlorofluoromethane	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Vinyl chloride	ND	1.0		µg/L	1	9/2/2014 9:23:43 PM	R20949
Xylenes, Total	ND	1.5		µg/L	1	9/2/2014 9:23:43 PM	R20949
Surr: 1,2-Dichloroethane-d4	97.4	70-130		%REC	1	9/2/2014 9:23:43 PM	R20949
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	9/2/2014 9:23:43 PM	R20949
Surr: Dibromofluoromethane	95.0	70-130		%REC	1	9/2/2014 9:23:43 PM	R20949
Surr: Toluene-d8	95.0	70-130		%REC	1	9/2/2014 9:23:43 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408C99**Date Reported: **10/2/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-44D**Project:** Refinery Wells 8-25-14**Collection Date:** 8/25/2014 11:00:00 AM**Lab ID:** 1408C99-007B**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/27/2014 5:42:53 PM	R20843
Surr: BFB	103	70.9-130		%REC	1	8/27/2014 5:42:53 PM	R20843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-007C

Client Sample ID: MW-44D
Collection Date: 8/25/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	8/27/2014 6:49:32 PM	14963
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/27/2014 6:49:32 PM	14963
Surr: DNOP	103	75.2-161		%REC	1	8/27/2014 6:49:32 PM	14963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-007D

Client Sample ID: MW-44D
Collection Date: 8/25/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.27	0.10		mg/L	1	8/26/2014 3:16:10 PM	R20831
Chloride	48	10		mg/L	20	8/26/2014 3:28:34 PM	R20831
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/26/2014 3:16:10 PM	R20831
Bromide	0.20	0.10		mg/L	1	8/26/2014 3:16:10 PM	R20831
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/26/2014 3:16:10 PM	R20831
Phosphorus, Orthophosphate (As P _i)	ND	10		mg/L	20	8/26/2014 3:28:34 PM	R20831
Sulfate	3200	50		mg/L	100	8/28/2014 10:11:39 PM	R20888
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	340	1.0	H	mg CO ₂ /L	1	9/2/2014 1:57:32 PM	R20962
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	4800	0.010		µmhos/cm	1	9/2/2014 1:57:32 PM	R20962
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	350	20		mg/L CaCO ₃	1	9/2/2014 1:57:32 PM	R20962
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	9/2/2014 1:57:32 PM	R20962
Total Alkalinity (as CaCO ₃)	350	20		mg/L CaCO ₃	1	9/2/2014 1:57:32 PM	R20962
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	4810	20.0	*	mg/L	1	9/2/2014 10:07:00 AM	14989

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-007E

Client Sample ID: MW-44D
Collection Date: 8/25/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.0091	0.0020		mg/L	1	8/28/2014 6:33:06 PM	R20883
Cadmium	ND	0.0020		mg/L	1	8/28/2014 6:33:06 PM	R20883
Calcium	460	10		mg/L	10	8/29/2014 3:24:30 PM	R20915
Chromium	ND	0.0060		mg/L	1	8/28/2014 6:33:06 PM	R20883
Iron	ND	0.020		mg/L	1	8/28/2014 6:33:06 PM	R20883
Magnesium	63	1.0		mg/L	1	8/28/2014 6:33:06 PM	R20883
Manganese	0.46	0.0020	*	mg/L	1	8/28/2014 6:33:06 PM	R20883
Potassium	7.2	1.0		mg/L	1	8/28/2014 6:33:06 PM	R20883
Silver	ND	0.0050		mg/L	1	8/28/2014 6:33:06 PM	R20883
Sodium	900	10		mg/L	10	8/29/2014 3:24:30 PM	R20915
Zinc	0.016	0.010		mg/L	1	8/28/2014 6:33:06 PM	R20883
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Arsenic	ND	0.0010		mg/L	1	9/8/2014 5:29:15 PM	R21084
Copper	ND	0.020		mg/L	20	9/10/2014 1:30:08 PM	R21134
Lead	ND	0.0010		mg/L	1	9/8/2014 5:29:15 PM	R21084
Selenium	0.0012	0.0010		mg/L	1	9/8/2014 5:29:15 PM	R21084
Uranium	0.0013	0.0010		mg/L	1	9/8/2014 5:29:15 PM	R21084
EPA METHOD 7470: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	8/30/2014 1:35:51 PM	15037

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.

Client Sample ID: MW-44D

Project: Refinery Wells 8-25-14

Collection Date: 8/25/2014 11:00:00 AM

Lab ID: 1408C99-007F

Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	9/5/2014 5:59:39 PM	15120
Barium	0.011	0.0020		mg/L	1	9/5/2014 5:59:39 PM	15120
Cadmium	ND	0.0020		mg/L	1	9/5/2014 5:59:39 PM	15120
Chromium	ND	0.0060		mg/L	1	9/5/2014 5:59:39 PM	15120
Lead	ND	0.0050		mg/L	1	9/5/2014 5:59:39 PM	15120
Selenium	ND	0.050		mg/L	1	9/5/2014 5:59:39 PM	15120
Silver	ND	0.0050		mg/L	1	9/9/2014 5:03:51 PM	15187
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	9/4/2014 2:56:18 PM	15109

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical Report

Lab Order: 1408C99

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.

Client Sample ID: MW-4

Project: Refinery Wells 8-25-14

Collection Date: 8/25/2014 9:00:00 AM

Lab ID: 1408C99-008A

Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	27	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Toluene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Ethylbenzene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,2,4-Trimethylbenzene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,3,5-Trimethylbenzene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Naphthalene	55	20		µg/L	10	9/2/2014 9:53:23 PM	R20949
1-Methylnaphthalene	ND	40		µg/L	10	9/2/2014 9:53:23 PM	R20949
2-Methylnaphthalene	ND	40		µg/L	10	9/2/2014 9:53:23 PM	R20949
Acetone	ND	100		µg/L	10	9/2/2014 9:53:23 PM	R20949
Bromobenzene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Bromodichloromethane	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Bromoform	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Bromomethane	ND	30		µg/L	10	9/2/2014 9:53:23 PM	R20949
2-Butanone	ND	100		µg/L	10	9/2/2014 9:53:23 PM	R20949
Carbon disulfide	ND	100		µg/L	10	9/2/2014 9:53:23 PM	R20949
Carbon Tetrachloride	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Chlorobenzene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Chloroethane	ND	20		µg/L	10	9/2/2014 9:53:23 PM	R20949
Chloroform	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Chloromethane	ND	30		µg/L	10	9/2/2014 9:53:23 PM	R20949
2-Chlorotoluene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
4-Chlorotoluene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
cis-1,2-DCE	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
cis-1,3-Dichloropropene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	9/2/2014 9:53:23 PM	R20949
Dibromochloromethane	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Dibromomethane	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,2-Dichlorobenzene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,3-Dichlorobenzene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,4-Dichlorobenzene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Dichlorodifluoromethane	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,1-Dichloroethane	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,1-Dichloroethene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,2-Dichloropropane	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,3-Dichloropropane	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
2,2-Dichloropropane	ND	20		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,1-Dichloropropene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Hexachlorobutadiene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Analytical Report

Lab Order: 1408C99

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-008A

Client Sample ID: MW-4
Collection Date: 8/25/2014 9:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
2-Hexanone	ND	100		µg/L	10	9/2/2014 9:53:23 PM	R20949
Isopropylbenzene	25	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
4-Isopropyltoluene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
4-Methyl-2-pentanone	ND	100		µg/L	10	9/2/2014 9:53:23 PM	R20949
Methylene Chloride	ND	30		µg/L	10	9/2/2014 9:53:23 PM	R20949
n-Butylbenzene	ND	30		µg/L	10	9/2/2014 9:53:23 PM	R20949
n-Propylbenzene	25	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
sec-Butylbenzene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Styrene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
tert-Butylbenzene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	9/2/2014 9:53:23 PM	R20949
Tetrachloroethene (PCE)	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
trans-1,2-DCE	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
trans-1,3-Dichloropropene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,2,3-Trichlorobenzene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,2,4-Trichlorobenzene	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,1,1-Trichloroethane	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,1,2-Trichloroethane	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Trichloroethene (TCE)	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Trichlorofluoromethane	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
1,2,3-Trichloropropane	ND	20		µg/L	10	9/2/2014 9:53:23 PM	R20949
Vinyl chloride	ND	10		µg/L	10	9/2/2014 9:53:23 PM	R20949
Xylenes, Total	ND	15		µg/L	10	9/2/2014 9:53:23 PM	R20949
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	10	9/2/2014 9:53:23 PM	R20949
Surr: 4-Bromofluorobenzene	102	70-130		%REC	10	9/2/2014 9:53:23 PM	R20949
Surr: Dibromofluoromethane	101	70-130		%REC	10	9/2/2014 9:53:23 PM	R20949
Surr: Toluene-d8	90.9	70-130		%REC	10	9/2/2014 9:53:23 PM	R20949

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 40 of 76

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-008B

Client Sample ID: MW-4
Collection Date: 8/25/2014 9:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	5.4	0.50		mg/L	10	8/27/2014 6:12:56 PM	R20843
Surr: BFB	136	70.9-130	S	%REC	10	8/27/2014 6:12:56 PM	R20843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-008C

Client Sample ID: MW-4
Collection Date: 8/25/2014 9:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	0.84	0.20		mg/L	1	8/29/2014 12:10:45 AM	14963
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/29/2014 12:10:45 AM	14963
Surr: DNOP	104	75.2-161		%REC	1	8/29/2014 12:10:45 AM	14963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-008D

Client Sample ID: MW-4
Collection Date: 8/25/2014 9:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	ND	0.50		mg/L	5	8/26/2014 3:40:58 PM	R20831
Chloride	220	10		mg/L	20	8/26/2014 3:53:23 PM	R20831
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	8/26/2014 3:40:58 PM	R20831
Bromide	3.4	0.50		mg/L	5	8/26/2014 3:40:58 PM	R20831
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	8/26/2014 3:40:58 PM	R20831
Phosphorus, Orthophosphate (As P _i)	ND	2.5		mg/L	5	8/26/2014 3:40:58 PM	R20831
Sulfate	6.8	2.5		mg/L	5	8/26/2014 3:40:58 PM	R20831
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	1200	2.5	H	mg CO ₂ /L	2.5	9/2/2014 7:19:14 PM	R20962
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	2700	0.010		µmhos/cm	1	9/2/2014 2:13:28 PM	R20962
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	1400	50		mg/L CaCO ₃	2.5	9/2/2014 7:19:14 PM	R20962
Carbonate (As CaCO ₃)	ND	5.0		mg/L CaCO ₃	2.5	9/2/2014 7:19:14 PM	R20962
Total Alkalinity (as CaCO ₃)	1400	50		mg/L CaCO ₃	2.5	9/2/2014 7:19:14 PM	R20962
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1840	100	*	mg/L	1	9/2/2014 10:07:00 AM	14989

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-008E

Client Sample ID: MW-4
Collection Date: 8/25/2014 9:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	2.1	0.020	*	mg/L	10	8/29/2014 3:26:22 PM	R20915
Cadmium	ND	0.0020		mg/L	1	8/28/2014 6:35:04 PM	R20883
Calcium	150	10		mg/L	10	8/29/2014 3:26:22 PM	R20915
Chromium	ND	0.0060		mg/L	1	8/28/2014 6:35:04 PM	R20883
Iron	12	0.40	*	mg/L	20	8/29/2014 3:28:02 PM	R20915
Magnesium	62	1.0		mg/L	1	8/28/2014 6:35:04 PM	R20883
Manganese	2.5	0.020	*	mg/L	10	8/29/2014 3:26:22 PM	R20915
Potassium	6.1	1.0		mg/L	1	8/28/2014 6:35:04 PM	R20883
Silver	ND	0.0050		mg/L	1	8/28/2014 6:35:04 PM	R20883
Sodium	470	10		mg/L	10	8/29/2014 3:26:22 PM	R20915
Zinc	0.011	0.010		mg/L	1	8/28/2014 6:35:04 PM	R20883
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Arsenic	ND	0.010		mg/L	10	9/10/2014 1:35:31 PM	R21134
Copper	0.023	0.0010		mg/L	1	9/8/2014 5:32:20 PM	R21084
Lead	0.0011	0.0010		mg/L	1	9/8/2014 5:32:20 PM	R21084
Selenium	0.012	0.010		mg/L	10	9/10/2014 1:35:31 PM	R21134
Uranium	ND	0.0010		mg/L	1	9/8/2014 5:32:20 PM	R21084
EPA METHOD 7470: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	8/30/2014 1:37:39 PM	15037

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408C99**Date Reported: **10/2/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-4**Project:** Refinery Wells 8-25-14**Collection Date:** 8/25/2014 9:00:00 AM**Lab ID:** 1408C99-008F**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020	*	mg/L	1	9/5/2014 6:01:36 PM	15120
Barium	2.6	0.010	*	mg/L	5	9/8/2014 5:37:38 PM	15120
Cadmium	ND	0.0020		mg/L	1	9/5/2014 6:01:36 PM	15120
Chromium	0.024	0.0060		mg/L	1	9/5/2014 6:01:36 PM	15120
Lead	0.010	0.0050		mg/L	1	9/5/2014 6:01:36 PM	15120
Selenium	ND	0.050		mg/L	1	9/5/2014 6:01:36 PM	15120
Silver	ND	0.0050		mg/L	1	9/9/2014 5:05:46 PM	15187
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	9/4/2014 2:58:02 PM	15109

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-009A

Client Sample ID: MW-15
Collection Date: 8/25/2014 9:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
Benzene	2100	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Toluene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Ethylbenzene	3400	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Methyl tert-butyl ether (MTBE)	150	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,2,4-Trimethylbenzene	2500	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,3,5-Trimethylbenzene	490	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Naphthalene	640	100		µg/L	50	9/3/2014 6:13:35 PM	R20971
1-Methylnaphthalene	ND	200		µg/L	50	9/3/2014 6:13:35 PM	R20971
2-Methylnaphthalene	210	200		µg/L	50	9/3/2014 6:13:35 PM	R20971
Acetone	ND	500		µg/L	50	9/3/2014 6:13:35 PM	R20971
Bromobenzene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Bromodichloromethane	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Bromoform	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Bromomethane	ND	150		µg/L	50	9/3/2014 6:13:35 PM	R20971
2-Butanone	ND	500		µg/L	50	9/3/2014 6:13:35 PM	R20971
Carbon disulfide	ND	500		µg/L	50	9/3/2014 6:13:35 PM	R20971
Carbon Tetrachloride	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Chlorobenzene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Chloroethane	ND	100		µg/L	50	9/3/2014 6:13:35 PM	R20971
Chloroform	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Chloromethane	ND	150		µg/L	50	9/3/2014 6:13:35 PM	R20971
2-Chlorotoluene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
4-Chlorotoluene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
cis-1,2-DCE	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
cis-1,3-Dichloropropene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	9/3/2014 6:13:35 PM	R20971
Dibromochloromethane	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Dibromomethane	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,2-Dichlorobenzene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,3-Dichlorobenzene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,4-Dichlorobenzene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Dichlorodifluoromethane	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,1-Dichloroethane	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,1-Dichloroethene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,2-Dichloropropane	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,3-Dichloropropane	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
2,2-Dichloropropane	ND	100		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,1-Dichloropropene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Hexachlorobutadiene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408C99****Hall Environmental Analysis Laboratory, Inc.**Date Reported: **10/2/2014**

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-009A

Client Sample ID: MW-15
Collection Date: 8/25/2014 9:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
2-Hexanone	ND	500		µg/L	50	9/3/2014 6:13:35 PM	R20971
Isopropylbenzene	93	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
4-Isopropyltoluene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
4-Methyl-2-pentanone	ND	500		µg/L	50	9/3/2014 6:13:35 PM	R20971
Methylene Chloride	ND	150		µg/L	50	9/3/2014 6:13:35 PM	R20971
n-Butylbenzene	ND	150		µg/L	50	9/3/2014 6:13:35 PM	R20971
n-Propylbenzene	320	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
sec-Butylbenzene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Styrene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
tert-Butylbenzene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	9/3/2014 6:13:35 PM	R20971
Tetrachloroethene (PCE)	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
trans-1,2-DCE	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
trans-1,3-Dichloropropene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,2,3-Trichlorobenzene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,2,4-Trichlorobenzene	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,1,1-Trichloroethane	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,1,2-Trichloroethane	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Trichloroethene (TCE)	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Trichlorofluoromethane	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
1,2,3-Trichloropropane	ND	100		µg/L	50	9/3/2014 6:13:35 PM	R20971
Vinyl chloride	ND	50		µg/L	50	9/3/2014 6:13:35 PM	R20971
Xylenes, Total	6600	75		µg/L	50	9/3/2014 6:13:35 PM	R20971
Surr: 1,2-Dichloroethane-d4	97.2	70-130		%REC	50	9/3/2014 6:13:35 PM	R20971
Surr: 4-Bromofluorobenzene	89.9	70-130		%REC	50	9/3/2014 6:13:35 PM	R20971
Surr: Dibromofluoromethane	92.0	70-130		%REC	50	9/3/2014 6:13:35 PM	R20971
Surr: Toluene-d8	97.7	70-130		%REC	50	9/3/2014 6:13:35 PM	R20971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-009B

Client Sample ID: MW-15
Collection Date: 8/25/2014 9:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	39	2.5		mg/L	50	8/28/2014 3:53:55 PM	R20862
Surr: BFB	114	70.9-130		%REC	50	8/28/2014 3:53:55 PM	R20862

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-009C

Client Sample ID: MW-15
Collection Date: 8/25/2014 9:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	4.7	0.20		mg/L	1	8/29/2014 12:40:28 AM	14963
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/29/2014 12:40:28 AM	14963
Surr: DNOP	102	75.2-161		%REC	1	8/29/2014 12:40:28 AM	14963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-009D

Client Sample ID: MW-15
Collection Date: 8/25/2014 9:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	ND	0.50		mg/L	5	8/26/2014 4:30:37 PM	R20831
Chloride	410	25		mg/L	50	8/28/2014 10:48:52 PM	R20888
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	8/26/2014 4:30:37 PM	R20831
Bromide	6.1	0.50		mg/L	5	8/26/2014 4:30:37 PM	R20831
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	8/26/2014 4:30:37 PM	R20831
Phosphorus, Orthophosphate (As P _i)	ND	2.5		mg/L	5	8/26/2014 4:30:37 PM	R20831
Sulfate	2.8	2.5		mg/L	5	8/26/2014 4:30:37 PM	R20831
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	1100	2.5	H	mg CO ₂ /L	2.5	9/2/2014 7:39:32 PM	R20962
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	3000	0.010		µmhos/cm	1	9/2/2014 2:45:53 PM	R20962
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	1200	50		mg/L CaCO ₃	2.5	9/2/2014 7:39:32 PM	R20962
Carbonate (As CaCO ₃)	ND	5.0		mg/L CaCO ₃	2.5	9/2/2014 7:39:32 PM	R20962
Total Alkalinity (as CaCO ₃)	1200	50		mg/L CaCO ₃	2.5	9/2/2014 7:39:32 PM	R20962
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	2050	100	*	mg/L	1	9/2/2014 10:07:00 AM	14989

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-009E

Client Sample ID: MW-15
Collection Date: 8/25/2014 9:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	1.4	0.010		mg/L	5	8/29/2014 3:29:53 PM	R20915
Cadmium	ND	0.0020		mg/L	1	8/28/2014 6:36:42 PM	R20883
Calcium	150	5.0		mg/L	5	8/29/2014 3:29:53 PM	R20915
Chromium	ND	0.0060		mg/L	1	8/28/2014 6:36:42 PM	R20883
Iron	6.8	0.20	*	mg/L	10	8/29/2014 3:31:42 PM	R20915
Magnesium	47	1.0		mg/L	1	8/28/2014 6:36:42 PM	R20883
Manganese	3.6	0.010	*	mg/L	5	8/29/2014 3:29:53 PM	R20915
Potassium	3.5	1.0		mg/L	1	8/28/2014 6:36:42 PM	R20883
Silver	ND	0.0050		mg/L	1	8/28/2014 6:36:42 PM	R20883
Sodium	560	10		mg/L	10	8/29/2014 3:31:42 PM	R20915
Zinc	0.013	0.010		mg/L	1	8/28/2014 6:36:42 PM	R20883
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Arsenic	ND	0.010		mg/L	10	9/10/2014 1:40:54 PM	R21134
Copper	ND	0.010		mg/L	10	9/10/2014 1:40:54 PM	R21134
Lead	ND	0.0010		mg/L	1	9/8/2014 5:35:26 PM	R21084
Selenium	0.020	0.010		mg/L	10	9/10/2014 1:40:54 PM	R21134
Uranium	ND	0.0010		mg/L	1	9/8/2014 5:35:26 PM	R21084
EPA METHOD 7470: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	8/30/2014 1:39:28 PM	15037

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408C99

Date Reported: 10/2/2014

CLIENT: Western Refining Southwest, Inc.
Project: Refinery Wells 8-25-14
Lab ID: 1408C99-009F

Client Sample ID: MW-15
Collection Date: 8/25/2014 9:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	9/5/2014 6:03:23 PM	15120
Barium	1.6	0.010		mg/L	5	9/8/2014 5:42:34 PM	15120
Cadmium	ND	0.0020		mg/L	1	9/5/2014 6:03:23 PM	15120
Chromium	ND	0.0060		mg/L	1	9/5/2014 6:03:23 PM	15120
Lead	ND	0.0050		mg/L	1	9/5/2014 6:03:23 PM	15120
Selenium	ND	0.050		mg/L	1	9/5/2014 6:03:23 PM	15120
Silver	ND	0.0050		mg/L	1	9/9/2014 5:07:36 PM	15187
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	9/4/2014 3:03:30 PM	15109

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Metals					
Client ID:	PBW	Batch ID: R20915			RunNo: 20915					
Prep Date:		Analysis Date: 8/29/2014			SeqNo: 608597		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Calcium	ND	1.0								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Metals					
Client ID:	LCSW		Batch ID: R20915		RunNo: 20915					
Prep Date:			Analysis Date: 8/29/2014		SeqNo: 608598		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.47	0.0020	0.5000	0	94.3	85	115			
Calcium	49	1.0	50.00	0	99.0	85	115			
Iron	0.47	0.020	0.5000	0	94.1	85	115			
Manganese	0.46	0.0020	0.5000	0	92.4	85	115			

Sample ID	MB-15120		SampType: MBLK		TestCode: EPA Method 200.7: Metals					
Client ID:	PBW		Batch ID: 15120		RunNo: 21047					
Prep Date:	9/4/2014		Analysis Date: 9/5/2014		SeqNo: 612532		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Lead	ND	0.0050								
Selenium	ND	0.050								

Sample ID	LCS-15120			SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW			Batch ID:	15120		RunNo:	21047			
Prep Date:	9/4/2014			Analysis Date:	9/5/2014		SeqNo:	612535		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	0.50	0.020	0.5000	0	99.4	85	115				
Barium	0.50	0.0020	0.5000	0	101	85	115				
Cadmium	0.50	0.0020	0.5000	0	101	85	115				
Chromium	0.50	0.0060	0.5000	0	99.8	85	115				
Lead	0.50	0.0050	0.5000	0	100	85	115				
Selenium	0.53	0.050	0.5000	0	106	85	115				

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	1408C99-001FMS			SampType:	MS		TestCode:	EPA Method 200.7: Metals			
Client ID:	MW-29			Batch ID:	15120		RunNo:	21047			
Prep Date:	9/4/2014			Analysis Date:	9/5/2014		SeqNo:	612572		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	0.53	0.020	0.5000	0	105	70	130				
Barium	0.50	0.0020	0.5000	0.02574	95.1	70	130				
Cadmium	0.48	0.0020	0.5000	0	95.6	70	130				
Chromium	0.48	0.0060	0.5000	0	95.3	70	130				
Lead	0.47	0.0050	0.5000	0	93.1	70	130				
Selenium	0.48	0.050	0.5000	0	95.8	70	130				

Sample ID	1408C99-001FMSD			SampType:	MSD		TestCode:	EPA Method 200.7: Metals			
Client ID:	MW-29			Batch ID:	15120		RunNo:	21047			
Prep Date:	9/4/2014			Analysis Date:	9/5/2014		SeqNo:	612573		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	0.52	0.020	0.5000	0	104	70	130	0.819	20		
Barium	0.50	0.0020	0.5000	0.02574	95.8	70	130	0.608	20		
Cadmium	0.48	0.0020	0.5000	0	96.8	70	130	1.26	20		
Chromium	0.48	0.0060	0.5000	0	95.7	70	130	0.459	20		
Lead	0.47	0.0050	0.5000	0	94.4	70	130	1.40	20		
Selenium	0.48	0.050	0.5000	0	96.7	70	130	0.871	20		

Sample ID	MB-15187		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals				
Client ID:	PBW		Batch ID:	15187		RunNo:	21110				
Prep Date:	9/9/2014		Analysis Date:	9/9/2014		SeqNo:	614315		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Silver	ND	0.0050									

Sample ID	LCS-15187			SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW			Batch ID:	15187		RunNo:	21110			
Prep Date:	9/9/2014			Analysis Date:	9/9/2014		SeqNo:	614316		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Silver	0.47	0.0050	0.5000	0	93.5	85	115				

Sample ID	1408C99-001FMS			SampType:	MS		TestCode:	EPA Method 200.7: Metals			
Client ID:	MW-29			Batch ID:	15187		RunNo:	21110			
Prep Date:	9/9/2014			Analysis Date:	9/9/2014		SeqNo:	614327		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Silver	0.49	0.0050	0.5000	0	98.6	70	130				

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	1408C99-001FMSD	SampType:	MSD	TestCode:	EPA Method 200.7: Metals					
Client ID:	MW-29	Batch ID:	15187	RunNo:	21110					
Prep Date:	9/9/2014	Analysis Date:	9/9/2014	SeqNo:	614328	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.44	0.0050	0.5000	0	87.4	70	130	12.0	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R20883			RunNo: 20883					
Prep Date:		Analysis Date: 8/28/2014			SeqNo: 607543		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R20883		RunNo: 20883					
Prep Date:			Analysis Date: 8/28/2014		SeqNo: 607544		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.46	0.0020	0.5000	0	92.4	85	115			
Cadmium	0.47	0.0020	0.5000	0	94.3	85	115			
Calcium	48	1.0	50.00	0	96.7	85	115			
Chromium	0.47	0.0060	0.5000	0	93.3	85	115			
Iron	0.46	0.020	0.5000	0	92.9	85	115			
Magnesium	49	1.0	50.00	0	97.1	85	115			
Manganese	0.45	0.0020	0.5000	0	90.7	85	115			
Potassium	46	1.0	50.00	0	93.0	85	115			
Silver	0.48	0.0050	0.5000	0	95.4	85	115			
Zinc	0.46	0.010	0.5000	0	92.8	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R20915			RunNo: 20915					
Prep Date:		Analysis Date: 8/29/2014			SeqNo: 608593		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Calcium	ND	1.0								
Iron	ND	0.020								
Manganese	ND	0.0020								
Sodium	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	LCSW		Batch ID: R20915			RunNo: 20915				
Prep Date:	Analysis Date: 8/29/2014			SeqNo: 608594		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.47	0.0020	0.5000	0	94.0	85	115			
Calcium	49	1.0	50.00	0	98.9	85	115			
Iron	0.47	0.020	0.5000	0	94.9	85	115			
Manganese	0.46	0.0020	0.5000	0	92.3	85	115			
Sodium	49	1.0	50.00	0	98.0	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R20915			RunNo: 20915					
Prep Date:		Analysis Date: 8/29/2014			SeqNo: 608595		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Calcium	ND	1.0								
Iron	ND	0.020								
Manganese	ND	0.0020								
Sodium	ND	1.0								

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	LCSW		Batch ID: R20915			RunNo: 20915				
Prep Date:	Analysis Date: 8/29/2014			SeqNo: 608596		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.46	0.0020	0.5000	0	91.8	85	115			
Calcium	49	1.0	50.00	0	98.3	85	115			
Iron	0.47	0.020	0.5000	0	93.1	85	115			
Manganese	0.45	0.0020	0.5000	0	90.0	85	115			
Sodium	48	1.0	50.00	0	96.9	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R21084		RunNo: 21084					
Prep Date:			Analysis Date: 9/8/2014		SeqNo: 613680		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.2	85	115			
Copper	0.025	0.0010	0.02500	0	101	85	115			
Lead	0.025	0.0010	0.02500	0	101	85	115			
Selenium	0.024	0.0010	0.02500	0	95.1	85	115			
Uranium	0.025	0.0010	0.02500	0	101	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R21084		RunNo: 21084					
Prep Date:			Analysis Date: 9/8/2014		SeqNo: 613681		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	95.7	85	115			
Copper	0.025	0.0010	0.02500	0	98.7	85	115			
Lead	0.025	0.0010	0.02500	0	99.8	85	115			
Selenium	0.024	0.0010	0.02500	0	95.2	85	115			
Uranium	0.024	0.0010	0.02500	0	96.7	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R21084		RunNo: 21084					
Prep Date:			Analysis Date: 9/8/2014		SeqNo: 613682		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.4	85	115			
Copper	0.025	0.0010	0.02500	0	102	85	115			
Lead	0.025	0.0010	0.02500	0	102	85	115			
Selenium	0.024	0.0010	0.02500	0	96.4	85	115			
Uranium	0.025	0.0010	0.02500	0	98.0	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R21084		RunNo: 21084					
Prep Date:			Analysis Date: 9/8/2014		SeqNo: 613683		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	100	85	115			
Copper	0.026	0.0010	0.02500	0	102	85	115			
Lead	0.024	0.0010	0.02500	0	95.5	85	115			
Selenium	0.024	0.0010	0.02500	0	97.1	85	115			
Uranium	0.024	0.0010	0.02500	0	95.5	85	115			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R21084	RunNo:	21084					
Prep Date:		Analysis Date:	9/8/2014	SeqNo:	613684	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Copper	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R21084	RunNo:	21084					
Prep Date:		Analysis Date:	9/8/2014	SeqNo:	613685	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Copper	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R21084	RunNo:	21084					
Prep Date:		Analysis Date:	9/8/2014	SeqNo:	613686	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Copper	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R21084	RunNo:	21084					
Prep Date:		Analysis Date:	9/8/2014	SeqNo:	613687	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Copper	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R21134		RunNo: 21134					
Prep Date:			Analysis Date: 9/10/2014		SeqNo: 615240		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.023	0.0010	0.02500	0	92.7	85	115			
Copper	0.024	0.0010	0.02500	0	97.9	85	115			
Lead	0.025	0.0010	0.02500	0	100	85	115			
Selenium	0.023	0.0010	0.02500	0	91.2	85	115			
Uranium	0.024	0.0010	0.02500	0	95.4	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R21134			RunNo: 21134					
Prep Date:		Analysis Date: 9/10/2014			SeqNo: 615241		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Copper	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	MB-15109		SampType:	MBLK		TestCode:	EPA Method 245.1: Mercury				
Client ID:	PBW		Batch ID:	15109		RunNo:	20992				
Prep Date:	9/4/2014		Analysis Date:	9/4/2014		SeqNo:	610945		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	ND	0.00020									

Sample ID	LCS-15109			SampType:	LCS		TestCode:	EPA Method 245.1: Mercury			
Client ID:	LCSW			Batch ID:	15109		RunNo:	20992			
Prep Date:	9/4/2014			Analysis Date:	9/4/2014		SeqNo:	610946		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	0.0052	0.00020	0.005000	0	104	80	120				

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R20831		RunNo: 20831							
Prep Date:	Analysis Date: 8/26/2014		SeqNo: 606285		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P)	ND	0.50								
Sulfate	ND	0.50								

Sample ID LCS	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: R20831		RunNo: 20831							
Prep Date:	Analysis Date: 8/26/2014		SeqNo: 606286		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.47	0.10	0.5000	0	94.7	90	110			
Chloride	4.6	0.50	5.000	0	92.4	90	110			
Nitrogen, Nitrite (As N)	0.95	0.10	1.000	0	94.8	90	110			
Bromide	2.4	0.10	2.500	0	97.0	90	110			
Nitrogen, Nitrate (As N)	2.4	0.10	2.500	0	97.7	90	110			
Phosphorus, Orthophosphate (As P)	4.8	0.50	5.000	0	96.5	90	110			
Sulfate	9.8	0.50	10.00	0	97.7	90	110			

Sample ID 1408C99-001DMS	SampType: MS		TestCode: EPA Method 300.0: Anions							
Client ID: MW-29	Batch ID: R20831		RunNo: 20831							
Prep Date:	Analysis Date: 8/26/2014		SeqNo: 606292		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.72	0.10	0.5000	0.2733	88.4	72.7	110			
Nitrogen, Nitrite (As N)	0.90	0.10	1.000	0	89.8	75.5	104			
Bromide	2.7	0.10	2.500	0.3369	94.9	85.1	108			
Nitrogen, Nitrate (As N)	2.9	0.10	2.500	0.4846	96.5	87.8	111			
Phosphorus, Orthophosphate (As P)	4.7	0.50	5.000	0.1807	89.5	81.3	101			

Sample ID 1408C99-001DMSD	SampType: MSD		TestCode: EPA Method 300.0: Anions							
Client ID: MW-29	Batch ID: R20831		RunNo: 20831							
Prep Date:	Analysis Date: 8/26/2014		SeqNo: 606293		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.72	0.10	0.5000	0.2733	89.9	72.7	110	1.08	20	
Nitrogen, Nitrite (As N)	0.91	0.10	1.000	0	91.2	75.5	104	1.60	20	
Bromide	2.7	0.10	2.500	0.3369	95.1	85.1	108	0.177	20	

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	1408C99-001DMSD		SampType: MSD		TestCode: EPA Method 300.0: Anions					
Client ID:	MW-29		Batch ID: R20831		RunNo: 20831					
Prep Date:			Analysis Date: 8/26/2014		SeqNo: 606293		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrate (As N)	2.9	0.10	2.500	0.4846	97.5	87.8	111	0.852	20	
Phosphorus, Orthophosphate (As P)	4.7	0.50	5.000	0.1807	90.4	81.3	101	0.981	20	

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID: R20831			RunNo: 20831					
Prep Date:		Analysis Date: 8/26/2014			SeqNo: 606339		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID	LCS	SampType: LCS			TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID: R20831			RunNo: 20831					
Prep Date:		Analysis Date: 8/26/2014			SeqNo: 606340		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.47	0.10	0.5000	0	94.7	90	110			
Chloride	4.6	0.50	5.000	0	92.6	90	110			
Nitrogen, Nitrite (As N)	0.95	0.10	1.000	0	95.0	90	110			
Bromide	2.4	0.10	2.500	0	97.9	90	110			
Nitrogen, Nitrate (As N)	2.4	0.10	2.500	0	97.8	90	110			
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	98.4	90	110			
Sulfate	9.9	0.50	10.00	0	98.5	90	110			

Sample ID	MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions						
Client ID:	PBW	Batch ID: R20888		RunNo: 20888						
Prep Date:		Analysis Date: 8/28/2014		SeqNo: 607812		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R20888		RunNo: 20888					
Prep Date:			Analysis Date: 8/28/2014		SeqNo: 607813		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.4	90	110			
Sulfate	9.5	0.50	10.00	0	95.1	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	MB-14963		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range				
Client ID:	PBW		Batch ID:	14963		RunNo:	20785				
Prep Date:	8/26/2014		Analysis Date:	8/27/2014		SeqNo:	606095		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	0.20									
Motor Oil Range Organics (MRO)	ND	2.5									
Surr: DNOP	0.44		0.5000		87.1	75.2	161				

Sample ID	LCS-14963		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 14963		RunNo: 20785					
Prep Date:	8/26/2014		Analysis Date: 8/27/2014		SeqNo: 606096		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	2.6	0.20	2.500	0	106	65.8	162			
Surr: DNOP	0.27		0.2500		108	75.2	161			

Sample ID	1408C99-001CMS		SampType: MS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	MW-29		Batch ID: 14963		RunNo: 20785					
Prep Date:	8/26/2014		Analysis Date: 8/27/2014		SeqNo: 606101		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	2.9	0.20	2.500	0	115	64.4	178			
Surr: DNOP	0.29		0.2500		114	75.2	161			

Sample ID	1408C99-001CMSD			SampType:	MSD		TestCode:	EPA Method 8015D: Diesel Range			
Client ID:	MW-29		Batch ID:		14963		RunNo:	20785			
Prep Date:	8/26/2014		Analysis Date:		8/27/2014		SeqNo:	606102		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	3.0	0.20	2.500	0	120	64.4	178	4.08	20		
Surr: DNOP	0.30		0.2500		121	75.2	161	0	0		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: R20843		RunNo: 20843							
Prep Date:	Analysis Date: 8/27/2014		SeqNo: 606692		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	19		20.00		97.1	70.9	130			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: R20843		RunNo: 20843							
Prep Date:	Analysis Date: 8/27/2014		SeqNo: 606693		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.52	0.050	0.5000	0	104	80	120			
Surr: BFB	21		20.00		105	70.9	130			

Sample ID 1408C99-002BMS	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: MW-30	Batch ID: R20843		RunNo: 20843							
Prep Date:	Analysis Date: 8/27/2014		SeqNo: 606698		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	130	5.0	50.00	73.10	113	70.4	127			
Surr: BFB	2500		2000		124	70.9	130			

Sample ID 1408C99-002BMDS	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: MW-30	Batch ID: R20843		RunNo: 20843							
Prep Date:	Analysis Date: 8/27/2014		SeqNo: 606699		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	130	5.0	50.00	73.10	111	70.4	127	0.991	20	
Surr: BFB	2500		2000		125	70.9	130	0	0	

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: R20862		RunNo: 20862							
Prep Date:	Analysis Date: 8/28/2014		SeqNo: 607754		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	19		20.00		96.7	70.9	130			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: R20862		RunNo: 20862							
Prep Date:	Analysis Date: 8/28/2014		SeqNo: 607755		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R20862	RunNo:	20862					
Prep Date:		Analysis Date:	8/28/2014	SeqNo:	607755	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.53	0.050	0.5000	0	105	80	120			
Surr: BFB	21		20.00		103	70.9	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.**Project:** Refinery Wells 8-25-14

Sample ID	5mL-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R20949	RunNo:	20949					
Prep Date:		Analysis Date:	9/2/2014	SeqNo:	609628	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	5mL-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R20949			RunNo: 20949					
Prep Date:		Analysis Date: 9/2/2014			SeqNo: 609628		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	8.8		10.00		88.4	70	130			
Surr: Toluene-d8	9.5		10.00		95.4	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R20949			RunNo: 20949					
Prep Date:		Analysis Date: 9/2/2014			SeqNo: 609630		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	89.8	70	130			
Toluene	20	1.0	20.00	0	100	80	120			
Chlorobenzene	19	1.0	20.00	0	95.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R20949			RunNo: 20949					
Prep Date:		Analysis Date: 9/2/2014			SeqNo: 609630		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19	1.0	20.00	0	93.5	82.6	131			
Trichloroethene (TCE)	17	1.0	20.00	0	85.4	70	130			
Surr: 1,2-Dichloroethane-d4	8.1		10.00		81.1	70	130			
Surr: 4-Bromofluorobenzene	9.1		10.00		91.2	70	130			
Surr: Dibromofluoromethane	8.7		10.00		86.8	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID	1408C99-001a ms		SampType: MS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	MW-29		Batch ID: R20949		RunNo: 20949					
Prep Date:			Analysis Date: 9/2/2014		SeqNo: 609651		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.0	70	130			
Toluene	18	1.0	20.00	0	88.8	67.5	123			
Chlorobenzene	17	1.0	20.00	0	86.1	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	100	81.9	134			
Trichloroethene (TCE)	18	1.0	20.00	0	90.9	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	9.0		10.00		89.9	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.5		10.00		95.0	70	130			

Sample ID	1408C99-001a msd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	MW-29		Batch ID: R20949		RunNo: 20949					
Prep Date:			Analysis Date: 9/2/2014		SeqNo: 609652		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.3	70	130	1.78	20	
Toluene	18	1.0	20.00	0	92.2	67.5	123	3.78	20	
Chlorobenzene	18	1.0	20.00	0	90.7	70	130	5.28	20	
1,1-Dichloroethene	21	1.0	20.00	0	107	81.9	134	6.25	20	
Trichloroethene (TCE)	18	1.0	20.00	0	91.1	70	130	0.176	20	
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130	0	0	
Surr: 4-Bromofluorobenzene	8.7		10.00		87.3	70	130	0	0	
Surr: Dibromofluoromethane	9.7		10.00		96.8	70	130	0	0	
Surr: Toluene-d8	9.7		10.00		97.1	70	130	0	0	

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	5mL-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R20971	RunNo:	20971					
Prep Date:		Analysis Date:	9/3/2014	SeqNo:	610426	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	5mL-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R20971	RunNo:	20971					
Prep Date:		Analysis Date:	9/3/2014	SeqNo:	610426	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.5	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	8.5		10.00		85.4	70	130			

Sample ID	100ng lcs3	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R20971	RunNo:	20971					
Prep Date:		Analysis Date:	9/3/2014	SeqNo:	610428	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.4	70	130			
Toluene	19	1.0	20.00	0	92.8	80	120			
Chlorobenzene	18	1.0	20.00	0	90.8	70	130			

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	100ng lcs3		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW		Batch ID: R20971		RunNo: 20971					
Prep Date:			Analysis Date: 9/3/2014		SeqNo: 610428		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19	1.0	20.00	0	95.3	82.6	131			
Trichloroethene (TCE)	18	1.0	20.00	0	90.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.8	70	130			
Surr: 4-Bromofluorobenzene	9.0		10.00		90.2	70	130			
Surr: Dibromofluoromethane	8.8		10.00		87.6	70	130			
Surr: Toluene-d8	9.1		10.00		91.3	70	130			

Sample ID	1408C99-009a ms		SampType: MS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	MW-15		Batch ID: R20971		RunNo: 20971					
Prep Date:			Analysis Date: 9/3/2014		SeqNo: 610431		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3400	50	1000	2104	126	70	130			
Toluene	1000	50	1000	42.00	99.6	67.5	123			
Chlorobenzene	960	50	1000	0	96.1	70	130			
1,1-Dichloroethene	1000	50	1000	0	102	81.9	134			
Trichloroethene (TCE)	990	50	1000	0	98.7	70	130			
Surr: 1,2-Dichloroethane-d4	510		500.0		103	70	130			
Surr: 4-Bromofluorobenzene	440		500.0		87.6	70	130			
Surr: Dibromofluoromethane	480		500.0		96.2	70	130			
Surr: Toluene-d8	480		500.0		96.4	70	130			

Sample ID	1408C99-009a msd			SampType:	MSD		TestCode: EPA Method 8260B: VOLATILES				
Client ID:	MW-15			Batch ID:	R20971		RunNo: 20971				
Prep Date:				Analysis Date:	9/3/2014		SeqNo: 610432		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	3000	50	1000	2104	93.8	70	130	9.96	20		
Toluene	1100	50	1000	42.00	104	67.5	123	4.17	20		
Chlorobenzene	930	50	1000	0	92.6	70	130	3.69	20		
1,1-Dichloroethene	1100	50	1000	0	106	81.9	134	3.87	20		
Trichloroethene (TCE)	940	50	1000	0	94.3	70	130	4.53	20		
Surr: 1,2-Dichloroethane-d4	510		500.0		102	70	130	0	0		
Surr: 4-Bromofluorobenzene	500		500.0		99.1	70	130	0	0		
Surr: Dibromofluoromethane	460		500.0		91.5	70	130	0	0		
Surr: Toluene-d8	490		500.0		98.0	70	130	0	0		

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	MB-15037		SampType:	MBLK		TestCode:	EPA Method 7470: Mercury				
Client ID:	PBW		Batch ID:	15037		RunNo:	20907				
Prep Date:	8/29/2014		Analysis Date:	8/30/2014		SeqNo:	608339		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	ND	0.00020									

Sample ID	LCS-15037		SampType: LCS		TestCode: EPA Method 7470: Mercury					
Client ID:	LCSW		Batch ID: 15037		RunNo: 20907					
Prep Date:	8/29/2014		Analysis Date: 8/30/2014		SeqNo: 608340		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0054	0.00020	0.005000	0	107	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	mb-1		SampType: MBLK		TestCode: SM2320B: Alkalinity					
Client ID:	PBW		Batch ID: R20962		RunNo: 20962					
Prep Date:			Analysis Date: 9/2/2014		SeqNo: 610172		Units: mg/L CaCO3			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20								

Sample ID	Ics-1		SampType: LCS		TestCode: SM2320B: Alkalinity					
Client ID:	LCSW		Batch ID: R20962		RunNo: 20962					
Prep Date:			Analysis Date: 9/2/2014		SeqNo: 610173		Units: mg/L CaCO3			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	80	20	80.00	0	100	90	110			

Sample ID	mb-2		SampType: MBLK		TestCode: SM2320B: Alkalinity					
Client ID:	PBW		Batch ID: R20962		RunNo: 20962					
Prep Date:			Analysis Date: 9/2/2014		SeqNo: 610188		Units: mg/L CaCO3			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20								

Sample ID	lcs-2		SampType: LCS		TestCode: SM2320B: Alkalinity					
Client ID:	LCSW		Batch ID: R20962		RunNo: 20962					
Prep Date:			Analysis Date: 9/2/2014		SeqNo: 610189		Units: mg/L CaCO3			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	81	20	80.00	0	101	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408C99

02-Oct-14

Client: Western Refining Southwest, Inc.

Project: Refinery Wells 8-25-14

Sample ID	MB-14989	SampType:	MBLK	TestCode:	SM2540C MOD: Total Dissolved Solids					
Client ID:	PBW	Batch ID:	14989	RunNo:	20924					
Prep Date:	8/27/2014	Analysis Date:	9/2/2014	SeqNo:	608856	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	LCS-14989	SampType: LCS			TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	LCSW	Batch ID: 14989			RunNo: 20924					
Prep Date:	8/27/2014	Analysis Date: 9/2/2014			SeqNo: 608857		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Sample ID	1408C99-005DMS	SampType:	MS	TestCode:	SM2540C MOD: Total Dissolved Solids					
Client ID:	MW-31	Batch ID:	14989	RunNo:	20924					
Prep Date:	8/27/2014	Analysis Date:	9/2/2014	SeqNo:	608861	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	3810	40.0	2000	1808	100	80	120			

Sample ID	1408C99-005DMSD	SampType:	MSD	TestCode:	SM2540C MOD: Total Dissolved Solids					
Client ID:	MW-31	Batch ID:	14989	RunNo:	20924					
Prep Date:	8/27/2014	Analysis Date:	9/2/2014	SeqNo:	608862	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	3810	40.0	2000	1808	100	80	120	0	5	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: **Western Refining Southw**

Work Order Number: 1408C99

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

8/26/2014 7:45:00 AM

Completed By: **Lindsay Mangin**

8/26/2014 8:10:28 AM

Reviewed By:

Chain of Custody

- | | | | |
|--|---------|----|-------------|
| 1. Custody seals intact on sample bottles? | Yes | No | Not Present |
| 2. Is Chain of Custody complete? | Yes | No | Not Present |
| 3. How was the sample delivered? | Courier | | |

Log In

- | Question | Yes | No | Notes |
|---|-------|------|--|
| 4. Was an attempt made to cool the samples? | Yes ✓ | No | NA |
| 5. Were all samples received at a temperature of >0° C to 6.0°C | Yes ✓ | No | NA |
| 6. Sample(s) in proper container(s)? | Yes ✓ | No | |
| 7. Sufficient sample volume for indicated test(s)? | Yes ✓ | No | |
| 8. Are samples (except VOA and ONG) properly preserved? | Yes ✓ | No ✓ | |
| 9. Was preservative added to bottles? | Yes ✓ | No ✓ | NA |
| 10. VOA vials have zero headspace? | Yes ✓ | No | No VOA Vials |
| 11. Were any sample containers received broken? | Yes | No ✓ | # of preserved bottles checked for pH: |
| 12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) | Yes ✓ | No | Adjusted |
| 13. Are matrices correctly identified on Chain of Custody? | Yes ✓ | No | Adjusted |
| 14. Is it clear what analyses were requested? | Yes ✓ | No | Checked |
| 15. Were all holding times able to be met?
(If no, notify customer for authorization.) | Yes ✓ | No | Checked |

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

eMail

Phone

Fax

In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good	Yes			

www.hallenvironmental.com

Tel. 505-345-3975 Fax 505-345-4107

Tel. 505-345-3975

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TMB's (8021)
BTEX + MTBE + TMBE + TMB's (8021)	BTEX + MTBE + TMB's (8021)
TPH (Method 418.1)	TPH (Method 418.1)
EDB (Method 504.1)	EDB (Method 504.1)
PAH's (8310 or 8270 SIMS)	PAH's (8310 or 8270 SIMS)
RCRA 8 Metals Total	RCRA 8 Metals Total
Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)
8081 Pesticides / 8082 PCB's	8081 Pesticides / 8082 PCB's
8260B (VOA)	8260B (VOA)
8270 (Semi-VOA)	8270 (Semi-VOA)
DRO - Extended 8015B	DRO - Extended 8015B
Dissolved Metals	Dissolved Metals
Cation/Anion Balance	Cation/Anion Balance
Alkalinity CO ₂	Alkalinity CO ₂
Air Bubbles (Y or N)	Air Bubbles (Y or N)

Chain-of-Custody Record					
Turn-Around Time:					
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush					
Project Name:					
Refinery Wells					
Project #:					
Project Manager:					
Sampler: Bob + Matt					
On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
Sample Temperature: 2.6					
HEAL No. 12-080099					
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type
3-25-14	11:00	H ₂ O	MW-44	5-VOA	HCl
				1-500ml	amber
				1-500ml	HNO ₃
			filter	1-250ml	HNO ₃
				1-500ml	/
				1-250ml	H ₂ SO ₄
	11:00		MW-44 D	5-VOA	HCl
				1-500ml	amber
				1-500ml	HNO ₃
			filter	1-250ml	HNO ₃
				1-500ml	/
				1-250ml	H ₂ SO ₄
Date:	Time:	Relinquished by:	Received by:	Date	Time
3-25-14	1550	Potomac Krabon	(Matter White)	8/25/14	1550
Date:	Time:	Relinquished by:	Received by:	Date	Time
3/25/14	1718	UA-Lalor	(X)	08/26/14	10744
If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this.					

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. Any sub-contracted data will be clearly notated on the analytical report. This serves as notice of this possibility.



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 30, 2014

Kelly Robinson

Western Refining Southwest, Inc.

#50 CR 4990

Bloomfield, NM 87413

TEL: (505) 632-4135

FAX (505) 632-3911

RE: Cross-Gradient Wells

OrderNo.: 1404810

Dear Kelly Robinson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 4/17/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', with a stylized flourish at the end.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Workorder Sample Summary

WO#: 1404810

30-Apr-14

CLIENT: Western Refining Southwest, Inc.

Project: Cross-Gradient Wells

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1404810-001	MW-1		4/16/2014 9:30:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404810-001	MW-1		4/16/2014 9:30:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404810-001	MW-1		4/16/2014 9:30:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404810-002	MW-13		4/16/2014 9:40:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404810-003	MW-33		4/16/2014 9:55:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404810-003	MW-33		4/16/2014 9:55:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404810-003	MW-33		4/16/2014 9:55:00 AM	4/17/2014 10:10:00 AM	Aqueous

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1404810**Date Reported: **4/30/2014****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-1**Project:** Cross-Gradient Wells**Collection Date:** 4/16/2014 9:30:00 AM**Lab ID:** 1404810-001**Matrix:** AQUEOUS**Received Date:** 4/17/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	4/18/2014 8:41:38 PM	12782
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	4/18/2014 8:41:38 PM	12782
Surr: DNOP	122	76-161		%REC	1	4/18/2014 8:41:38 PM	12782
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/22/2014 1:17:00 AM	R18124
Surr: BFB	86.3	80.4-118		%REC	1	4/22/2014 1:17:00 AM	R18124
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: KJH
Benzene	ND	1.0		µg/L	1	4/18/2014 12:18:25 PM	R18099
Toluene	ND	1.0		µg/L	1	4/18/2014 12:18:25 PM	R18099
Ethylbenzene	ND	1.0		µg/L	1	4/18/2014 12:18:25 PM	R18099
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/18/2014 12:18:25 PM	R18099
Xylenes, Total	ND	1.5		µg/L	1	4/18/2014 12:18:25 PM	R18099
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	1	4/18/2014 12:18:25 PM	R18099
Surr: 4-Bromofluorobenzene	93.6	70-130		%REC	1	4/18/2014 12:18:25 PM	R18099
Surr: Dibromofluoromethane	93.3	70-130		%REC	1	4/18/2014 12:18:25 PM	R18099
Surr: Toluene-d8	91.4	70-130		%REC	1	4/18/2014 12:18:25 PM	R18099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1404810**

Date Reported: **4/30/2014**

CLIENT: Western Refining Southwest, Inc.

Client Sample ID: MW-13

Project: Cross-Gradient Wells

Collection Date: 4/16/2014 9:40:00 AM

Lab ID: 1404810-002

Matrix: AQUEOUS

Received Date: 4/17/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: KJH	
Benzene	ND	1.0		µg/L	1	4/18/2014 1:42:59 PM	R18099
Toluene	ND	1.0		µg/L	1	4/18/2014 1:42:59 PM	R18099
Ethylbenzene	ND	1.0		µg/L	1	4/18/2014 1:42:59 PM	R18099
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/18/2014 1:42:59 PM	R18099
Xylenes, Total	ND	1.5		µg/L	1	4/18/2014 1:42:59 PM	R18099
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%REC	1	4/18/2014 1:42:59 PM	R18099
Surr: 4-Bromofluorobenzene	92.7	70-130		%REC	1	4/18/2014 1:42:59 PM	R18099
Surr: Dibromofluoromethane	91.0	70-130		%REC	1	4/18/2014 1:42:59 PM	R18099
Surr: Toluene-d8	90.6	70-130		%REC	1	4/18/2014 1:42:59 PM	R18099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1404810**Date Reported: **4/30/2014****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-33**Project:** Cross-Gradient Wells**Collection Date:** 4/16/2014 9:55:00 AM**Lab ID:** 1404810-003**Matrix:** AQUEOUS**Received Date:** 4/17/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	4/18/2014 9:12:22 PM	12782
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	4/18/2014 9:12:22 PM	12782
Surr: DNOP	138	76-161		%REC	1	4/18/2014 9:12:22 PM	12782
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/22/2014 1:45:31 AM	R18124
Surr: BFB	87.2	80.4-118		%REC	1	4/22/2014 1:45:31 AM	R18124
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: KJH
Benzene	ND	1.0		µg/L	1	4/18/2014 2:10:55 PM	R18099
Toluene	ND	1.0		µg/L	1	4/18/2014 2:10:55 PM	R18099
Ethylbenzene	ND	1.0		µg/L	1	4/18/2014 2:10:55 PM	R18099
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/18/2014 2:10:55 PM	R18099
Xylenes, Total	ND	1.5		µg/L	1	4/18/2014 2:10:55 PM	R18099
Surr: 1,2-Dichloroethane-d4	90.0	70-130		%REC	1	4/18/2014 2:10:55 PM	R18099
Surr: 4-Bromofluorobenzene	92.5	70-130		%REC	1	4/18/2014 2:10:55 PM	R18099
Surr: Dibromofluoromethane	95.2	70-130		%REC	1	4/18/2014 2:10:55 PM	R18099
Surr: Toluene-d8	93.9	70-130		%REC	1	4/18/2014 2:10:55 PM	R18099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404810

30-Apr-14

Client: Western Refining Southwest, Inc.

Project: Cross-Gradient Wells

Sample ID	MB-12782		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range			
Client ID:	PBW		Batch ID:	12782		RunNo:	18069			
Prep Date:	4/18/2014		Analysis Date:	4/18/2014		SeqNo:	522339		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	0.20								
Motor Oil Range Organics (MRO)	ND	2.5								
Surr: DNOP	0.59		0.5000		118	76	161			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404810

30-Apr-14

Client: Western Refining Southwest, Inc.

Project: Cross-Gradient Wells

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R18124	RunNo:	18124					
Prep Date:		Analysis Date:	4/21/2014	SeqNo:	523149	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		83.8	80.4	118			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404810

30-Apr-14

Client: Western Refining Southwest, Inc.

Project: Cross-Gradient Wells

Sample ID	5mL-rb	SampType:	MBLK	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	PBW	Batch ID:	R18099	RunNo:	18099					
Prep Date:		Analysis Date:	4/18/2014	SeqNo:	522548	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.3	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.1	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.0	70	130			
Surr: Toluene-d8	9.1		10.00		90.9	70	130			

Sample ID	1404810-001a ms	SampType:	MS	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	MW-1	Batch ID:	R18099	RunNo:	18099					
Prep Date:		Analysis Date:	4/18/2014	SeqNo:	522552	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.9	70	130			
Toluene	18	1.0	20.00	0	88.6	67.5	123			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.0	70	130			
Surr: 4-Bromofluorobenzene	9.0		10.00		89.9	70	130			
Surr: Dibromofluoromethane	8.8		10.00		88.3	70	130			
Surr: Toluene-d8	8.8		10.00		88.3	70	130			

Sample ID	1404810-001amsd	SampType:	MSD	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	MW-1	Batch ID:	R18099	RunNo:	18099					
Prep Date:		Analysis Date:	4/18/2014	SeqNo:	522553	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	13	1.0	20.00	0	66.9	70	130	35.7	20	RS
Toluene	13	1.0	20.00	0	64.0	67.5	123	32.3	20	RS
Surr: 1,2-Dichloroethane-d4	8.9		10.00		89.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.2		10.00		91.9	70	130	0	0	
Surr: Dibromofluoromethane	9.4		10.00		93.9	70	130	0	0	
Surr: Toluene-d8	9.3		10.00		92.8	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: Western Refining Southw

Work Order Number: 1404810

RcptNo: 1

Received by/date:

Logged By: Ashley Gallegos

4/17/2014 10:10:00 AM

Completed By: Ashley Gallegos

4/17/2014 11:33:41 AM

Reviewed By:

Chain of Custody

1. Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

2. Is Chain of Custody complete?

Yes ☒

No ☐

Not Present ☐

3. How was the sample delivered?

Courier

Log In

4. Was an attempt made to cool the samples?

Yes ☒

No ☐

NA

5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C

Yes ☒

No ☐

NA

6. Sample(s) in proper container(s)?

Yes ☒

No ☐

7. Sufficient sample volume for indicated test(s)?

Yes ☒

No ☐

8. Are samples (except VOA and ONG) properly preserved?

Yes ☒

No ☐

9. Was preservative added to bottles?

Yes ☐

No ☒

NA

10. VOA vials have zero headspace?

Yes ☒

No ☐

No VOA Vials

11. Were any sample containers received broken?

Yes ☐

No ☒

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

12. Does paperwork match bottle labels?

Yes ☒

No ☐

(Note discrepancies on chain of custody)

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

Adjusted?

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

Yes ☒

No ☐

Checked by:

(If no, notify customer for authorization.)

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?

Yes ☐

No ☐

NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

TABLE 3
Facility-Wide Monitoring Plan - June 2011
Western Refining Southwest, Inc. - Bloomfield Refinery

Well ID	Sampling Event	VOCS (EPA Method 8260)	VOCS - Target List (1)(2)	SVOCs (EPA Method 8260)	TPH - Diesel Range Organics (EPA Method 8270)	Extended TPH - Gasoline Range Organics	TPH - Gasoline Range Organics (EPA Method 8015B)	Total Recoverable Metals - Target List	Total Dissolved Metals - Target List	General Chemistry - Alkalinity (EPA Method 310.1)	General Chemistry - Anions (EPA Method 300.0)	Carbon Dioxide (EPA Method 310.1)	Total Dissolved Solids (TDS) (EPA Method 160.1 or Field Measurement)	Specific Conductance (EPA Method 120.1 or Field Measurement)	Temperature, pH, ORP (Field Measurement)	Dissolved Oxygen (Field Measurement)
REFINERY COMPLEX																
Background Wells																
MW-3	Semi-Annual Event (April)									Not Sampled						
MW-5	Semi-Annual Event (April)									Not Sampled						
MW-6	Semi-Annual Event (April)	X											X	X	X	X
Refinery Wells																
RW-1	Semi-Annual Event (April)									Not Sampled						
MW-4	Semi-Annual Event (April)									Not Sampled						
MW-8	Semi-Annual Event (April)		X							Not Sampled			X	X	X	X
RW-9	Semi-Annual Event (April)									Not Sampled						
RW-15	Semi-Annual Event (April)									Not Sampled						
RW-18	Semi-Annual Event (April)									Not Sampled						
MW-20	Semi-Annual Event (April)		X							Not Sampled			X	X	X	X
MW-21	Semi-Annual Event (April)									Not Sampled						
RW-23	Semi-Annual Event (April)									Not Sampled						
RW-28	Semi-Annual Event (April)									Not Sampled						
MW-29	Semi-Annual Event (April)									Not Sampled						
MW-30	Semi-Annual Event (April)		X							Not Sampled			X	X	X	X
MW-31	Semi-Annual Event (April)									Not Sampled						
MW-40	Semi-Annual Event (April)									Not Sampled						
RW-42	Semi-Annual Event (April)									Not Sampled						
RW-43	Semi-Annual Event (April)									Not Sampled						
MW-44	Semi-Annual Event (April)									Not Sampled						
Cross-Gradient Wells																
MW-1	Semi-Annual Event (April)		X			X	X						X	X	X	X
MW-13	Semi-Annual Event (April)		X										X	X	X	X
MW-26	Semi-Annual Event (April)									Not Sampled						
MW-27	Semi-Annual Event (April)									Not Sampled						
MW-32	Semi-Annual Event (April)									Not Sampled						
MW-33	Semi-Annual Event (April)		X			X	X			Not Sampled			X	X	X	X

Week of
4-8-13

Day No Sample

spk No Sample

spk

✓ = sampled



*Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com*

September 24, 2014

Kelly Robinson

Western Refining Southwest, Inc.

#50 CR 4990

Bloomfield, NM 87413

TEL: (505) 632-4166

FAX (505) 632-3911

RE: Cross Gradient Wells 8-20-14

OrderNo.: 1408B43

Dear Kelly Robinson:

Hall Environmental Analysis Laboratory received 8 sample(s) on 8/21/2014 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued September 11, 2014.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-001A

Client Sample ID: MW-1
Collection Date: 8/20/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Toluene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Ethylbenzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Naphthalene	ND	2.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
2-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Acetone	ND	10		µg/L	1	8/28/2014 5:32:47 PM	R20892
Bromobenzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Bromodichloromethane	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Bromoform	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Bromomethane	ND	3.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
2-Butanone	ND	10		µg/L	1	8/28/2014 5:32:47 PM	R20892
Carbon disulfide	ND	10		µg/L	1	8/28/2014 5:32:47 PM	R20892
Carbon Tetrachloride	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Chlorobenzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Chloroethane	ND	2.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Chloroform	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Chloromethane	ND	3.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
2-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
4-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
cis-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Dibromochloromethane	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Dibromomethane	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,1-Dichloroethane	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,1-Dichloroethene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,2-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,3-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
2,2-Dichloropropane	ND	2.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,1-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Hexachlorobutadiene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-001A

Client Sample ID: MW-1
Collection Date: 8/20/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
2-Hexanone	ND	10		µg/L	1	8/28/2014 5:32:47 PM	R20892
Isopropylbenzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
4-Isopropyltoluene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
4-Methyl-2-pentanone	ND	10		µg/L	1	8/28/2014 5:32:47 PM	R20892
Methylene Chloride	ND	3.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
n-Butylbenzene	ND	3.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
n-Propylbenzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
sec-Butylbenzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Styrene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
tert-Butylbenzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
trans-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Trichlorofluoromethane	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Vinyl chloride	ND	1.0		µg/L	1	8/28/2014 5:32:47 PM	R20892
Xylenes, Total	ND	1.5		µg/L	1	8/28/2014 5:32:47 PM	R20892
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	8/28/2014 5:32:47 PM	R20892
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	8/28/2014 5:32:47 PM	R20892
Surr: Dibromofluoromethane	102	70-130		%REC	1	8/28/2014 5:32:47 PM	R20892
Surr: Toluene-d8	91.1	70-130		%REC	1	8/28/2014 5:32:47 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-001B

Client Sample ID: MW-1
Collection Date: 8/20/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/22/2014 11:43:10 AM	R20754
Surr: BFB	98.6	70.9-130		%REC	1	8/22/2014 11:43:10 AM	R20754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-001C

Client Sample ID: MW-1
Collection Date: 8/20/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	8/23/2014 2:49:14 AM	14896
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/23/2014 2:49:14 AM	14896
Surr: DNOP	113	75.2-161		%REC	1	8/23/2014 2:49:14 AM	14896

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-001D

Client Sample ID: MW-1
Collection Date: 8/20/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.49	0.10		mg/L	1	8/21/2014 7:34:55 PM	R20741
Chloride	14	0.50		mg/L	1	8/21/2014 7:34:55 PM	R20741
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/21/2014 7:34:55 PM	R20741
Bromide	0.12	0.10		mg/L	1	8/21/2014 7:34:55 PM	R20741
Nitrogen, Nitrate (As N)	0.43	0.10		mg/L	1	8/21/2014 7:34:55 PM	R20741
Phosphorus, Orthophosphate (As P _i)	ND	0.50		mg/L	1	8/21/2014 7:34:55 PM	R20741
Sulfate	110	10		mg/L	20	8/21/2014 7:47:20 PM	R20741
SM 2540 C: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	546	40.0	*	mg/L	1	8/28/2014 2:52:00 PM	14985
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	270	1.0	H	mg CO ₂ /L	1	8/25/2014 5:05:13 PM	R20804
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	630	0.010		µmhos/cm	1	8/25/2014 5:05:13 PM	R20804
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	300	20		mg/L CaCO ₃	1	8/25/2014 5:05:13 PM	R20804
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	8/25/2014 5:05:13 PM	R20804
Total Alkalinity (as CaCO ₃)	300	20		mg/L CaCO ₃	1	8/25/2014 5:05:13 PM	R20804

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-001E

Client Sample ID: MW-1
Collection Date: 8/20/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.027	0.0020		mg/L	1	8/27/2014 3:08:33 PM	R20845
Cadmium	ND	0.0020		mg/L	1	8/27/2014 3:08:33 PM	R20845
Calcium	71	1.0		mg/L	1	8/27/2014 3:08:33 PM	R20845
Chromium	ND	0.0060		mg/L	1	8/27/2014 3:08:33 PM	R20845
Copper	ND	0.0060		mg/L	1	8/27/2014 3:08:33 PM	R20845
Iron	0.053	0.020		mg/L	1	8/27/2014 3:08:33 PM	R20845
Magnesium	16	1.0		mg/L	1	8/27/2014 3:08:33 PM	R20845
Manganese	0.11	0.0020	*	mg/L	1	8/27/2014 3:08:33 PM	R20845
Potassium	2.7	1.0		mg/L	1	8/27/2014 3:08:33 PM	R20845
Silver	ND	0.0050		mg/L	1	8/27/2014 3:08:33 PM	R20845
Sodium	81	5.0		mg/L	5	8/27/2014 5:08:11 PM	R20845
Zinc	ND	0.010		mg/L	1	8/27/2014 3:08:33 PM	R20845
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Antimony	ND	0.0010		mg/L	1	8/29/2014 4:45:22 PM	R20917
Arsenic	0.0011	0.0010		mg/L	1	8/29/2014 4:45:22 PM	R20917
Lead	ND	0.0010		mg/L	1	8/29/2014 4:45:22 PM	R20917
Selenium	0.0015	0.0010		mg/L	1	8/29/2014 4:45:22 PM	R20917
Thallium	ND	0.0010		mg/L	1	8/29/2014 4:45:22 PM	R20917
Uranium	0.0027	0.0010		mg/L	1	8/29/2014 4:45:22 PM	R20917
EPA METHOD 245.1: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	9/3/2014 9:29:42 AM	15056

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-001F

Client Sample ID: MW-1
Collection Date: 8/20/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	8/26/2014 5:14:05 PM	14929
Barium	0.072	0.0020		mg/L	1	8/26/2014 5:14:05 PM	14929
Cadmium	ND	0.0020		mg/L	1	8/26/2014 5:14:05 PM	14929
Chromium	ND	0.0060		mg/L	1	8/26/2014 5:14:05 PM	14929
Lead	ND	0.0050		mg/L	1	8/26/2014 5:14:05 PM	14929
Selenium	ND	0.050		mg/L	1	8/26/2014 5:14:05 PM	14929
Silver	ND	0.0050		mg/L	1	8/28/2014 4:57:37 PM	14991
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	8/29/2014 1:01:17 PM	15017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-002A

Client Sample ID: MW-13
Collection Date: 8/20/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Toluene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Ethylbenzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Naphthalene	ND	2.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
2-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Acetone	ND	10		µg/L	1	8/28/2014 6:02:30 PM	R20892
Bromobenzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Bromodichloromethane	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Bromoform	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Bromomethane	ND	3.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
2-Butanone	ND	10		µg/L	1	8/28/2014 6:02:30 PM	R20892
Carbon disulfide	ND	10		µg/L	1	8/28/2014 6:02:30 PM	R20892
Carbon Tetrachloride	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Chlorobenzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Chloroethane	ND	2.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Chloroform	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Chloromethane	ND	3.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
2-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
4-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
cis-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Dibromochloromethane	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Dibromomethane	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,1-Dichloroethane	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,1-Dichloroethene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,2-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,3-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
2,2-Dichloropropane	ND	2.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,1-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Hexachlorobutadiene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B43****Hall Environmental Analysis Laboratory, Inc.**Date Reported: **9/24/2014****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-13**Project:** Cross Gradient Wells 8-20-14**Collection Date:** 8/20/2014 11:00:00 AM**Lab ID:** 1408B43-002A**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
2-Hexanone	ND	10		µg/L	1	8/28/2014 6:02:30 PM	R20892
Isopropylbenzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
4-Isopropyltoluene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
4-Methyl-2-pentanone	ND	10		µg/L	1	8/28/2014 6:02:30 PM	R20892
Methylene Chloride	ND	3.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
n-Butylbenzene	ND	3.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
n-Propylbenzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
sec-Butylbenzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Styrene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
tert-Butylbenzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
trans-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Trichlorofluoromethane	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Vinyl chloride	ND	1.0		µg/L	1	8/28/2014 6:02:30 PM	R20892
Xylenes, Total	ND	1.5		µg/L	1	8/28/2014 6:02:30 PM	R20892
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%REC	1	8/28/2014 6:02:30 PM	R20892
Surr: 4-Bromofluorobenzene	98.7	70-130		%REC	1	8/28/2014 6:02:30 PM	R20892
Surr: Dibromofluoromethane	93.7	70-130		%REC	1	8/28/2014 6:02:30 PM	R20892
Surr: Toluene-d8	88.6	70-130		%REC	1	8/28/2014 6:02:30 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-002B

Client Sample ID: MW-13
Collection Date: 8/20/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/22/2014 12:13:23 PM	R20754
Surr: BFB	101	70.9-130		%REC	1	8/22/2014 12:13:23 PM	R20754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-002C

Client Sample ID: MW-13
Collection Date: 8/20/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	8/23/2014 4:18:35 AM	14896
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/23/2014 4:18:35 AM	14896
Surr: DNOP	98.6	75.2-161		%REC	1	8/23/2014 4:18:35 AM	14896

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-002D

Client Sample ID: MW-13
Collection Date: 8/20/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	ND	0.10		mg/L	1	8/21/2014 7:59:45 PM	R20741
Chloride	160	10		mg/L	20	8/21/2014 8:12:10 PM	R20741
Nitrogen, Nitrite (As N)	0.36	0.10		mg/L	1	8/21/2014 7:59:45 PM	R20741
Bromide	2.7	2.0		mg/L	20	8/21/2014 8:12:10 PM	R20741
Nitrogen, Nitrate (As N)	2.9	0.10		mg/L	1	8/21/2014 7:59:45 PM	R20741
Phosphorus, Orthophosphate (As P _i)	ND	0.50		mg/L	1	8/21/2014 7:59:45 PM	R20741
Sulfate	1200	25		mg/L	50	8/22/2014 7:44:49 PM	R20760
SM 2540 C: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	2980	20.0	*	mg/L	1	8/28/2014 2:52:00 PM	14985
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	880	1.0	H	mg CO ₂ /L	1	8/25/2014 5:23:29 PM	R20804
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	2200	0.010		µmhos/cm	1	8/25/2014 5:23:29 PM	R20804
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	930	20		mg/L CaCO ₃	1	8/25/2014 5:23:29 PM	R20804
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	8/25/2014 5:23:29 PM	R20804
Total Alkalinity (as CaCO ₃)	930	20		mg/L CaCO ₃	1	8/25/2014 5:23:29 PM	R20804

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-002E

Client Sample ID: MW-13
Collection Date: 8/20/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.022	0.0020		mg/L	1	8/27/2014 3:12:08 PM	R20845
Cadmium	ND	0.0020		mg/L	1	8/27/2014 3:12:08 PM	R20845
Calcium	280	5.0		mg/L	5	8/27/2014 3:14:08 PM	R20845
Chromium	ND	0.0060		mg/L	1	8/27/2014 3:12:08 PM	R20845
Copper	ND	0.0060		mg/L	1	8/27/2014 3:12:08 PM	R20845
Iron	ND	0.020		mg/L	1	8/27/2014 3:12:08 PM	R20845
Magnesium	83	1.0		mg/L	1	8/27/2014 3:12:08 PM	R20845
Manganese	1.4	0.010	*	mg/L	5	8/27/2014 3:14:08 PM	R20845
Potassium	5.5	1.0		mg/L	1	8/27/2014 3:12:08 PM	R20845
Silver	ND	0.0050		mg/L	1	8/27/2014 3:12:08 PM	R20845
Sodium	600	20		mg/L	20	8/27/2014 5:09:58 PM	R20845
Zinc	ND	0.010		mg/L	1	8/27/2014 3:12:08 PM	R20845
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Antimony	ND	0.0010		mg/L	1	8/29/2014 5:01:28 PM	R20917
Arsenic	ND	0.020		mg/L	20	9/2/2014 1:39:38 PM	R20953
Lead	ND	0.0010		mg/L	1	8/29/2014 5:01:28 PM	R20917
Selenium	0.023	0.020		mg/L	20	9/2/2014 1:39:38 PM	R20953
Thallium	ND	0.0010		mg/L	1	8/29/2014 5:01:28 PM	R20917
Uranium	0.0081	0.0010		mg/L	1	8/29/2014 5:01:28 PM	R20917
EPA METHOD 245.1: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	9/3/2014 9:35:15 AM	15056

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B43**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-13**Project:** Cross Gradient Wells 8-20-14**Collection Date:** 8/20/2014 11:00:00 AM**Lab ID:** 1408B43-002F**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	8/26/2014 5:15:40 PM	14929
Barium	0.023	0.0020		mg/L	1	8/26/2014 5:15:40 PM	14929
Cadmium	ND	0.0020		mg/L	1	8/26/2014 5:15:40 PM	14929
Chromium	ND	0.0060		mg/L	1	8/26/2014 5:15:40 PM	14929
Lead	ND	0.0050		mg/L	1	8/26/2014 5:15:40 PM	14929
Selenium	ND	0.050		mg/L	1	8/26/2014 5:15:40 PM	14929
Silver	ND	0.0050		mg/L	1	8/28/2014 4:59:11 PM	14991
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	8/29/2014 1:03:03 PM	15017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-003A

Client Sample ID: MW-27
Collection Date: 8/20/2014 1:30:00 PM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Toluene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Ethylbenzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Naphthalene	ND	4.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1-Methylnaphthalene	ND	8.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
2-Methylnaphthalene	ND	8.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Acetone	ND	20		µg/L	2	8/29/2014 12:33:36 PM	R20920
Bromobenzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Bromodichloromethane	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Bromoform	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Bromomethane	ND	6.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
2-Butanone	ND	20		µg/L	2	8/29/2014 12:33:36 PM	R20920
Carbon disulfide	ND	20		µg/L	2	8/29/2014 12:33:36 PM	R20920
Carbon Tetrachloride	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Chlorobenzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Chloroethane	ND	4.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Chloroform	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Chloromethane	ND	6.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
2-Chlorotoluene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
4-Chlorotoluene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
cis-1,2-DCE	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Dibromochloromethane	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Dibromomethane	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,2-Dichlorobenzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,3-Dichlorobenzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,4-Dichlorobenzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Dichlorodifluoromethane	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,1-Dichloroethane	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,1-Dichloroethene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,2-Dichloropropane	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,3-Dichloropropane	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
2,2-Dichloropropane	ND	4.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,1-Dichloropropene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Hexachlorobutadiene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-003A

Client Sample ID: MW-27
Collection Date: 8/20/2014 1:30:00 PM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
2-Hexanone	ND	20		µg/L	2	8/29/2014 12:33:36 PM	R20920
Isopropylbenzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
4-Isopropyltoluene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
4-Methyl-2-pentanone	ND	20		µg/L	2	8/29/2014 12:33:36 PM	R20920
Methylene Chloride	ND	6.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
n-Butylbenzene	ND	6.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
n-Propylbenzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
sec-Butylbenzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Styrene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
tert-Butylbenzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
trans-1,2-DCE	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,1,1-Trichloroethane	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,1,2-Trichloroethane	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Trichloroethene (TCE)	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Trichlorofluoromethane	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
1,2,3-Trichloropropane	ND	4.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Vinyl chloride	ND	2.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Xylenes, Total	ND	3.0		µg/L	2	8/29/2014 12:33:36 PM	R20920
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%REC	2	8/29/2014 12:33:36 PM	R20920
Surr: 4-Bromofluorobenzene	109	70-130		%REC	2	8/29/2014 12:33:36 PM	R20920
Surr: Dibromofluoromethane	93.7	70-130		%REC	2	8/29/2014 12:33:36 PM	R20920
Surr: Toluene-d8	88.3	70-130		%REC	2	8/29/2014 12:33:36 PM	R20920

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-003B

Client Sample ID: MW-27
Collection Date: 8/20/2014 1:30:00 PM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/22/2014 12:43:34 PM	R20754
Surr: BFB	98.9	70.9-130		%REC	1	8/22/2014 12:43:34 PM	R20754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-003C

Client Sample ID: MW-27
Collection Date: 8/20/2014 1:30:00 PM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	0.34	0.20		mg/L	1	8/23/2014 4:48:38 AM	14896
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/23/2014 4:48:38 AM	14896
Surr: DNOP	101	75.2-161		%REC	1	8/23/2014 4:48:38 AM	14896

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-003D

Client Sample ID: MW-27
Collection Date: 8/20/2014 1:30:00 PM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.19	0.10		mg/L	1	8/21/2014 8:24:34 PM	R20741
Chloride	690	50		mg/L	100	8/22/2014 8:22:02 PM	R20760
Nitrogen, Nitrite (As N)	ND	2.0		mg/L	20	8/21/2014 8:36:59 PM	R20741
Bromide	6.2	2.0		mg/L	20	8/21/2014 8:36:59 PM	R20741
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/21/2014 8:24:34 PM	R20741
Phosphorus, Orthophosphate (As P _i)	ND	10		mg/L	20	8/21/2014 8:36:59 PM	R20741
Sulfate	3100	50		mg/L	100	8/22/2014 8:22:02 PM	R20760
SM 2540 C: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	5790	40.0	*	mg/L	1	8/28/2014 2:52:00 PM	14985
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	230	1.0	H	mg CO ₂ /L	1	8/25/2014 5:55:55 PM	R20804
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	3400	0.010		µmhos/cm	1	8/25/2014 5:55:55 PM	R20804
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	220	20		mg/L CaCO ₃	1	8/25/2014 5:55:55 PM	R20804
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	8/25/2014 5:55:55 PM	R20804
Total Alkalinity (as CaCO ₃)	220	20		mg/L CaCO ₃	1	8/25/2014 5:55:55 PM	R20804

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-003E

Client Sample ID: MW-27
Collection Date: 8/20/2014 1:30:00 PM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.053	0.0020		mg/L	1	8/27/2014 3:16:05 PM	R20845
Cadmium	ND	0.0020		mg/L	1	8/27/2014 3:16:05 PM	R20845
Calcium	700	20		mg/L	20	8/27/2014 5:11:46 PM	R20845
Chromium	ND	0.0060		mg/L	1	8/27/2014 3:16:05 PM	R20845
Copper	ND	0.0060		mg/L	1	8/27/2014 3:16:05 PM	R20845
Iron	0.36	0.020	*	mg/L	1	8/27/2014 3:16:05 PM	R20845
Magnesium	110	5.0		mg/L	5	8/27/2014 3:17:58 PM	R20845
Manganese	0.80	0.0020	*	mg/L	1	8/27/2014 3:16:05 PM	R20845
Potassium	3.3	1.0		mg/L	1	8/27/2014 3:16:05 PM	R20845
Silver	ND	0.0050		mg/L	1	8/27/2014 3:16:05 PM	R20845
Sodium	910	20		mg/L	20	8/27/2014 5:11:46 PM	R20845
Zinc	ND	0.010		mg/L	1	8/27/2014 3:16:05 PM	R20845
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Antimony	ND	0.010		mg/L	10	9/2/2014 1:44:58 PM	R20953
Arsenic	0.016	0.010	*	mg/L	10	9/2/2014 1:44:58 PM	R20953
Lead	ND	0.010		mg/L	10	9/2/2014 1:44:58 PM	R20953
Selenium	0.054	0.010	*	mg/L	10	9/2/2014 1:44:58 PM	R20953
Thallium	ND	0.010		mg/L	10	9/2/2014 1:44:58 PM	R20953
Uranium	ND	0.010		mg/L	10	9/2/2014 1:44:58 PM	R20953
EPA METHOD 245.1: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	9/3/2014 9:37:04 AM	15056

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: **1408B43**Date Reported: **9/24/2014**

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-003F

Client Sample ID: MW-27
Collection Date: 8/20/2014 1:30:00 PM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	8/26/2014 5:21:48 PM	14929
Barium	0.058	0.0020		mg/L	1	8/26/2014 5:21:48 PM	14929
Cadmium	ND	0.0020		mg/L	1	8/26/2014 5:21:48 PM	14929
Chromium	ND	0.0060		mg/L	1	8/26/2014 5:21:48 PM	14929
Lead	ND	0.0050		mg/L	1	8/26/2014 5:21:48 PM	14929
Selenium	ND	0.050		mg/L	1	8/26/2014 5:21:48 PM	14929
Silver	ND	0.0050		mg/L	1	8/28/2014 5:01:08 PM	14991
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	8/29/2014 1:04:49 PM	15017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-004A

Client Sample ID: MW-32
Collection Date: 8/20/2014 11:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Toluene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Ethylbenzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Naphthalene	ND	2.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1-Methylnaphthalene	ND	4.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
2-Methylnaphthalene	ND	4.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Acetone	ND	10		µg/L	1	8/29/2014 1:03:18 PM	R20920
Bromobenzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Bromodichloromethane	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Bromoform	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Bromomethane	ND	3.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
2-Butanone	ND	10		µg/L	1	8/29/2014 1:03:18 PM	R20920
Carbon disulfide	ND	10		µg/L	1	8/29/2014 1:03:18 PM	R20920
Carbon Tetrachloride	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Chlorobenzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Chloroethane	ND	2.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Chloroform	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Chloromethane	ND	3.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
2-Chlorotoluene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
4-Chlorotoluene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
cis-1,2-DCE	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Dibromochloromethane	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Dibromomethane	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,1-Dichloroethane	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,1-Dichloroethene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,2-Dichloropropane	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,3-Dichloropropane	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
2,2-Dichloropropane	ND	2.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,1-Dichloropropene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Hexachlorobutadiene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-004A

Client Sample ID: MW-32
Collection Date: 8/20/2014 11:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
2-Hexanone	ND	10		µg/L	1	8/29/2014 1:03:18 PM	R20920
Isopropylbenzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
4-Isopropyltoluene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
4-Methyl-2-pentanone	ND	10		µg/L	1	8/29/2014 1:03:18 PM	R20920
Methylene Chloride	ND	3.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
n-Butylbenzene	ND	3.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
n-Propylbenzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
sec-Butylbenzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Styrene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
tert-Butylbenzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
trans-1,2-DCE	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Trichlorofluoromethane	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Vinyl chloride	ND	1.0		µg/L	1	8/29/2014 1:03:18 PM	R20920
Xylenes, Total	ND	1.5		µg/L	1	8/29/2014 1:03:18 PM	R20920
Surr: 1,2-Dichloroethane-d4	93.8	70-130		%REC	1	8/29/2014 1:03:18 PM	R20920
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	1	8/29/2014 1:03:18 PM	R20920
Surr: Dibromofluoromethane	94.5	70-130		%REC	1	8/29/2014 1:03:18 PM	R20920
Surr: Toluene-d8	89.7	70-130		%REC	1	8/29/2014 1:03:18 PM	R20920

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-004B

Client Sample ID: MW-32
Collection Date: 8/20/2014 11:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/22/2014 1:13:40 PM	R20754
Surr: BFB	95.9	70.9-130		%REC	1	8/22/2014 1:13:40 PM	R20754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B43**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-32**Project:** Cross Gradient Wells 8-20-14**Collection Date:** 8/20/2014 11:30:00 AM**Lab ID:** 1408B43-004C**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	8/23/2014 5:18:25 AM	14896
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/23/2014 5:18:25 AM	14896
Surr: DNOP	114	75.2-161		%REC	1	8/23/2014 5:18:25 AM	14896

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B43****Hall Environmental Analysis Laboratory, Inc.**Date Reported: **9/24/2014**

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-004D

Client Sample ID: MW-32
Collection Date: 8/20/2014 11:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.15	0.10		mg/L	1	8/21/2014 8:49:23 PM	R20741
Chloride	650	25		mg/L	50	8/22/2014 8:34:27 PM	R20760
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/21/2014 8:49:23 PM	R20741
Bromide	4.9	2.0		mg/L	20	8/21/2014 9:01:47 PM	R20741
Nitrogen, Nitrate (As N)	39	2.0	*	mg/L	20	8/21/2014 9:01:47 PM	R20741
Phosphorus, Orthophosphate (As P _i)	ND	10		mg/L	20	8/21/2014 9:01:47 PM	R20741
Sulfate	1600	25		mg/L	50	8/22/2014 8:34:27 PM	R20760
SM 2540 C: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	3610	40.0	*	mg/L	1	8/28/2014 2:52:00 PM	14985
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	170	1.0	H	mg CO ₂ /L	1	8/25/2014 6:08:57 PM	R20804
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	2900	0.010		µmhos/cm	1	8/25/2014 6:08:57 PM	R20804
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	190	20		mg/L CaCO ₃	1	8/25/2014 6:08:57 PM	R20804
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	8/25/2014 6:08:57 PM	R20804
Total Alkalinity (as CaCO ₃)	190	20		mg/L CaCO ₃	1	8/25/2014 6:08:57 PM	R20804

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 26 of 67

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-004E

Client Sample ID: MW-32
Collection Date: 8/20/2014 11:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.017	0.0020		mg/L	1	8/27/2014 3:19:54 PM	R20845
Cadmium	ND	0.0020		mg/L	1	8/27/2014 3:19:54 PM	R20845
Calcium	290	5.0		mg/L	5	8/27/2014 3:21:55 PM	R20845
Chromium	ND	0.0060		mg/L	1	8/27/2014 3:19:54 PM	R20845
Copper	ND	0.0060		mg/L	1	8/27/2014 3:19:54 PM	R20845
Iron	ND	0.020		mg/L	1	8/27/2014 3:19:54 PM	R20845
Magnesium	44	1.0		mg/L	1	8/27/2014 3:19:54 PM	R20845
Manganese	ND	0.0020		mg/L	1	8/27/2014 3:19:54 PM	R20845
Potassium	5.9	1.0		mg/L	1	8/27/2014 3:19:54 PM	R20845
Silver	ND	0.0050		mg/L	1	8/27/2014 3:19:54 PM	R20845
Sodium	800	20		mg/L	20	8/27/2014 5:13:35 PM	R20845
Zinc	ND	0.010		mg/L	1	8/27/2014 3:19:54 PM	R20845
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Antimony	ND	0.0010		mg/L	1	8/29/2014 5:12:10 PM	R20917
Arsenic	ND	0.020	*	mg/L	20	9/2/2014 1:50:19 PM	R20953
Lead	ND	0.0010		mg/L	1	8/29/2014 5:12:10 PM	R20917
Selenium	0.057	0.020	*	mg/L	20	9/2/2014 1:50:19 PM	R20953
Thallium	ND	0.0010		mg/L	1	8/29/2014 5:12:10 PM	R20917
Uranium	0.016	0.0010		mg/L	1	8/29/2014 5:12:10 PM	R20917
EPA METHOD 245.1: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	9/3/2014 9:38:54 AM	15056

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-004F

Client Sample ID: MW-32
Collection Date: 8/20/2014 11:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	8/26/2014 5:23:34 PM	14929
Barium	0.034	0.0020		mg/L	1	8/26/2014 5:23:34 PM	14929
Cadmium	ND	0.0020		mg/L	1	8/26/2014 5:23:34 PM	14929
Chromium	ND	0.0060		mg/L	1	8/26/2014 5:23:34 PM	14929
Lead	ND	0.0050		mg/L	1	8/26/2014 5:23:34 PM	14929
Selenium	ND	0.050		mg/L	1	8/26/2014 5:23:34 PM	14929
Silver	ND	0.0050		mg/L	1	8/28/2014 5:02:54 PM	14991
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	8/29/2014 1:06:36 PM	15017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical Report

Lab Order: 1408B43

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-005A

Client Sample ID: MW-33
Collection Date: 8/20/2014 1:00:00 PM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Toluene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Ethylbenzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Naphthalene	ND	2.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1-Methylnaphthalene	ND	4.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
2-Methylnaphthalene	ND	4.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Acetone	ND	10		µg/L	1	8/29/2014 1:32:59 PM	R20920
Bromobenzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Bromodichloromethane	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Bromoform	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Bromomethane	ND	3.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
2-Butanone	ND	10		µg/L	1	8/29/2014 1:32:59 PM	R20920
Carbon disulfide	ND	10		µg/L	1	8/29/2014 1:32:59 PM	R20920
Carbon Tetrachloride	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Chlorobenzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Chloroethane	ND	2.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Chloroform	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Chloromethane	ND	3.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
2-Chlorotoluene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
4-Chlorotoluene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
cis-1,2-DCE	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Dibromochloromethane	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Dibromomethane	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,1-Dichloroethane	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,1-Dichloroethene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,2-Dichloropropane	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,3-Dichloropropane	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
2,2-Dichloropropane	ND	2.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,1-Dichloropropene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Hexachlorobutadiene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-005A

Client Sample ID: MW-33
Collection Date: 8/20/2014 1:00:00 PM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
2-Hexanone	ND	10		µg/L	1	8/29/2014 1:32:59 PM	R20920
Isopropylbenzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
4-Isopropyltoluene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
4-Methyl-2-pentanone	ND	10		µg/L	1	8/29/2014 1:32:59 PM	R20920
Methylene Chloride	ND	3.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
n-Butylbenzene	ND	3.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
n-Propylbenzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
sec-Butylbenzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Styrene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
tert-Butylbenzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
trans-1,2-DCE	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Trichlorofluoromethane	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Vinyl chloride	ND	1.0		µg/L	1	8/29/2014 1:32:59 PM	R20920
Xylenes, Total	ND	1.5		µg/L	1	8/29/2014 1:32:59 PM	R20920
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%REC	1	8/29/2014 1:32:59 PM	R20920
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	8/29/2014 1:32:59 PM	R20920
Surr: Dibromofluoromethane	89.2	70-130		%REC	1	8/29/2014 1:32:59 PM	R20920
Surr: Toluene-d8	90.6	70-130		%REC	1	8/29/2014 1:32:59 PM	R20920

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B43**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-33**Project:** Cross Gradient Wells 8-20-14**Collection Date:** 8/20/2014 1:00:00 PM**Lab ID:** 1408B43-005B**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/22/2014 1:43:51 PM	R20754
Surr: BFB	102	70.9-130		%REC	1	8/22/2014 1:43:51 PM	R20754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B43**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-005C

Client Sample ID: MW-33
Collection Date: 8/20/2014 1:00:00 PM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	8/23/2014 5:48:25 AM	14896
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/23/2014 5:48:25 AM	14896
Surr: DNOP	117	75.2-161		%REC	1	8/23/2014 5:48:25 AM	14896

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-005D

Client Sample ID: MW-33
Collection Date: 8/20/2014 1:00:00 PM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.10	0.10		mg/L	1	8/21/2014 9:14:12 PM	R20741
Chloride	340	50		mg/L	100	8/22/2014 8:46:52 PM	R20760
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/21/2014 9:14:12 PM	R20741
Bromide	1.7	0.10		mg/L	1	8/21/2014 9:14:12 PM	R20741
Nitrogen, Nitrate (As N)	24	2.0	*	mg/L	20	8/21/2014 9:26:38 PM	R20741
Phosphorus, Orthophosphate (As P _i)	ND	10		mg/L	20	8/21/2014 9:26:38 PM	R20741
Sulfate	2100	50		mg/L	100	8/22/2014 8:46:52 PM	R20760
SM 2540 C: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	3960	40.0	*	mg/L	1	8/28/2014 2:52:00 PM	14985
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	110	1.0	H	mg CO ₂ /L	1	8/25/2014 6:19:37 PM	R20804
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	2900	0.010		µmhos/cm	1	8/25/2014 6:19:37 PM	R20804
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	120	20		mg/L CaCO ₃	1	8/25/2014 6:19:37 PM	R20804
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	8/25/2014 6:19:37 PM	R20804
Total Alkalinity (as CaCO ₃)	120	20		mg/L CaCO ₃	1	8/25/2014 6:19:37 PM	R20804

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-005E

Client Sample ID: MW-33
Collection Date: 8/20/2014 1:00:00 PM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.015	0.0020		mg/L	1	8/27/2014 3:39:53 PM	R20845
Cadmium	ND	0.0020		mg/L	1	8/27/2014 3:39:53 PM	R20845
Calcium	370	5.0		mg/L	5	8/27/2014 3:42:05 PM	R20845
Chromium	ND	0.0060		mg/L	1	8/27/2014 3:39:53 PM	R20845
Copper	ND	0.0060		mg/L	1	8/27/2014 3:39:53 PM	R20845
Iron	ND	0.020		mg/L	1	8/27/2014 3:39:53 PM	R20845
Magnesium	55	1.0		mg/L	1	8/27/2014 3:39:53 PM	R20845
Manganese	ND	0.0020		mg/L	1	8/27/2014 3:39:53 PM	R20845
Potassium	7.0	1.0		mg/L	1	8/27/2014 3:39:53 PM	R20845
Silver	ND	0.0050		mg/L	1	8/28/2014 5:44:20 PM	R20883
Sodium	770	20		mg/L	20	8/27/2014 5:15:23 PM	R20845
Zinc	ND	0.010		mg/L	1	8/27/2014 3:39:53 PM	R20845
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Antimony	ND	0.0010		mg/L	1	8/29/2014 5:17:32 PM	R20917
Arsenic	ND	0.010		mg/L	10	9/2/2014 1:55:40 PM	R20953
Lead	ND	0.010		mg/L	10	9/2/2014 1:55:40 PM	R20953
Selenium	0.049	0.010		mg/L	10	9/2/2014 1:55:40 PM	R20953
Thallium	ND	0.010		mg/L	10	9/2/2014 1:55:40 PM	R20953
Uranium	0.012	0.0010		mg/L	1	8/29/2014 5:17:32 PM	R20917
EPA METHOD 245.1: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	9/3/2014 9:40:46 AM	15056

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B43**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-005F

Client Sample ID: MW-33
Collection Date: 8/20/2014 1:00:00 PM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	8/26/2014 5:33:24 PM	14929
Barium	0.016	0.0020		mg/L	1	8/26/2014 5:33:24 PM	14929
Cadmium	ND	0.0020		mg/L	1	8/26/2014 5:33:24 PM	14929
Chromium	ND	0.0060		mg/L	1	8/26/2014 5:33:24 PM	14929
Lead	ND	0.0050		mg/L	1	8/26/2014 5:33:24 PM	14929
Selenium	ND	0.050		mg/L	1	8/26/2014 5:33:24 PM	14929
Silver	ND	0.0050		mg/L	1	8/28/2014 5:12:55 PM	14991
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	8/29/2014 1:08:24 PM	15017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-006A

Client Sample ID: MW-1D
Collection Date: 8/20/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Toluene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Ethylbenzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Naphthalene	ND	2.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1-Methylnaphthalene	ND	4.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
2-Methylnaphthalene	ND	4.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Acetone	ND	10		µg/L	1	8/29/2014 2:02:39 PM	R20920
Bromobenzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Bromodichloromethane	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Bromoform	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Bromomethane	ND	3.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
2-Butanone	ND	10		µg/L	1	8/29/2014 2:02:39 PM	R20920
Carbon disulfide	ND	10		µg/L	1	8/29/2014 2:02:39 PM	R20920
Carbon Tetrachloride	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Chlorobenzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Chloroethane	ND	2.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Chloroform	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Chloromethane	ND	3.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
2-Chlorotoluene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
4-Chlorotoluene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
cis-1,2-DCE	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Dibromochloromethane	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Dibromomethane	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,1-Dichloroethane	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,1-Dichloroethene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,2-Dichloropropane	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,3-Dichloropropane	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
2,2-Dichloropropane	ND	2.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,1-Dichloropropene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Hexachlorobutadiene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-006A

Client Sample ID: MW-1D
Collection Date: 8/20/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
2-Hexanone	ND	10		µg/L	1	8/29/2014 2:02:39 PM	R20920
Isopropylbenzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
4-Isopropyltoluene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
4-Methyl-2-pentanone	ND	10		µg/L	1	8/29/2014 2:02:39 PM	R20920
Methylene Chloride	ND	3.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
n-Butylbenzene	ND	3.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
n-Propylbenzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
sec-Butylbenzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Styrene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
tert-Butylbenzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
trans-1,2-DCE	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Trichlorofluoromethane	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Vinyl chloride	ND	1.0		µg/L	1	8/29/2014 2:02:39 PM	R20920
Xylenes, Total	ND	1.5		µg/L	1	8/29/2014 2:02:39 PM	R20920
Surr: 1,2-Dichloroethane-d4	97.5	70-130		%REC	1	8/29/2014 2:02:39 PM	R20920
Surr: 4-Bromofluorobenzene	98.8	70-130		%REC	1	8/29/2014 2:02:39 PM	R20920
Surr: Dibromofluoromethane	94.7	70-130		%REC	1	8/29/2014 2:02:39 PM	R20920
Surr: Toluene-d8	89.2	70-130		%REC	1	8/29/2014 2:02:39 PM	R20920

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B43**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-1D**Project:** Cross Gradient Wells 8-20-14**Collection Date:** 8/20/2014 10:30:00 AM**Lab ID:** 1408B43-006B**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/22/2014 2:16:43 PM	R20754
Surr: BFB	101	70.9-130		%REC	1	8/22/2014 2:16:43 PM	R20754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B43**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-1D**Project:** Cross Gradient Wells 8-20-14**Collection Date:** 8/20/2014 10:30:00 AM**Lab ID:** 1408B43-006C**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	8/23/2014 6:18:07 AM	14896
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/23/2014 6:18:07 AM	14896
Surr: DNOP	105	75.2-161		%REC	1	8/23/2014 6:18:07 AM	14896

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-006D

Client Sample ID: MW-1D
Collection Date: 8/20/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.49	0.10		mg/L	1	8/21/2014 10:03:53 PM	R20741
Chloride	14	0.50		mg/L	1	8/21/2014 10:03:53 PM	R20741
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/21/2014 10:03:53 PM	R20741
Bromide	0.13	0.10		mg/L	1	8/21/2014 10:03:53 PM	R20741
Nitrogen, Nitrate (As N)	0.21	0.10		mg/L	1	8/21/2014 10:03:53 PM	R20741
Phosphorus, Orthophosphate (As P _i)	ND	0.50		mg/L	1	8/21/2014 10:03:53 PM	R20741
Sulfate	100	10		mg/L	20	8/21/2014 10:16:17 PM	R20741
SM 2540 C: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	458	40.0		mg/L	1	8/28/2014 2:52:00 PM	14985
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	240	1.0	H	mg CO ₂ /L	1	8/25/2014 6:28:27 PM	R20804
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	590	0.010		µmhos/cm	1	8/25/2014 6:28:27 PM	R20804
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	260	20		mg/L CaCO ₃	1	8/25/2014 6:28:27 PM	R20804
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	8/25/2014 6:28:27 PM	R20804
Total Alkalinity (as CaCO ₃)	260	20		mg/L CaCO ₃	1	8/25/2014 6:28:27 PM	R20804

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-006E

Client Sample ID: MW-1D
Collection Date: 8/20/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.027	0.0020		mg/L	1	8/27/2014 3:44:01 PM	R20845
Cadmium	ND	0.0020		mg/L	1	8/27/2014 3:44:01 PM	R20845
Calcium	69	1.0		mg/L	1	8/27/2014 3:44:01 PM	R20845
Chromium	ND	0.0060		mg/L	1	8/27/2014 3:44:01 PM	R20845
Copper	ND	0.0060		mg/L	1	8/27/2014 3:44:01 PM	R20845
Iron	0.082	0.020		mg/L	1	8/27/2014 3:44:01 PM	R20845
Magnesium	16	1.0		mg/L	1	8/27/2014 3:44:01 PM	R20845
Manganese	0.13	0.0020	*	mg/L	1	8/27/2014 3:44:01 PM	R20845
Potassium	2.6	1.0		mg/L	1	8/27/2014 3:44:01 PM	R20845
Silver	ND	0.0050		mg/L	1	8/28/2014 5:46:21 PM	R20883
Sodium	77	5.0		mg/L	5	8/27/2014 5:17:10 PM	R20845
Zinc	ND	0.010		mg/L	1	8/27/2014 3:44:01 PM	R20845
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Antimony	ND	0.0010		mg/L	1	8/29/2014 5:22:53 PM	R20917
Arsenic	0.0010	0.0010		mg/L	1	8/29/2014 5:22:53 PM	R20917
Lead	ND	0.0010		mg/L	1	8/29/2014 5:22:53 PM	R20917
Selenium	0.0018	0.0010		mg/L	1	8/29/2014 5:22:53 PM	R20917
Thallium	ND	0.0010		mg/L	1	8/29/2014 5:22:53 PM	R20917
Uranium	0.0026	0.0010		mg/L	1	8/29/2014 5:22:53 PM	R20917
EPA METHOD 245.1: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	9/3/2014 9:42:37 AM	15056

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-006F

Client Sample ID: MW-1D
Collection Date: 8/20/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	8/26/2014 5:35:23 PM	14929
Barium	0.041	0.0020		mg/L	1	8/26/2014 5:35:23 PM	14929
Cadmium	ND	0.0020		mg/L	1	8/26/2014 5:35:23 PM	14929
Chromium	ND	0.0060		mg/L	1	8/26/2014 5:35:23 PM	14929
Lead	ND	0.0050		mg/L	1	8/26/2014 5:35:23 PM	14929
Selenium	ND	0.050		mg/L	1	8/26/2014 5:35:23 PM	14929
Silver	ND	0.0050		mg/L	1	8/28/2014 5:19:01 PM	14991
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	8/29/2014 1:10:11 PM	15017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical Report

Lab Order: 1408B43

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-007A

Client Sample ID: Trip Blank
Collection Date:
Matrix: Trip Blank

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Toluene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Ethylbenzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Naphthalene	ND	2.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1-Methylnaphthalene	ND	4.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
2-Methylnaphthalene	ND	4.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Acetone	ND	10		µg/L	1	8/29/2014 2:32:17 PM	R20920
Bromobenzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Bromodichloromethane	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Bromoform	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Bromomethane	ND	3.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
2-Butanone	ND	10		µg/L	1	8/29/2014 2:32:17 PM	R20920
Carbon disulfide	ND	10		µg/L	1	8/29/2014 2:32:17 PM	R20920
Carbon Tetrachloride	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Chlorobenzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Chloroethane	ND	2.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Chloroform	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Chloromethane	ND	3.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
2-Chlorotoluene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
4-Chlorotoluene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
cis-1,2-DCE	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Dibromochloromethane	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Dibromomethane	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,1-Dichloroethane	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,1-Dichloroethene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,2-Dichloropropane	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,3-Dichloropropane	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
2,2-Dichloropropane	ND	2.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,1-Dichloropropene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Hexachlorobutadiene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical Report

Lab Order: 1408B43

Date Reported: 9/24/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Inc.
Project: Cross Gradient Wells 8-20-14
Lab ID: 1408B43-007A

Client Sample ID: Trip Blank
Collection Date:
Matrix: Trip Blank

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
2-Hexanone	ND	10		µg/L	1	8/29/2014 2:32:17 PM	R20920
Isopropylbenzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
4-Isopropyltoluene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
4-Methyl-2-pentanone	ND	10		µg/L	1	8/29/2014 2:32:17 PM	R20920
Methylene Chloride	ND	3.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
n-Butylbenzene	ND	3.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
n-Propylbenzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
sec-Butylbenzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Styrene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
tert-Butylbenzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
trans-1,2-DCE	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Trichlorofluoromethane	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Vinyl chloride	ND	1.0		µg/L	1	8/29/2014 2:32:17 PM	R20920
Xylenes, Total	ND	1.5		µg/L	1	8/29/2014 2:32:17 PM	R20920
Surr: 1,2-Dichloroethane-d4	96.8	70-130		%REC	1	8/29/2014 2:32:17 PM	R20920
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	1	8/29/2014 2:32:17 PM	R20920
Surr: Dibromofluoromethane	96.8	70-130		%REC	1	8/29/2014 2:32:17 PM	R20920
Surr: Toluene-d8	90.4	70-130		%REC	1	8/29/2014 2:32:17 PM	R20920

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 44 of 67

Analytical ReportLab Order: **1408B43**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** Rinsate**Project:** Cross Gradient Wells 8-20-14**Collection Date:** 8/20/2014 1:45:00 PM**Lab ID:** 1408B43-008A**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	8/29/2014 12:03:52 PM	R20920
Toluene	ND	1.0		µg/L	1	8/29/2014 12:03:52 PM	R20920
Ethylbenzene	ND	1.0		µg/L	1	8/29/2014 12:03:52 PM	R20920
Xylenes, Total	ND	1.5		µg/L	1	8/29/2014 12:03:52 PM	R20920
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	8/29/2014 12:03:52 PM	R20920
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	8/29/2014 12:03:52 PM	R20920
Surr: Dibromofluoromethane	98.7	70-130		%REC	1	8/29/2014 12:03:52 PM	R20920
Surr: Toluene-d8	91.1	70-130		%REC	1	8/29/2014 12:03:52 PM	R20920

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	MB-14929		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	14929		RunNo:	20802			
Prep Date:	8/25/2014		Analysis Date:	8/26/2014		SeqNo:	605254		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								

Sample ID	LCS-14929		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	14929		RunNo:	20802			
Prep Date:	8/25/2014		Analysis Date:	8/26/2014		SeqNo:	605255		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.52	0.020	0.5000	0	104	85	115			
Barium	0.52	0.0020	0.5000	0	103	85	115			
Cadmium	0.52	0.0020	0.5000	0	104	85	115			
Chromium	0.51	0.0060	0.5000	0	102	85	115			

Sample ID	MB-14929		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	14929		RunNo:	20816			
Prep Date:	8/25/2014		Analysis Date:	8/26/2014		SeqNo:	605686		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0050								
Selenium	ND	0.050								

Sample ID	LCS-14929		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	14929		RunNo:	20816			
Prep Date:	8/25/2014		Analysis Date:	8/26/2014		SeqNo:	605687		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.51	0.0050	0.5000	0	101	85	115			
Selenium	0.52	0.050	0.5000	0	105	85	115			

Sample ID	1408B43-002FMS		SampType:	MS		TestCode:	EPA Method 200.7: Metals			
Client ID:	MW-13		Batch ID:	14929		RunNo:	20816			
Prep Date:	8/25/2014		Analysis Date:	8/26/2014		SeqNo:	605703		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.53	0.020	0.5000	0	105	70	130			
Barium	0.49	0.0020	0.5000	0.02349	93.7	70	130			
Cadmium	0.49	0.0020	0.5000	0	97.6	70	130			
Chromium	0.48	0.0060	0.5000	0	95.1	70	130			

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	1408B43-002FMS	SampType: MS			TestCode: EPA Method 200.7: Metals					
Client ID:	MW-13	Batch ID: 14929			RunNo: 20816					
Prep Date:	8/25/2014	Analysis Date: 8/26/2014			SeqNo: 605703		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.46	0.0050	0.5000	0	91.5	70	130			
Selenium	0.46	0.050	0.5000	0	91.7	70	130			

Sample ID	1408B43-002FMSD	SampType: MSD		TestCode: EPA Method 200.7: Metals						
Client ID:	MW-13	Batch ID: 14929		RunNo: 20816						
Prep Date:	8/25/2014	Analysis Date: 8/26/2014		SeqNo: 605704		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.52	0.020	0.5000	0	103	70	130	1.83	20	
Barium	0.49	0.0020	0.5000	0.02349	93.4	70	130	0.334	20	
Cadmium	0.49	0.0020	0.5000	0	97.0	70	130	0.580	20	
Chromium	0.47	0.0060	0.5000	0	94.7	70	130	0.478	20	
Lead	0.46	0.0050	0.5000	0	91.1	70	130	0.451	20	
Selenium	0.45	0.050	0.5000	0	89.9	70	130	1.93	20	

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Metals					
Client ID:	PBW	Batch ID: R20845			RunNo: 20845					
Prep Date:		Analysis Date: 8/27/2014			SeqNo: 606768		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID	LCS	SampType: LCS			TestCode: EPA Method 200.7: Metals					
Client ID:	LCSW	Batch ID: R20845			RunNo: 20845					
Prep Date:		Analysis Date: 8/27/2014			SeqNo: 606769		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	95.4	85	115			
Cadmium	0.48	0.0020	0.5000	0	96.1	85	115			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Metals					
Client ID:	LCSW		Batch ID: R20845		RunNo: 20845					
Prep Date:			Analysis Date: 8/27/2014		SeqNo: 606769		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	50	1.0	50.00	0	99.6	85	115			
Chromium	0.50	0.0060	0.5000	0	99.6	85	115			
Copper	0.47	0.0060	0.5000	0	94.3	85	115			
Iron	0.51	0.020	0.5000	0	103	85	115			
Magnesium	50	1.0	50.00	0	100	85	115			
Manganese	0.49	0.0020	0.5000	0	97.9	85	115			
Potassium	49	1.0	50.00	0	98.0	85	115			
Silver	0.50	0.0050	0.5000	0	99.4	85	115			
Sodium	49	1.0	50.00	0	98.3	85	115			
Zinc	0.48	0.010	0.5000	0	95.2	85	115			

Sample ID	MB-14991		SampType: MBLK		TestCode: EPA Method 200.7: Metals					
Client ID:	PBW		Batch ID: 14991		RunNo: 20883					
Prep Date:	8/27/2014		Analysis Date: 8/28/2014		SeqNo: 607539		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.0050								

Sample ID	LCS-14991			SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW			Batch ID:	14991		RunNo:	20883			
Prep Date:	8/27/2014			Analysis Date:	8/28/2014		SeqNo:	607540		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Silver	0.50	0.0050	0.5000	0	99.6	85	115				

Sample ID	1408B43-005FMS			SampType:	MS		TestCode:	EPA Method 200.7: Metals				
Client ID:	MW-33			Batch ID:	14991		RunNo:	20883				
Prep Date:	8/27/2014			Analysis Date:	8/28/2014		SeqNo:	607562			Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Silver	0.45	0.0050	0.5000	0	89.1	70	130					

Sample ID	1408B43-005FMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Metals				
Client ID:	MW-33		Batch ID:	14991		RunNo:	20883				
Prep Date:	8/27/2014		Analysis Date:	8/28/2014		SeqNo:	607563		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Silver	0.45	0.0050	0.5000	0	90.0	70	130	0.911	20		

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R20845			RunNo: 20845					
Prep Date:		Analysis Date: 8/27/2014			SeqNo: 606770		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R20845		RunNo: 20845					
Prep Date:			Analysis Date: 8/27/2014		SeqNo: 606771		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.3	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.3	85	115			
Calcium	51	1.0	50.00	0	101	85	115			
Chromium	0.51	0.0060	0.5000	0	103	85	115			
Copper	0.49	0.0060	0.5000	0	97.2	85	115			
Iron	0.52	0.020	0.5000	0	103	85	115			
Magnesium	51	1.0	50.00	0	102	85	115			
Manganese	0.50	0.0020	0.5000	0	101	85	115			
Potassium	50	1.0	50.00	0	100	85	115			
Silver	0.52	0.0050	0.5000	0	103	85	115			
Sodium	50	1.0	50.00	0	100	85	115			
Zinc	0.49	0.010	0.5000	0	97.7	85	115			

Sample ID	MB	SampType:	MBLK		TestCode:	EPA Method 200.7: Dissolved Metals				
Client ID:	PBW	Batch ID:	R20883		RunNo:	20883				
Prep Date:		Analysis Date:	8/28/2014		SeqNo:	607543		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.0050								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R20883		RunNo: 20883					
Prep Date:			Analysis Date: 8/28/2014		SeqNo: 607544		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.48	0.0050	0.5000	0	95.4	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R20917		RunNo: 20917					
Prep Date:			Analysis Date: 8/29/2014		SeqNo: 608778		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.023	0.0010	0.02500	0	90.5	85	115			
Arsenic	0.023	0.0010	0.02500	0	91.9	85	115			
Lead	0.024	0.0010	0.02500	0	96.8	85	115			
Selenium	0.023	0.0010	0.02500	0	90.3	85	115			
Thallium	0.024	0.0010	0.02500	0	96.9	85	115			
Uranium	0.025	0.0010	0.02500	0	98.2	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R20917		RunNo: 20917					
Prep Date:			Analysis Date: 8/29/2014		SeqNo: 608779		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	99.7	85	115			
Arsenic	0.023	0.0010	0.02500	0	93.8	85	115			
Lead	0.024	0.0010	0.02500	0	97.4	85	115			
Selenium	0.023	0.0010	0.02500	0	90.7	85	115			
Thallium	0.024	0.0010	0.02500	0	97.6	85	115			
Uranium	0.025	0.0010	0.02500	0	100	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R20917			RunNo: 20917					
Prep Date:		Analysis Date: 8/29/2014			SeqNo: 608780		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Thallium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R20917			RunNo: 20917					
Prep Date:		Analysis Date: 8/29/2014			SeqNo: 608781		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R20917			RunNo: 20917					
Prep Date:		Analysis Date: 8/29/2014			SeqNo: 608781		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Thallium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R20953		RunNo: 20953					
Prep Date:			Analysis Date: 9/2/2014		SeqNo: 609801		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.024	0.0010	0.02500	0	96.1	85	115			
Arsenic	0.024	0.0010	0.02500	0	96.4	85	115			
Lead	0.025	0.0010	0.02500	0	101	85	115			
Selenium	0.023	0.0010	0.02500	0	93.1	85	115			
Thallium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.026	0.0010	0.02500	0	102	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R20953		RunNo: 20953					
Prep Date:			Analysis Date: 9/2/2014		SeqNo: 609802		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.024	0.0010	0.02500	0	96.9	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R20953			RunNo: 20953					
Prep Date:		Analysis Date: 9/2/2014			SeqNo: 609803		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Thallium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType:	MBLK		TestCode:	EPA 200.8: Dissolved Metals				
Client ID:	PBW	Batch ID:	R20953		RunNo:	20953				
Prep Date:		Analysis Date:	9/2/2014		SeqNo:	609804	Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	MB-15017	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	15017	RunNo:	20896					
Prep Date:	8/28/2014	Analysis Date:	8/29/2014	SeqNo:	608095	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-15017	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	15017	RunNo:	20896					
Prep Date:	8/28/2014	Analysis Date:	8/29/2014	SeqNo:	608096	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	98.4	80	120			

Sample ID	MB-15056	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	15056	RunNo:	20955					
Prep Date:	9/2/2014	Analysis Date:	9/3/2014	SeqNo:	609874	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-15056	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	15056	RunNo:	20955					
Prep Date:	9/2/2014	Analysis Date:	9/3/2014	SeqNo:	609875	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0055	0.00020	0.005000	0	110	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	MB-14985	SampType:	MBLK	TestCode:	SM 2540 C: Total Dissolved Solids					
Client ID:	PBW	Batch ID:	14985	RunNo:	20874					
Prep Date:	8/27/2014	Analysis Date:	8/28/2014	SeqNo:	607415	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	LCS-14985	SampType:	LCS	TestCode:	SM 2540 C: Total Dissolved Solids					
Client ID:	LCSW	Batch ID:	14985	RunNo:	20874					
Prep Date:	8/27/2014	Analysis Date:	8/28/2014	SeqNo:	607416	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	102	80	120			

Sample ID	1408B43-001DMS	SampType:	MS	TestCode:	SM 2540 C: Total Dissolved Solids					
Client ID:	MW-1	Batch ID:	14985	RunNo:	20874					
Prep Date:	8/27/2014	Analysis Date:	8/28/2014	SeqNo:	607418	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	2550	40.0	2000	546.0	100	80	120			

Sample ID	1408B43-001DMSD	SampType:	MSD	TestCode:	SM 2540 C: Total Dissolved Solids					
Client ID:	MW-1	Batch ID:	14985	RunNo:	20874					
Prep Date:	8/27/2014	Analysis Date:	8/28/2014	SeqNo:	607419	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	2560	40.0	2000	546.0	101	80	120	0.391	5	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID: R20741			RunNo: 20741					
Prep Date:		Analysis Date: 8/21/2014			SeqNo: 603501		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R20741		RunNo: 20741					
Prep Date:			Analysis Date: 8/21/2014		SeqNo: 603502		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.51	0.10	0.5000	0	102	90	110			
Chloride	4.9	0.50	5.000	0	97.2	90	110			
Nitrogen, Nitrite (As N)	1.0	0.10	1.000	0	100	90	110			
Bromide	2.5	0.10	2.500	0	101	90	110			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	102	90	110			
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	97.3	90	110			
Sulfate	9.9	0.50	10.00	0	99.3	90	110			

Sample ID	MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions						
Client ID:	PBW	Batch ID: R20741		RunNo: 20741						
Prep Date:		Analysis Date: 8/21/2014		SeqNo: 603565		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P)	ND	0.50								
Sulfate	ND	0.50								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R20741		RunNo: 20741					
Prep Date:			Analysis Date: 8/21/2014		SeqNo: 603566		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.51	0.10	0.5000	0	102	90	110			

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R20741		RunNo: 20741					
Prep Date:			Analysis Date: 8/21/2014		SeqNo: 603566		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	98.2	90	110			
Nitrogen, Nitrite (As N)	1.0	0.10	1.000	0	101	90	110			
Bromide	2.5	0.10	2.500	0	101	90	110			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	102	90	110			
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	97.3	90	110			
Sulfate	9.9	0.50	10.00	0	98.8	90	110			

Sample ID	MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions						
Client ID:	PBW	Batch ID: R20760		RunNo: 20760						
Prep Date:		Analysis Date: 8/22/2014		SeqNo: 604138		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R20760		RunNo: 20760					
Prep Date:			Analysis Date: 8/22/2014		SeqNo: 604139		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	95.4	90	110			
Sulfate	9.7	0.50	10.00	0	97.2	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	MB-14896		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 14896		RunNo: 20738					
Prep Date:	8/21/2014		Analysis Date: 8/22/2014		SeqNo: 603778		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	0.20								
Motor Oil Range Organics (MRO)	ND	2.5								
Surr: DNOP	0.47		0.5000		93.5	75.2	161			

Sample ID	LCS-14896		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 14896		RunNo: 20738					
Prep Date:	8/21/2014		Analysis Date: 8/22/2014		SeqNo: 603880		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	2.9	0.20	2.500	0	115	65.8	162			
Surr: DNOP	0.27		0.2500		109	75.2	161			

Sample ID	1408B43-001CMS		SampType: MS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	MW-1		Batch ID: 14896		RunNo: 20738					
Prep Date:	8/21/2014		Analysis Date: 8/23/2014		SeqNo: 603903		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.0	0.20	2.500	0	120	64.4	178			
Surr: DNOP	0.29		0.2500		116	75.2	161			

Sample ID	1408B43-001CMSD			SampType:	MSD		TestCode:	EPA Method 8015D: Diesel Range			
Client ID:	MW-1		Batch ID:	14896		RunNo:	20738				
Prep Date:	8/21/2014		Analysis Date:	8/23/2014		SeqNo:	603904		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	2.7	0.20	2.500	0	109	64.4	178	9.47	20		
Surr: DNOP	0.27		0.2500		108	75.2	161	0	0		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R20754	RunNo:	20754					
Prep Date:		Analysis Date:	8/22/2014	SeqNo:	603970	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	20		20.00		98.2	70.9	130			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R20754	RunNo:	20754					
Prep Date:		Analysis Date:	8/22/2014	SeqNo:	603971	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.54	0.050	0.5000	0	109	80	120			
Surr: BFB	20		20.00		101	70.9	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.**Project:** Cross Gradient Wells 8-20-14

Sample ID	5mL rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R20892			RunNo: 20892					
Prep Date:		Analysis Date: 8/28/2014			SeqNo: 607980		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	5mL rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R20892	RunNo:	20892					
Prep Date:		Analysis Date:	8/28/2014	SeqNo:	607980	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	6.7		10.00		67.3	70	130			S
Surr: 4-Bromofluorobenzene	9.3		10.00		93.2	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.0	70	130			
Surr: Toluene-d8	9.4		10.00		93.8	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R20892	RunNo:	20892					
Prep Date:		Analysis Date:	8/28/2014	SeqNo:	607982	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	92.7	70	130			
Toluene	21	1.0	20.00	0	107	80	120			
Chlorobenzene	20	1.0	20.00	0	100	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R20892			RunNo: 20892					
Prep Date:		Analysis Date: 8/28/2014			SeqNo: 607982		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	105	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	96.6	70	130			
Surr: 1,2-Dichloroethane-d4	7.1		10.00		70.6	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.7	70	130			
Surr: Dibromofluoromethane	8.9		10.00		88.7	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID	5mL rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R20920			RunNo: 20920					
Prep Date:		Analysis Date: 8/29/2014			SeqNo: 608784		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	5mL rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R20920			RunNo: 20920					
Prep Date:		Analysis Date: 8/29/2014			SeqNo: 608784	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.3	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	5mL rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R20920			RunNo: 20920					
Prep Date:		Analysis Date: 8/29/2014			SeqNo: 608784		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.3	70	130			
Surr: Toluene-d8	8.8		10.00		87.9	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R20920			RunNo: 20920					
Prep Date:		Analysis Date: 8/29/2014			SeqNo: 608786		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	70	130			
Toluene	21	1.0	20.00	0	106	80	120			
Chlorobenzene	19	1.0	20.00	0	97.2	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	109	82.6	131			
Trichloroethene (TCE)	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.5	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.6	70	130			
Surr: Dibromofluoromethane	9.0		10.00		89.6	70	130			
Surr: Toluene-d8	9.6		10.00		96.1	70	130			

Sample ID	b4	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R20920			RunNo: 20920					
Prep Date:		Analysis Date: 8/29/2014			SeqNo: 608825		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.**Project:** Cross Gradient Wells 8-20-14

Sample ID b4	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R20920			RunNo: 20920						
Prep Date:	Analysis Date: 8/29/2014			SeqNo: 608825	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID b4	SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R20920		RunNo: 20920							
Prep Date:	Analysis Date: 8/29/2014		SeqNo: 608825		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.1		10.00		91.3	70	130			
Surr: Toluene-d8	9.1		10.00		91.1	70	130			

Sample ID 100ng lcs2	SampType: LCS		TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R20920		RunNo: 20920							
Prep Date:	Analysis Date: 8/30/2014		SeqNo: 608827		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	106	70	130			
Toluene	21	1.0	20.00	0	103	80	120			
Chlorobenzene	19	1.0	20.00	0	94.2	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	115	82.6	131			
Trichloroethene (TCE)	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.4		10.00		93.7	70	130			
Surr: Toluene-d8	9.3		10.00		93.3	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID 1408b43-001d dup		SampType: DUP			TestCode: SM2510B: Specific Conductance					
Client ID: MW-1		Batch ID: R20804			RunNo: 20804					
Prep Date:		Analysis Date: 8/25/2014			SeqNo: 605418		Units: µmhos/cm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	640	0.010						1.91	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B43

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Cross Gradient Wells 8-20-14

Sample ID	mb-1		SampType:	MBLK		TestCode:	SM2320B: Alkalinity				
Client ID:	PBW		Batch ID:	R20804		RunNo:	20804				
Prep Date:			Analysis Date:	8/25/2014		SeqNo:	605425		Units:	mg/L CaCO3	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Alkalinity (as CaCO3)	ND	20									

Sample ID	Ics-1		SampType: LCS			TestCode: SM2320B: Alkalinity				
Client ID:	LCSW		Batch ID: R20804			RunNo: 20804				
Prep Date:			Analysis Date: 8/25/2014			SeqNo: 605426		Units: mg/L CaCO3		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	80	20	80.00	0	99.7	90	110			

Sample ID	mb-2		SampType: MBLK		TestCode: SM2320B: Alkalinity					
Client ID:	PBW		Batch ID: R20804		RunNo: 20804					
Prep Date:			Analysis Date: 8/25/2014		SeqNo: 605442		Units: mg/L CaCO3			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20								

Sample ID	lcs-2		SampType: LCS		TestCode: SM2320B: Alkalinity					
Client ID:	LCSW		Batch ID: R20804		RunNo: 20804					
Prep Date:			Analysis Date: 8/25/2014		SeqNo: 605443		Units: mg/L CaCO3			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	80	20	80.00	0	100	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: **Western Refining Southw**

Work Order Number: **1408B43**

RcptNo: 1

Received by/date:

Logged By: **Ashley Gallegos**

8/21/2014 7:45:00 AM

Completed By: **Ashley Gallegos**

8/21/2014 2:03:20 PM

Reviewed By:

Chain of Custody

1. Custody seals intact on sample bottles? Yes No Not Present ✓
2. Is Chain of Custody complete? Yes ✓ No Not Present
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ✓ No NA
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ✓ No NA
6. Sample(s) in proper container(s)? Yes ✓ No
7. Sufficient sample volume for indicated test(s)? Yes ✓ No
8. Are samples (except VOA and ONG) properly preserved? Yes ✓ No
9. Was preservative added to bottles? Yes No ✓ NA
10. VOA vials have zero headspace? Yes ✓ No No VOA Vials
11. Were any sample containers received broken? Yes No ✓
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ✓ No # of preserved bottles checked for pH: **018**
(**<2** or **>12** unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ✓ No Adjusted? **No**
14. Is it clear what analyses were requested? Yes ✓ No
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ✓ No Checked by: **h**

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes No NA ✓

Person Notified:

Date:

By Whom:

Via:

eMail

Phone

Fax

In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

☒ Standard ☐ Rush

~~Standard~~

Cross Gradient Wells 8-20-14

Project #:

10

Project Manager:

☐ Standard ☒ Level 4 (Full Validation)

☒ Level 4 (Full Validation)

Sampler:

Online:

Sample T

Sample Request ID

MW-27

1-250

MW-32

by: _____

by:

13

if necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.haillenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

Remarks:

See Table 2

Date _____ Time _____

Date	Time
8/26/14	1447

Received by:

Received by: *Am. + 1 but*

Relinquished by:

by: W. L. L. L.

Date: _____ Time: _____

by:

Date: _____ Time: _____

by:

Date: _____ Time: _____

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

Remarks:

TRIP BLANK - 007

Rinsate → BTEX only 8/20/14 345 -008

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record					
Client: Western Refining					
Mailing Address: #50 CR-4990 Bloomfield, NM 87413 Phone #: 505-632-4135 email or Fax#:					
QA/QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)					
Accreditation <input type="checkbox"/> NELAP <input type="checkbox"/> Other					
<input type="checkbox"/> EDD (Type) _____					
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type
8-20-14	1:00	H ₂ O	MW-33	5-VOA	HCl
				1-500	amber
				1-500	HNO ₃
			filter	1-250	HNO ₃
				1-500	
-20-14			MW-1 D	1-250	H ₂ SO ₄
				5-VOA	HCl
				1-500	amber
				1-500	HNO ₃
			filter	1-250	HNO ₃
				1-500	
				1-250	H ₂ SO ₄
Date:	Time:	Relinquished by:	Received by:	Date	Time
-20-14	1447	Cotter/Krakauer	Ma Walt	8/20/14	1447
Date:	Time:	Relinquished by:	Received by:	Date	Time
8/20/14	1830	Ma Walt	Ma Walt	08/21/14	0745

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this

TABLE 2
Analytical Methods and Target Analytes

VOCs (EPA Method 8260B) ⁽¹⁾	
- Target List	
Benzene	
Toluene	
Ethylbenzene	
Xylenes	
Methyl tert butyl ether (MTBE)	
SVOCs - (EPA Method 8270)	
- Method List	
TPH-GRO (EPA Method 8015B)	
- Gasoline Range Organics	
TPH-DRO (EPA Method 8015B)	
- Diesel Range Organics	
- Motor Oil Range Organics	
Total Carbon Dioxide (Laboratory Calculated)	
- Dissolved CO2	
Specific Conductivity (EPA Method 120.1 or field measurement)	
- Specific conductance	
TDS (EPA Method 160.1 or field measurement)	
- Total dissolved solids	
General Chemistry - Anions (EPA Method 300.0)	
Fluoride	
Chloride	
Bromide	
Nitrogen, Nitrite (as N)	
Nitrogen, Nitrate (as N)	
Phosphorous, Orthophosphate (As P)	
Sulfate	
General Chemistry - Alkalinity (EPA Method 310.1)	
Alkalinity, Total	
Carbonate	
Bicarbonate	

Total Recoverable Metals (EPA Method 6010B/7470)	
- Target List (not applicable to River Terrace Sampling Events)	
Arsenic	Lead
Barium	Mercury
Cadmium	Selenium
Chromium	Silver
- Target List (for River Terrace Sampling Events Only)	
Lead	
Mercury (DW-1 ONLY)	
Dissolved Metals (EPA Method 6010B / 7470)	
- Target List (for Refinery Complex, Outfalls, and River)	
Arsenic	Manganese
Barium	Mercury
Cadmium	Potassium
Calcium	Selenium
Chromium	Silver
Copper	Sodium
Iron	Uranium
Lead	Zinc
Magnesium	

TPH = total petroleum hydrocarbons
 GRO = gasoline range organics
 VOCs = volatile organic compounds
 DRO = diesel range organics
 TDS = total dissolved solids

NOTES:

- (1) VOCs Target List for River Terrace samples are analyzed by EPA Method 8021B per NMED's letter Approval with Direction dated June 16, 2009.
- (2) Target List for San Juan River Terrace Monitoring Wells and Piezometer Wells only, per the River Terrace Bioventing System Monitoring Plan.

Table 2



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 30, 2014

Kelly Robinson

Western Refining Southwest, Inc.

#50 CR 4990

Bloomfield, NM 87413

TEL: (505) 632-4135

FAX (505) 632-3911

RE: Down Gradient 4-16-14

OrderNo.: 1404807

Dear Kelly Robinson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/17/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', with a stylized flourish at the end.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Workorder Sample Summary

WO#: 1404807

30-Apr-14

CLIENT: Western Refining Southwest, Inc.

Project: Down Gradient 4-16-14

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1404807-001	MW-12		4/16/2014 10:40:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404807-001	MW-12		4/16/2014 10:40:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404807-001	MW-12		4/16/2014 10:40:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404807-002	MW-35		4/16/2014 11:00:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404807-002	MW-35		4/16/2014 11:00:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404807-003	MW-37		4/16/2014 11:15:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404807-003	MW-37		4/16/2014 11:15:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404807-003	MW-37		4/16/2014 11:15:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404807-004	MW-38		4/16/2014 11:45:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404807-004	MW-38		4/16/2014 11:45:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404807-004	MW-38		4/16/2014 11:45:00 AM	4/17/2014 10:10:00 AM	Aqueous
1404807-005	TRIP BLANK			4/17/2014 10:10:00 AM	Trip Blank
1404807-005	TRIP BLANK			4/17/2014 10:10:00 AM	Trip Blank

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1404807**Date Reported: **4/30/2014****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-12**Project:** Down Gradient 4-16-14**Collection Date:** 4/16/2014 10:40:00 AM**Lab ID:** 1404807-001**Matrix:** AQUEOUS**Received Date:** 4/17/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	4/18/2014 6:06:31 PM	12782
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	4/18/2014 6:06:31 PM	12782
Surr: DNOP	140	76-161		%REC	1	4/18/2014 6:06:31 PM	12782
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/21/2014 11:22:47 PM	R18124
Surr: BFB	85.2	80.4-118		%REC	1	4/21/2014 11:22:47 PM	R18124
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: cadg
Benzene	ND	1.0		µg/L	1	4/24/2014 1:05:33 PM	R18198
Toluene	ND	1.0		µg/L	1	4/24/2014 1:05:33 PM	R18198
Ethylbenzene	ND	1.0		µg/L	1	4/24/2014 1:05:33 PM	R18198
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/24/2014 1:05:33 PM	R18198
Xylenes, Total	ND	1.5		µg/L	1	4/24/2014 1:05:33 PM	R18198
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	4/24/2014 1:05:33 PM	R18198
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	1	4/24/2014 1:05:33 PM	R18198
Surr: Dibromofluoromethane	104	70-130		%REC	1	4/24/2014 1:05:33 PM	R18198
Surr: Toluene-d8	103	70-130		%REC	1	4/24/2014 1:05:33 PM	R18198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 10
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1404807**

Date Reported: **4/30/2014**

CLIENT: Western Refining Southwest, Inc.

Client Sample ID: MW-35

Project: Down Gradient 4-16-14

Collection Date: 4/16/2014 11:00:00 AM

Lab ID: 1404807-002

Matrix: AQUEOUS

Received Date: 4/17/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: cadg
Benzene	ND	1.0		µg/L	1	4/18/2014 3:13:58 PM	R18092
Toluene	ND	1.0		µg/L	1	4/18/2014 3:13:58 PM	R18092
Ethylbenzene	ND	1.0		µg/L	1	4/18/2014 3:13:58 PM	R18092
Methyl tert-butyl ether (MTBE)	1.2	1.0		µg/L	1	4/18/2014 3:13:58 PM	R18092
Xylenes, Total	ND	1.5		µg/L	1	4/18/2014 3:13:58 PM	R18092
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	4/18/2014 3:13:58 PM	R18092
Surr: 4-Bromofluorobenzene	89.4	70-130		%REC	1	4/18/2014 3:13:58 PM	R18092
Surr: Dibromofluoromethane	98.6	70-130		%REC	1	4/18/2014 3:13:58 PM	R18092
Surr: Toluene-d8	90.7	70-130		%REC	1	4/18/2014 3:13:58 PM	R18092

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 10
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1404807**Date Reported: **4/30/2014****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-37**Project:** Down Gradient 4-16-14**Collection Date:** 4/16/2014 11:15:00 AM**Lab ID:** 1404807-003**Matrix:** AQUEOUS**Received Date:** 4/17/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	4/18/2014 7:39:46 PM	12782
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	4/18/2014 7:39:46 PM	12782
Surr: DNOP	146	76-161		%REC	1	4/18/2014 7:39:46 PM	12782
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/21/2014 11:51:23 PM	R18124
Surr: BFB	86.1	80.4-118		%REC	1	4/21/2014 11:51:23 PM	R18124
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: cadg
Benzene	ND	1.0		µg/L	1	4/18/2014 3:42:40 PM	R18092
Toluene	ND	1.0		µg/L	1	4/18/2014 3:42:40 PM	R18092
Ethylbenzene	ND	1.0		µg/L	1	4/18/2014 3:42:40 PM	R18092
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/18/2014 3:42:40 PM	R18092
Xylenes, Total	ND	1.5		µg/L	1	4/18/2014 3:42:40 PM	R18092
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	4/18/2014 3:42:40 PM	R18092
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	4/18/2014 3:42:40 PM	R18092
Surr: Dibromofluoromethane	103	70-130		%REC	1	4/18/2014 3:42:40 PM	R18092
Surr: Toluene-d8	91.2	70-130		%REC	1	4/18/2014 3:42:40 PM	R18092

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 10
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1404807**

Date Reported: **4/30/2014**

CLIENT: Western Refining Southwest, Inc.

Client Sample ID: MW-38

Project: Down Gradient 4-16-14

Collection Date: 4/16/2014 11:45:00 AM

Lab ID: 1404807-004

Matrix: AQUEOUS

Received Date: 4/17/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	4/18/2014 8:10:51 PM	12782
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	4/18/2014 8:10:51 PM	12782
Surr: DNOP	131	76-161		%REC	1	4/18/2014 8:10:51 PM	12782
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/22/2014 12:19:57 AM	R18124
Surr: BFB	88.4	80.4-118		%REC	1	4/22/2014 12:19:57 AM	R18124
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: cadg
Benzene	ND	1.0		µg/L	1	4/18/2014 4:11:26 PM	R18092
Toluene	ND	1.0		µg/L	1	4/18/2014 4:11:26 PM	R18092
Ethylbenzene	ND	1.0		µg/L	1	4/18/2014 4:11:26 PM	R18092
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/18/2014 4:11:26 PM	R18092
Xylenes, Total	ND	1.5		µg/L	1	4/18/2014 4:11:26 PM	R18092
Surr: 1,2-Dichloroethane-d4	98.6	70-130		%REC	1	4/18/2014 4:11:26 PM	R18092
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	1	4/18/2014 4:11:26 PM	R18092
Surr: Dibromofluoromethane	105	70-130		%REC	1	4/18/2014 4:11:26 PM	R18092
Surr: Toluene-d8	96.3	70-130		%REC	1	4/18/2014 4:11:26 PM	R18092

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1404807**Date Reported: **4/30/2014****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** TRIP BLANK**Project:** Down Gradient 4-16-14**Collection Date:****Lab ID:** 1404807-005**Matrix:** TRIP BLANK**Received Date:** 4/17/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE				Analyst: NSB			
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/22/2014 12:48:30 AM	R18124
Surr: BFB	86.8	80.4-118		%REC	1	4/22/2014 12:48:30 AM	R18124
EPA METHOD 8260: VOLATILES SHORT LIST				Analyst: cadg			
Benzene	ND	1.0		µg/L	1	4/18/2014 4:40:10 PM	R18092
Toluene	ND	1.0		µg/L	1	4/18/2014 4:40:10 PM	R18092
Ethylbenzene	ND	1.0		µg/L	1	4/18/2014 4:40:10 PM	R18092
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/18/2014 4:40:10 PM	R18092
Xylenes, Total	ND	1.5		µg/L	1	4/18/2014 4:40:10 PM	R18092
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	4/18/2014 4:40:10 PM	R18092
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	4/18/2014 4:40:10 PM	R18092
Surr: Dibromofluoromethane	105	70-130		%REC	1	4/18/2014 4:40:10 PM	R18092
Surr: Toluene-d8	93.6	70-130		%REC	1	4/18/2014 4:40:10 PM	R18092

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 10
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404807

30-Apr-14

Client: Western Refining Southwest, Inc.

Project: Down Gradient 4-16-14

Sample ID	MB-12782		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 12782		RunNo: 18069					
Prep Date:	4/18/2014		Analysis Date: 4/18/2014		SeqNo: 522339		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	0.20								
Motor Oil Range Organics (MRO)	ND	2.5								
Surr: DNOP	0.59		0.5000		118	76	161			

Sample ID	1404807-001CMS		SampType: MS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	MW-12		Batch ID: 12782		RunNo: 18094					
Prep Date:	4/18/2014		Analysis Date: 4/21/2014		SeqNo: 523016		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.4	0.20	2.500	0	177	72.1	156			S
Surr: DNOP	0.43		0.2500		173	76	161			S

Sample ID	1404807-001CMSD		SampType: MSD		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	MW-12		Batch ID: 12782		RunNo: 18094					
Prep Date:	4/18/2014		Analysis Date: 4/21/2014		SeqNo: 523017		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.1	0.20	2.500	0	164	72.1	156	14.6	20	S
Surr: DNOP	0.40		0.2500		162	76	161	0	0	S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404807

30-Apr-14

Client: Western Refining Southwest, Inc.

Project: Down Gradient 4-16-14

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R18124	RunNo:	18124					
Prep Date:		Analysis Date:	4/21/2014	SeqNo:	523149	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		83.8	80.4	118			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404807

30-Apr-14

Client: Western Refining Southwest, Inc.

Project: Down Gradient 4-16-14

Sample ID	5mL rb	SampType:	MBLK	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	PBW	Batch ID:	R18092	RunNo:	18092					
Prep Date:		Analysis Date:	4/18/2014	SeqNo:	522367	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	9.4		10.00		94.3	70	130			

Sample ID	1404807-001a ms	SampType:	MS	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	MW-12	Batch ID:	R18092	RunNo:	18092					
Prep Date:		Analysis Date:	4/18/2014	SeqNo:	522379	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.8	70	130			
Toluene	16	1.0	20.00	0	82.2	67.5	123			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.3		10.00		92.5	70	130			

Sample ID	1404807-001a msd	SampType:	MSD	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	MW-12	Batch ID:	R18092	RunNo:	18092					
Prep Date:		Analysis Date:	4/18/2014	SeqNo:	522380	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.5	70	130	1.35	20	
Toluene	16	1.0	20.00	0	79.0	67.5	123	4.07	20	
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		103	70	130	0	0	
Surr: Toluene-d8	9.2		10.00		92.0	70	130	0	0	

Sample ID	5mL rb	SampType:	MBLK	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	PBW	Batch ID:	R18198	RunNo:	18198					
Prep Date:		Analysis Date:	4/24/2014	SeqNo:	525242	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404807

30-Apr-14

Client: Western Refining Southwest, Inc.

Project: Down Gradient 4-16-14

Sample ID	5mL rb	SampType:	MBLK	TestCode:	EPA Method 8260: Volatiles Short List					
Client ID:	PBW	Batch ID:	R18198	RunNo:	18198					
Prep Date:		Analysis Date:	4/24/2014	SeqNo:	525242	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.0	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.9	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	10		10.00		99.7	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: Western Refining Southw

Work Order Number: 1404807

RcptNo: 1

Received by/date:

Logged By:

Ashley Gallegos

4/17/2014 10:10:00 AM

Completed By:

Ashley Gallegos

4/17/2014 11:23:19 AM

Reviewed By:

mg

04/17/14

Chain of Custody

1. Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

2. Is Chain of Custody complete?

Yes ☒

No ☐

Not Present ☐

3. How was the sample delivered?

Courier

Log In

4. Was an attempt made to cool the samples?

Yes ☒

No ☐

NA ☐

5. Were all samples received at a temperature of >0° C to 6.0°C

Yes ☒

No ☐

NA ☐

6. Sample(s) in proper container(s)?

Yes ☒

No ☐

7. Sufficient sample volume for indicated test(s)?

Yes ☒

No ☐

8. Are samples (except VOA and ONG) properly preserved?

Yes ☒

No ☐

9. Was preservative added to bottles?

Yes ☐

No ☒

NA ☐

10. VOA vials have zero headspace?

Yes ☒

No ☐

No VOA Vials ☐

11. Were any sample containers received broken?

Yes ☐

No ☒

of preserved
bottles checked
for pH:

12. Does paperwork match bottle labels?

Yes ☒

No ☐

(<2 or >12 unless noted)

(Note discrepancies on chain of custody)

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

Adjusted?

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

Yes ☒

No ☐

Checked by:

(If no, notify customer for authorization.)

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?

Yes ☐

No ☐

NA ☒

Person Notified:

Date:

By Whom:

Via:

eMail

Phone

Fax

In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Well ID	Sampling Event	VOCs (EPA Method 8260)	VOCs - Target List (1) (2) (EPA Method 8260)	SVOCs (EPA Method 8270)	TPH - Diesel Range Organics Extended	TPH - Gasoline Range Organics (EPA Method 8015B)	Total Recoverable Metals - Target List	Total Dissolved Metals - Target List	General Chemistry - Alkalinity (EPA Method 310.1)	General Chemistry - Anions (EPA Method 300.0)	Carbon Dioxide (EPA Method 310.1)	Total Dissolved Solids (TDS) (EPA Method 160.1 or Field Measurement)	Specific Conductance (EPA Method 120.1 or Field Measurement)	Temperature, pH, ORP (Field Measurement)	Dissolved Oxygen (Field Measurement)
Downgradient Wells															
MW-11	Semi-Annual Event (April)								Not Sampled						
MW-12	Semi-Annual Event (April)		X		X	X			Not Sampled						
MW-34	Semi-Annual Event (April)														
MW-35	Semi-Annual Event (April)		X		X	X									
MW-37	Semi-Annual Event (April)		X		X	X									
MW-38	Semi-Annual Event (April)		X		X	X									
RCRA Investigation Wells															
MW-50 *	Semi-Annual Event (April)								Not Sampled						
MW-51 *	Semi-Annual Event (April)								Not Sampled						
MW-52 *	Semi-Annual Event (April)								Not Sampled						
MW-53 *	Semi-Annual Event (April)								Not Sampled						
MW-54 *	Semi-Annual Event (April)								Not Sampled						
MW-55 *	Semi-Annual Event (April)								Not Sampled						
MW-56 *	Semi-Annual Event (April)								Not Sampled						
MW-57 *	Semi-Annual Event (April)								Not Sampled						
MW-58 *	Semi-Annual Event (April)								Not Sampled						
MW-59 *	Semi-Annual Event (April)								Not Sampled						
MW-60 *	Semi-Annual Event (April)								Not Sampled						
MW-61 *	Semi-Annual Event (April)								Not Sampled						
MW-62 *	Semi-Annual Event (April)								Not Sampled						
MW-63 *	Semi-Annual Event (April)								Not Sampled						
MW-64 *	Semi-Annual Event (April)								Not Sampled						
MW-65 *	Semi-Annual Event (April)								Not Sampled						
MW-66 *	Semi-Annual Event (April)								Not Sampled						
MW-67 **	Semi-Annual Event (April)								Not Sampled						
MW-68 **	Semi-Annual Event (April)								Not Sampled						
MW-69 **	Semi-Annual Event (April)								Not Sampled						



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 24, 2014

Kelly Robinson

Western Refining Southwest, Inc.

#50 CR 4990

Bloomfield, NM 87413

TEL: (505) 632-4166

FAX (505) 632-3911

RE: Downgradient Wells 8-21-14

OrderNo.: 1408B57

Dear Kelly Robinson:

Hall Environmental Analysis Laboratory received 8 sample(s) on 8/22/2014 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued September 15, 2014.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical ReportLab Order: **1408B57****Hall Environmental Analysis Laboratory, Inc.**Date Reported: **9/24/2014****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-37**Project:** Downgradient Wells 8-21-14**Collection Date:** 8/21/2014 11:00:00 AM**Lab ID:** 1408B57-001A**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Toluene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Ethylbenzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Naphthalene	ND	2.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
2-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Acetone	ND	10		µg/L	1	8/28/2014 12:36:13 PM	R20892
Bromobenzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Bromodichloromethane	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Bromoform	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Bromomethane	ND	3.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
2-Butanone	ND	10		µg/L	1	8/28/2014 12:36:13 PM	R20892
Carbon disulfide	ND	10		µg/L	1	8/28/2014 12:36:13 PM	R20892
Carbon Tetrachloride	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Chlorobenzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Chloroethane	ND	2.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Chloroform	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Chloromethane	ND	3.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
2-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
4-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
cis-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Dibromochloromethane	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Dibromomethane	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,1-Dichloroethane	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,1-Dichloroethene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,2-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,3-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
2,2-Dichloropropane	ND	2.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,1-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Hexachlorobutadiene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 1 of 70

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-001A

Client Sample ID: MW-37
Collection Date: 8/21/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
2-Hexanone	ND	10		µg/L	1	8/28/2014 12:36:13 PM	R20892
Isopropylbenzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
4-Isopropyltoluene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
4-Methyl-2-pentanone	ND	10		µg/L	1	8/28/2014 12:36:13 PM	R20892
Methylene Chloride	ND	3.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
n-Butylbenzene	ND	3.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
n-Propylbenzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
sec-Butylbenzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Styrene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
tert-Butylbenzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
trans-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Trichlorofluoromethane	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Vinyl chloride	ND	1.0		µg/L	1	8/28/2014 12:36:13 PM	R20892
Xylenes, Total	ND	1.5		µg/L	1	8/28/2014 12:36:13 PM	R20892
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%REC	1	8/28/2014 12:36:13 PM	R20892
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	8/28/2014 12:36:13 PM	R20892
Surr: Dibromofluoromethane	90.2	70-130		%REC	1	8/28/2014 12:36:13 PM	R20892
Surr: Toluene-d8	87.7	70-130		%REC	1	8/28/2014 12:36:13 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-37**Project:** Downgradient Wells 8-21-14**Collection Date:** 8/21/2014 11:00:00 AM**Lab ID:** 1408B57-001B**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.074	0.050		mg/L	1	8/22/2014 2:46:47 PM	R20754
Surr: BFB	106	70.9-130		%REC	1	8/22/2014 2:46:47 PM	R20754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 3 of 70

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-37**Project:** Downgradient Wells 8-21-14**Collection Date:** 8/21/2014 11:00:00 AM**Lab ID:** 1408B57-001C**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	0.55	0.20		mg/L	1	8/25/2014 3:38:19 PM	14896
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/25/2014 3:38:19 PM	14896
Surr: DNOP	114	75.2-161		%REC	1	8/25/2014 3:38:19 PM	14896

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57****Hall Environmental Analysis Laboratory, Inc.**Date Reported: **9/24/2014**

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-001D

Client Sample ID: MW-37
Collection Date: 8/21/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.74	0.10		mg/L	1	8/22/2014 3:01:17 PM	R20765
Chloride	190	10		mg/L	20	8/22/2014 3:13:41 PM	R20765
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/22/2014 3:01:17 PM	R20765
Bromide	2.7	2.0		mg/L	20	8/22/2014 3:13:41 PM	R20765
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/22/2014 3:01:17 PM	R20765
Phosphorus, Orthophosphate (As P _i)	ND	0.50		mg/L	1	8/22/2014 3:01:17 PM	R20765
Sulfate	24	0.50		mg/L	1	8/22/2014 3:01:17 PM	R20765
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	810	1.0	H	mg CO ₂ /L	1	8/25/2014 12:47:37 PM	R20804
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	2000	0.010		µmhos/cm	1	8/25/2014 12:47:37 PM	R20804
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	890	20		mg/L CaCO ₃	1	8/25/2014 12:47:37 PM	R20804
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	8/25/2014 12:47:37 PM	R20804
Total Alkalinity (as CaCO ₃)	890	20		mg/L CaCO ₃	1	8/25/2014 12:47:37 PM	R20804
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1350	40.0	*	mg/L	1	8/27/2014 4:44:00 PM	14958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-001E

Client Sample ID: MW-37
Collection Date: 8/21/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.20	0.0020		mg/L	1	8/27/2014 3:47:39 PM	R20845
Cadmium	ND	0.0020		mg/L	1	8/27/2014 3:47:39 PM	R20845
Calcium	44	1.0		mg/L	1	8/27/2014 3:47:39 PM	R20845
Chromium	ND	0.0060		mg/L	1	8/27/2014 3:47:39 PM	R20845
Copper	ND	0.0060		mg/L	1	8/27/2014 3:47:39 PM	R20845
Iron	0.38	0.020	*	mg/L	1	8/27/2014 3:47:39 PM	R20845
Magnesium	15	1.0		mg/L	1	8/27/2014 3:47:39 PM	R20845
Manganese	0.99	0.0020	*	mg/L	1	8/27/2014 3:47:39 PM	R20845
Potassium	3.0	1.0		mg/L	1	8/27/2014 3:47:39 PM	R20845
Silver	ND	0.0050		mg/L	1	8/28/2014 5:48:07 PM	R20883
Sodium	460	5.0		mg/L	5	8/27/2014 5:18:57 PM	R20845
Zinc	ND	0.010		mg/L	1	8/27/2014 3:47:39 PM	R20845
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Arsenic	ND	0.010		mg/L	10	9/3/2014 11:44:14 AM	R20973
Lead	ND	0.0010		mg/L	1	9/2/2014 2:58:18 PM	R20953
Selenium	0.022	0.010		mg/L	10	9/3/2014 11:44:14 AM	R20973
Uranium	0.0010	0.0010		mg/L	1	9/2/2014 2:58:18 PM	R20953
EPA METHOD 245.1: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	9/3/2014 9:44:28 AM	15056

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-001F

Client Sample ID: MW-37
Collection Date: 8/21/2014 11:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	8/26/2014 5:36:57 PM	14929
Barium	0.31	0.0020		mg/L	1	8/26/2014 5:36:57 PM	14929
Cadmium	ND	0.0020		mg/L	1	8/26/2014 5:36:57 PM	14929
Chromium	ND	0.0060		mg/L	1	8/26/2014 5:36:57 PM	14929
Lead	ND	0.0050		mg/L	1	8/26/2014 5:36:57 PM	14929
Selenium	ND	0.050		mg/L	1	8/26/2014 5:36:57 PM	14929
Silver	ND	0.0050		mg/L	1	8/28/2014 5:26:32 PM	14992
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	8/29/2014 1:12:01 PM	15017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Analytical Report

Lab Order: 1408B57

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-002A

Client Sample ID: MW-38
Collection Date: 8/21/2014 11:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Toluene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Ethylbenzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Naphthalene	ND	2.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
2-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Acetone	ND	10		µg/L	1	8/28/2014 2:05:08 PM	R20892
Bromobenzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Bromodichloromethane	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Bromoform	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Bromomethane	ND	3.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
2-Butanone	ND	10		µg/L	1	8/28/2014 2:05:08 PM	R20892
Carbon disulfide	ND	10		µg/L	1	8/28/2014 2:05:08 PM	R20892
Carbon Tetrachloride	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Chlorobenzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Chloroethane	ND	2.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Chloroform	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Chloromethane	ND	3.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
2-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
4-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
cis-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Dibromochloromethane	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Dibromomethane	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,1-Dichloroethane	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,1-Dichloroethene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,2-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,3-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
2,2-Dichloropropane	ND	2.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,1-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Hexachlorobutadiene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-002A

Client Sample ID: MW-38
Collection Date: 8/21/2014 11:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
2-Hexanone	ND	10		µg/L	1	8/28/2014 2:05:08 PM	R20892
Isopropylbenzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
4-Isopropyltoluene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
4-Methyl-2-pentanone	ND	10		µg/L	1	8/28/2014 2:05:08 PM	R20892
Methylene Chloride	ND	3.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
n-Butylbenzene	ND	3.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
n-Propylbenzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
sec-Butylbenzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Styrene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
tert-Butylbenzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
trans-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Trichlorofluoromethane	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Vinyl chloride	ND	1.0		µg/L	1	8/28/2014 2:05:08 PM	R20892
Xylenes, Total	ND	1.5		µg/L	1	8/28/2014 2:05:08 PM	R20892
Surr: 1,2-Dichloroethane-d4	93.8	70-130		%REC	1	8/28/2014 2:05:08 PM	R20892
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	8/28/2014 2:05:08 PM	R20892
Surr: Dibromofluoromethane	91.2	70-130		%REC	1	8/28/2014 2:05:08 PM	R20892
Surr: Toluene-d8	90.3	70-130		%REC	1	8/28/2014 2:05:08 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-38**Project:** Downgradient Wells 8-21-14**Collection Date:** 8/21/2014 11:30:00 AM**Lab ID:** 1408B57-002B**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/22/2014 3:16:48 PM	R20754
Surr: BFB	107	70.9-130		%REC	1	8/22/2014 3:16:48 PM	R20754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-38**Project:** Downgradient Wells 8-21-14**Collection Date:** 8/21/2014 11:30:00 AM**Lab ID:** 1408B57-002C**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	8/25/2014 4:08:25 PM	14896
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/25/2014 4:08:25 PM	14896
Surr: DNOP	124	75.2-161		%REC	1	8/25/2014 4:08:25 PM	14896

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: **1408B57**Date Reported: **9/24/2014**

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-002D

Client Sample ID: MW-38
Collection Date: 8/21/2014 11:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.96	0.10		mg/L	1	8/22/2014 3:50:55 PM	R20765
Chloride	62	10		mg/L	20	8/22/2014 4:03:19 PM	R20765
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/22/2014 3:50:55 PM	R20765
Bromide	0.87	0.10		mg/L	1	8/22/2014 3:50:55 PM	R20765
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/22/2014 3:50:55 PM	R20765
Phosphorus, Orthophosphate (As P _i)	ND	0.50		mg/L	1	8/22/2014 3:50:55 PM	R20765
Sulfate	36	0.50		mg/L	1	8/22/2014 3:50:55 PM	R20765
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	490	1.0	H	mg CO ₂ /L	1	8/25/2014 1:17:33 PM	R20804
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	1100	0.010		µmhos/cm	1	8/25/2014 1:17:33 PM	R20804
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	520	20		mg/L CaCO ₃	1	8/25/2014 1:17:33 PM	R20804
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	8/25/2014 1:17:33 PM	R20804
Total Alkalinity (as CaCO ₃)	520	20		mg/L CaCO ₃	1	8/25/2014 1:17:33 PM	R20804
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	790	100	*	mg/L	1	8/27/2014 4:44:00 PM	14958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-002E

Client Sample ID: MW-38
Collection Date: 8/21/2014 11:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.18	0.0020		mg/L	1	8/27/2014 3:51:27 PM	R20845
Cadmium	ND	0.0020		mg/L	1	8/27/2014 3:51:27 PM	R20845
Calcium	42	1.0		mg/L	1	8/27/2014 3:51:27 PM	R20845
Chromium	ND	0.0060		mg/L	1	8/27/2014 3:51:27 PM	R20845
Copper	ND	0.0060		mg/L	1	8/27/2014 3:51:27 PM	R20845
Iron	0.89	0.020	*	mg/L	1	8/27/2014 3:51:27 PM	R20845
Magnesium	7.3	1.0		mg/L	1	8/27/2014 3:51:27 PM	R20845
Manganese	1.2	0.010	*	mg/L	5	8/27/2014 3:53:07 PM	R20845
Potassium	1.9	1.0		mg/L	1	8/27/2014 3:51:27 PM	R20845
Silver	ND	0.0050		mg/L	1	8/28/2014 5:50:00 PM	R20883
Sodium	240	5.0		mg/L	5	8/27/2014 5:20:44 PM	R20845
Zinc	ND	0.010		mg/L	1	8/27/2014 3:51:27 PM	R20845
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Arsenic	ND	0.0050		mg/L	5	9/3/2014 11:47:16 AM	R20973
Lead	ND	0.0010		mg/L	1	9/2/2014 3:03:39 PM	R20953
Selenium	0.0072	0.0050		mg/L	5	9/3/2014 11:47:16 AM	R20973
Uranium	0.0017	0.0010		mg/L	1	9/2/2014 3:03:39 PM	R20953
EPA METHOD 245.1: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	9/3/2014 9:46:13 AM	15056

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-38**Project:** Downgradient Wells 8-21-14**Collection Date:** 8/21/2014 11:30:00 AM**Lab ID:** 1408B57-002F**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	8/26/2014 5:38:33 PM	14929
Barium	0.28	0.0020		mg/L	1	8/26/2014 5:38:33 PM	14929
Cadmium	ND	0.0020		mg/L	1	8/26/2014 5:38:33 PM	14929
Chromium	ND	0.0060		mg/L	1	8/26/2014 5:38:33 PM	14929
Lead	0.0052	0.0050		mg/L	1	8/26/2014 5:38:33 PM	14929
Selenium	ND	0.050		mg/L	1	8/26/2014 5:38:33 PM	14929
Silver	ND	0.0050		mg/L	1	8/28/2014 5:28:09 PM	14992
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	8/29/2014 1:13:49 PM	15017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-002G

Client Sample ID: MW-38
Collection Date: 8/21/2014 11:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Acenaphthylene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Aniline	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Anthracene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Azobenzene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Benz(a)anthracene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Benzo(a)pyrene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Benzo(b)fluoranthene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Benzo(g,h,i)perylene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Benzo(k)fluoranthene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Benzoic acid	ND	20		µg/L	1	8/25/2014 5:56:14 PM	14928
Benzyl alcohol	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Bis(2-chloroethyl)ether	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
4-Bromophenyl phenyl ether	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Butyl benzyl phthalate	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Carbazole	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
4-Chloro-3-methylphenol	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
4-Chloroaniline	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
2-Chloronaphthalene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
2-Chlorophenol	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Chrysene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Di-n-butyl phthalate	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Di-n-octyl phthalate	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Dibenz(a,h)anthracene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Dibenzofuran	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
1,2-Dichlorobenzene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
1,3-Dichlorobenzene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
1,4-Dichlorobenzene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
3,3'-Dichlorobenzidine	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Diethyl phthalate	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Dimethyl phthalate	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
2,4-Dichlorophenol	ND	20		µg/L	1	8/25/2014 5:56:14 PM	14928
2,4-Dimethylphenol	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	8/25/2014 5:56:14 PM	14928
2,4-Dinitrophenol	ND	20		µg/L	1	8/25/2014 5:56:14 PM	14928
2,4-Dinitrotoluene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
2,6-Dinitrotoluene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-002G

Client Sample ID: MW-38
Collection Date: 8/21/2014 11:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Fluoranthene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Fluorene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Hexachlorobenzene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Hexachlorobutadiene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Hexachlorocyclopentadiene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Hexachloroethane	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Isophorone	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
1-Methylnaphthalene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
2-Methylnaphthalene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
2-Methylphenol	ND	20		µg/L	1	8/25/2014 5:56:14 PM	14928
3+4-Methylphenol	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
N-Nitrosodimethylamine	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
N-Nitrosodiphenylamine	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Naphthalene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
2-Nitroaniline	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
3-Nitroaniline	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
4-Nitroaniline	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Nitrobenzene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
2-Nitrophenol	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
4-Nitrophenol	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Pentachlorophenol	ND	20		µg/L	1	8/25/2014 5:56:14 PM	14928
Phenanthrene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Phenol	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Pyrene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Pyridine	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
1,2,4-Trichlorobenzene	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
2,4,5-Trichlorophenol	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
2,4,6-Trichlorophenol	ND	10		µg/L	1	8/25/2014 5:56:14 PM	14928
Surr: 2-Fluorophenol	71.7	12.1-85.8		%REC	1	8/25/2014 5:56:14 PM	14928
Surr: Phenol-d5	46.1	17.7-65.8		%REC	1	8/25/2014 5:56:14 PM	14928
Surr: 2,4,6-Tribromophenol	63.2	26-138		%REC	1	8/25/2014 5:56:14 PM	14928
Surr: Nitrobenzene-d5	103	47.5-119		%REC	1	8/25/2014 5:56:14 PM	14928
Surr: 2-Fluorobiphenyl	100	48.1-106		%REC	1	8/25/2014 5:56:14 PM	14928
Surr: 4-Terphenyl-d14	82.2	44-113		%REC	1	8/25/2014 5:56:14 PM	14928

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57****Hall Environmental Analysis Laboratory, Inc.**Date Reported: **9/24/2014**

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-003A

Client Sample ID: MW-12
Collection Date: 8/21/2014 9:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Toluene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Ethylbenzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Naphthalene	ND	2.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
2-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Acetone	ND	10		µg/L	1	8/28/2014 2:34:51 PM	R20892
Bromobenzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Bromodichloromethane	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Bromoform	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Bromomethane	ND	3.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
2-Butanone	ND	10		µg/L	1	8/28/2014 2:34:51 PM	R20892
Carbon disulfide	ND	10		µg/L	1	8/28/2014 2:34:51 PM	R20892
Carbon Tetrachloride	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Chlorobenzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Chloroethane	ND	2.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Chloroform	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Chloromethane	ND	3.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
2-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
4-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
cis-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Dibromochloromethane	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Dibromomethane	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,1-Dichloroethane	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,1-Dichloroethene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,2-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,3-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
2,2-Dichloropropane	ND	2.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,1-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Hexachlorobutadiene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57****Hall Environmental Analysis Laboratory, Inc.**Date Reported: **9/24/2014**

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-003A

Client Sample ID: MW-12
Collection Date: 8/21/2014 9:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
2-Hexanone	ND	10		µg/L	1	8/28/2014 2:34:51 PM	R20892
Isopropylbenzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
4-Isopropyltoluene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
4-Methyl-2-pentanone	ND	10		µg/L	1	8/28/2014 2:34:51 PM	R20892
Methylene Chloride	ND	3.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
n-Butylbenzene	ND	3.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
n-Propylbenzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
sec-Butylbenzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Styrene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
tert-Butylbenzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
trans-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Trichlorofluoromethane	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Vinyl chloride	ND	1.0		µg/L	1	8/28/2014 2:34:51 PM	R20892
Xylenes, Total	ND	1.5		µg/L	1	8/28/2014 2:34:51 PM	R20892
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%REC	1	8/28/2014 2:34:51 PM	R20892
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	8/28/2014 2:34:51 PM	R20892
Surr: Dibromofluoromethane	92.6	70-130		%REC	1	8/28/2014 2:34:51 PM	R20892
Surr: Toluene-d8	90.7	70-130		%REC	1	8/28/2014 2:34:51 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-12**Project:** Downgradient Wells 8-21-14**Collection Date:** 8/21/2014 9:30:00 AM**Lab ID:** 1408B57-003B**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/22/2014 3:47:03 PM	R20754
Surr: BFB	101	70.9-130		%REC	1	8/22/2014 3:47:03 PM	R20754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-003C

Client Sample ID: MW-12
Collection Date: 8/21/2014 9:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	0.20		mg/L	1	8/25/2014 4:38:32 PM	14896
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/25/2014 4:38:32 PM	14896
Surr: DNOP	115	75.2-161		%REC	1	8/25/2014 4:38:32 PM	14896

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-003D

Client Sample ID: MW-12
Collection Date: 8/21/2014 9:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.63	0.10		mg/L	1	8/22/2014 4:15:44 PM	R20765
Chloride	4.0	0.50		mg/L	1	8/22/2014 4:15:44 PM	R20765
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/22/2014 4:15:44 PM	R20765
Bromide	ND	0.10		mg/L	1	8/22/2014 4:15:44 PM	R20765
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/22/2014 4:15:44 PM	R20765
Phosphorus, Orthophosphate (As P _i)	ND	0.50		mg/L	1	8/22/2014 4:15:44 PM	R20765
Sulfate	120	10		mg/L	20	8/22/2014 4:28:08 PM	R20765
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	130	1.0	H	mg CO ₂ /L	1	8/25/2014 1:38:31 PM	R20804
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	530	0.010		µmhos/cm	1	8/25/2014 1:38:31 PM	R20804
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	140	20		mg/L CaCO ₃	1	8/25/2014 1:38:31 PM	R20804
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	8/25/2014 1:38:31 PM	R20804
Total Alkalinity (as CaCO ₃)	140	20		mg/L CaCO ₃	1	8/25/2014 1:38:31 PM	R20804
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	380	100		mg/L	1	8/27/2014 4:44:00 PM	14958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-003E

Client Sample ID: MW-12
Collection Date: 8/21/2014 9:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.062	0.0020		mg/L	1	8/27/2014 4:12:31 PM	R20845
Cadmium	ND	0.0020		mg/L	1	8/27/2014 4:12:31 PM	R20845
Calcium	66	1.0		mg/L	1	8/27/2014 4:12:31 PM	R20845
Chromium	ND	0.0060		mg/L	1	8/27/2014 4:12:31 PM	R20845
Copper	ND	0.0060		mg/L	1	8/27/2014 4:12:31 PM	R20845
Iron	0.046	0.020		mg/L	1	8/27/2014 4:12:31 PM	R20845
Magnesium	9.3	1.0		mg/L	1	8/27/2014 4:12:31 PM	R20845
Manganese	0.25	0.0020	*	mg/L	1	8/27/2014 4:12:31 PM	R20845
Potassium	1.1	1.0		mg/L	1	8/27/2014 4:12:31 PM	R20845
Silver	ND	0.0050		mg/L	1	8/28/2014 5:51:33 PM	R20883
Sodium	40	1.0		mg/L	1	8/27/2014 5:22:33 PM	R20845
Zinc	ND	0.010		mg/L	1	8/27/2014 4:12:31 PM	R20845
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Arsenic	0.0012	0.0010		mg/L	1	9/2/2014 3:25:38 PM	R20953
Lead	ND	0.0010		mg/L	1	9/2/2014 3:25:38 PM	R20953
Selenium	ND	0.0010		mg/L	1	9/2/2014 3:25:38 PM	R20953
Uranium	ND	0.0010		mg/L	1	9/2/2014 3:25:38 PM	R20953
EPA METHOD 245.1: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	9/3/2014 9:47:57 AM	15056

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-12**Project:** Downgradient Wells 8-21-14**Collection Date:** 8/21/2014 9:30:00 AM**Lab ID:** 1408B57-003F**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	8/26/2014 5:40:11 PM	14929
Barium	0.19	0.0020		mg/L	1	8/26/2014 5:40:11 PM	14929
Cadmium	ND	0.0020		mg/L	1	8/26/2014 5:40:11 PM	14929
Chromium	0.82	0.0060	*	mg/L	1	8/26/2014 5:40:11 PM	14929
Lead	0.0096	0.0050		mg/L	1	8/26/2014 5:40:11 PM	14929
Selenium	ND	0.050		mg/L	1	8/26/2014 5:40:11 PM	14929
Silver	ND	0.0050		mg/L	1	8/28/2014 5:37:45 PM	14992
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	8/29/2014 1:19:23 PM	15017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-003G

Client Sample ID: MW-12
Collection Date: 8/21/2014 9:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Acenaphthylene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Aniline	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Anthracene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Azobenzene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Benz(a)anthracene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Benzo(a)pyrene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Benzo(b)fluoranthene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Benzo(g,h,i)perylene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Benzo(k)fluoranthene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Benzoic acid	ND	20		µg/L	1	8/25/2014 6:25:21 PM	14928
Benzyl alcohol	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Bis(2-chloroethyl)ether	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
4-Bromophenyl phenyl ether	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Butyl benzyl phthalate	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Carbazole	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
4-Chloro-3-methylphenol	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
4-Chloroaniline	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
2-Chloronaphthalene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
2-Chlorophenol	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Chrysene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Di-n-butyl phthalate	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Di-n-octyl phthalate	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Dibenz(a,h)anthracene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Dibenzofuran	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
1,2-Dichlorobenzene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
1,3-Dichlorobenzene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
1,4-Dichlorobenzene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
3,3'-Dichlorobenzidine	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Diethyl phthalate	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Dimethyl phthalate	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
2,4-Dichlorophenol	ND	20		µg/L	1	8/25/2014 6:25:21 PM	14928
2,4-Dimethylphenol	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	8/25/2014 6:25:21 PM	14928
2,4-Dinitrophenol	ND	20		µg/L	1	8/25/2014 6:25:21 PM	14928
2,4-Dinitrotoluene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
2,6-Dinitrotoluene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-003G

Client Sample ID: MW-12
Collection Date: 8/21/2014 9:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Fluoranthene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Fluorene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Hexachlorobenzene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Hexachlorobutadiene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Hexachlorocyclopentadiene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Hexachloroethane	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Isophorone	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
1-Methylnaphthalene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
2-Methylnaphthalene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
2-Methylphenol	ND	20		µg/L	1	8/25/2014 6:25:21 PM	14928
3+4-Methylphenol	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
N-Nitrosodimethylamine	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
N-Nitrosodiphenylamine	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Naphthalene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
2-Nitroaniline	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
3-Nitroaniline	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
4-Nitroaniline	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Nitrobenzene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
2-Nitrophenol	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
4-Nitrophenol	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Pentachlorophenol	ND	20		µg/L	1	8/25/2014 6:25:21 PM	14928
Phenanthrene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Phenol	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Pyrene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Pyridine	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
1,2,4-Trichlorobenzene	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
2,4,5-Trichlorophenol	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
2,4,6-Trichlorophenol	ND	10		µg/L	1	8/25/2014 6:25:21 PM	14928
Surr: 2-Fluorophenol	73.3	12.1-85.8		%REC	1	8/25/2014 6:25:21 PM	14928
Surr: Phenol-d5	51.1	17.7-65.8		%REC	1	8/25/2014 6:25:21 PM	14928
Surr: 2,4,6-Tribromophenol	76.4	26-138		%REC	1	8/25/2014 6:25:21 PM	14928
Surr: Nitrobenzene-d5	110	47.5-119		%REC	1	8/25/2014 6:25:21 PM	14928
Surr: 2-Fluorobiphenyl	107	48.1-106	S	%REC	1	8/25/2014 6:25:21 PM	14928
Surr: 4-Terphenyl-d14	105	44-113		%REC	1	8/25/2014 6:25:21 PM	14928

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-004A

Client Sample ID: MW-11
Collection Date: 8/21/2014 9:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Toluene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Ethylbenzene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,2,4-Trimethylbenzene	230	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Naphthalene	59	10		µg/L	5	8/28/2014 3:04:32 PM	R20892
1-Methylnaphthalene	ND	20		µg/L	5	8/28/2014 3:04:32 PM	R20892
2-Methylnaphthalene	ND	20		µg/L	5	8/28/2014 3:04:32 PM	R20892
Acetone	ND	50		µg/L	5	8/28/2014 3:04:32 PM	R20892
Bromobenzene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Bromodichloromethane	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Bromoform	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Bromomethane	ND	15		µg/L	5	8/28/2014 3:04:32 PM	R20892
2-Butanone	ND	50		µg/L	5	8/28/2014 3:04:32 PM	R20892
Carbon disulfide	ND	50		µg/L	5	8/28/2014 3:04:32 PM	R20892
Carbon Tetrachloride	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Chlorobenzene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Chloroethane	ND	10		µg/L	5	8/28/2014 3:04:32 PM	R20892
Chloroform	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Chloromethane	ND	15		µg/L	5	8/28/2014 3:04:32 PM	R20892
2-Chlorotoluene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
4-Chlorotoluene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
cis-1,2-DCE	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	8/28/2014 3:04:32 PM	R20892
Dibromochloromethane	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Dibromomethane	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,2-Dichlorobenzene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,3-Dichlorobenzene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,4-Dichlorobenzene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Dichlorodifluoromethane	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,1-Dichloroethane	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,1-Dichloroethene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,2-Dichloropropane	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,3-Dichloropropane	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
2,2-Dichloropropane	ND	10		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,1-Dichloropropene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Hexachlorobutadiene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-004A

Client Sample ID: MW-11
Collection Date: 8/21/2014 9:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
2-Hexanone	ND	50		µg/L	5	8/28/2014 3:04:32 PM	R20892
Isopropylbenzene	48	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
4-Isopropyltoluene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
4-Methyl-2-pentanone	ND	50		µg/L	5	8/28/2014 3:04:32 PM	R20892
Methylene Chloride	ND	15		µg/L	5	8/28/2014 3:04:32 PM	R20892
n-Butylbenzene	ND	15		µg/L	5	8/28/2014 3:04:32 PM	R20892
n-Propylbenzene	62	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
sec-Butylbenzene	12	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Styrene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
tert-Butylbenzene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	8/28/2014 3:04:32 PM	R20892
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
trans-1,2-DCE	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,1,1-Trichloroethane	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,1,2-Trichloroethane	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Trichloroethene (TCE)	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Trichlorofluoromethane	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
1,2,3-Trichloropropane	ND	10		µg/L	5	8/28/2014 3:04:32 PM	R20892
Vinyl chloride	ND	5.0		µg/L	5	8/28/2014 3:04:32 PM	R20892
Xylenes, Total	ND	7.5		µg/L	5	8/28/2014 3:04:32 PM	R20892
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%REC	5	8/28/2014 3:04:32 PM	R20892
Surr: 4-Bromofluorobenzene	105	70-130		%REC	5	8/28/2014 3:04:32 PM	R20892
Surr: Dibromofluoromethane	92.8	70-130		%REC	5	8/28/2014 3:04:32 PM	R20892
Surr: Toluene-d8	89.4	70-130		%REC	5	8/28/2014 3:04:32 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-11**Project:** Downgradient Wells 8-21-14**Collection Date:** 8/21/2014 9:00:00 AM**Lab ID:** 1408B57-004B**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	2.3	0.25		mg/L	5	8/22/2014 4:17:16 PM	R20754
Surr: BFB	214	70.9-130	S	%REC	5	8/22/2014 4:17:16 PM	R20754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-004C

Client Sample ID: MW-11
Collection Date: 8/21/2014 9:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	1.6	0.20		mg/L	1	8/25/2014 5:08:43 PM	14896
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/25/2014 5:08:43 PM	14896
Surr: DNOP	116	75.2-161		%REC	1	8/25/2014 5:08:43 PM	14896

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-004D

Client Sample ID: MW-11
Collection Date: 8/21/2014 9:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.62	0.50		mg/L	5	8/22/2014 4:40:33 PM	R20765
Chloride	96	10		mg/L	20	8/22/2014 4:52:58 PM	R20765
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	8/22/2014 4:40:33 PM	R20765
Bromide	1.4	0.50		mg/L	5	8/22/2014 4:40:33 PM	R20765
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	8/22/2014 4:40:33 PM	R20765
Phosphorus, Orthophosphate (As P _i)	ND	2.5		mg/L	5	8/22/2014 4:40:33 PM	R20765
Sulfate	6.3	2.5		mg/L	5	8/22/2014 4:40:33 PM	R20765
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	1100	1.0	H	mg CO ₂ /L	1	8/25/2014 1:48:12 PM	R20804
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	1900	0.010		µmhos/cm	1	8/25/2014 1:48:12 PM	R20804
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	1000	20		mg/L CaCO ₃	1	8/25/2014 1:48:12 PM	R20804
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	8/25/2014 1:48:12 PM	R20804
Total Alkalinity (as CaCO ₃)	1000	20		mg/L CaCO ₃	1	8/25/2014 1:48:12 PM	R20804
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1380	100	*	mg/L	1	8/27/2014 4:44:00 PM	14958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-004E

Client Sample ID: MW-11
Collection Date: 8/21/2014 9:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.64	0.0020		mg/L	1	8/27/2014 4:16:04 PM	R20845
Cadmium	ND	0.0020		mg/L	1	8/27/2014 4:16:04 PM	R20845
Calcium	73	1.0		mg/L	1	8/27/2014 4:16:04 PM	R20845
Chromium	ND	0.0060		mg/L	1	8/27/2014 4:16:04 PM	R20845
Copper	ND	0.0060		mg/L	1	8/27/2014 4:16:04 PM	R20845
Iron	8.0	0.40	*	mg/L	20	8/27/2014 5:34:41 PM	R20845
Magnesium	17	1.0		mg/L	1	8/27/2014 4:16:04 PM	R20845
Manganese	1.2	0.010	*	mg/L	5	8/27/2014 4:17:46 PM	R20845
Potassium	2.4	1.0		mg/L	1	8/27/2014 4:16:04 PM	R20845
Silver	ND	0.0050		mg/L	1	8/28/2014 6:01:29 PM	R20883
Sodium	380	5.0		mg/L	5	8/28/2014 6:03:04 PM	R20883
Zinc	ND	0.010		mg/L	1	8/27/2014 4:16:04 PM	R20845
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Arsenic	ND	0.0050		mg/L	5	9/3/2014 11:50:18 AM	R20973
Lead	0.0019	0.0010		mg/L	1	9/2/2014 3:30:59 PM	R20953
Selenium	0.0090	0.0050		mg/L	5	9/3/2014 11:50:18 AM	R20973
Uranium	ND	0.0010		mg/L	1	9/2/2014 3:30:59 PM	R20953
EPA METHOD 245.1: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	9/3/2014 9:49:42 AM	15056

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-004F

Client Sample ID: MW-11
Collection Date: 8/21/2014 9:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	8/26/2014 5:41:43 PM	14929
Barium	0.74	0.0020		mg/L	1	8/26/2014 5:41:43 PM	14929
Cadmium	ND	0.0020		mg/L	1	8/26/2014 5:41:43 PM	14929
Chromium	ND	0.0060		mg/L	1	8/26/2014 5:41:43 PM	14929
Lead	0.019	0.0050	*	mg/L	1	8/26/2014 5:41:43 PM	14929
Selenium	ND	0.050		mg/L	1	8/26/2014 5:41:43 PM	14929
Silver	ND	0.0050		mg/L	1	8/28/2014 5:39:32 PM	14992
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	8/29/2014 1:21:12 PM	15017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-004G

Client Sample ID: MW-11
Collection Date: 8/21/2014 9:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Acenaphthylene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Aniline	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Anthracene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Azobenzene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Benz(a)anthracene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Benzo(a)pyrene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Benzo(b)fluoranthene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Benzo(g,h,i)perylene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Benzo(k)fluoranthene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Benzoic acid	ND	20		µg/L	1	8/25/2014 6:54:26 PM	14928
Benzyl alcohol	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Bis(2-chloroethyl)ether	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
4-Bromophenyl phenyl ether	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Butyl benzyl phthalate	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Carbazole	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
4-Chloro-3-methylphenol	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
4-Chloroaniline	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
2-Chloronaphthalene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
2-Chlorophenol	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Chrysene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Di-n-butyl phthalate	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Di-n-octyl phthalate	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Dibenz(a,h)anthracene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Dibenzofuran	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
1,2-Dichlorobenzene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
1,3-Dichlorobenzene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
1,4-Dichlorobenzene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
3,3'-Dichlorobenzidine	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Diethyl phthalate	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Dimethyl phthalate	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
2,4-Dichlorophenol	ND	20		µg/L	1	8/25/2014 6:54:26 PM	14928
2,4-Dimethylphenol	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	8/25/2014 6:54:26 PM	14928
2,4-Dinitrophenol	ND	20		µg/L	1	8/25/2014 6:54:26 PM	14928
2,4-Dinitrotoluene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
2,6-Dinitrotoluene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-004G

Client Sample ID: MW-11
Collection Date: 8/21/2014 9:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Fluoranthene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Fluorene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Hexachlorobenzene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Hexachlorobutadiene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Hexachlorocyclopentadiene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Hexachloroethane	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Isophorone	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
1-Methylnaphthalene	16	10		µg/L	1	8/25/2014 6:54:26 PM	14928
2-Methylnaphthalene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
2-Methylphenol	ND	20		µg/L	1	8/25/2014 6:54:26 PM	14928
3+4-Methylphenol	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
N-Nitrosodimethylamine	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
N-Nitrosodiphenylamine	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Naphthalene	23	10		µg/L	1	8/25/2014 6:54:26 PM	14928
2-Nitroaniline	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
3-Nitroaniline	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
4-Nitroaniline	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Nitrobenzene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
2-Nitrophenol	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
4-Nitrophenol	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Pentachlorophenol	ND	20		µg/L	1	8/25/2014 6:54:26 PM	14928
Phenanthrene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Phenol	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Pyrene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Pyridine	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
1,2,4-Trichlorobenzene	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
2,4,5-Trichlorophenol	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
2,4,6-Trichlorophenol	ND	10		µg/L	1	8/25/2014 6:54:26 PM	14928
Surr: 2-Fluorophenol	67.2	12.1-85.8		%REC	1	8/25/2014 6:54:26 PM	14928
Surr: Phenol-d5	49.1	17.7-65.8		%REC	1	8/25/2014 6:54:26 PM	14928
Surr: 2,4,6-Tribromophenol	96.0	26-138		%REC	1	8/25/2014 6:54:26 PM	14928
Surr: Nitrobenzene-d5	95.9	47.5-119		%REC	1	8/25/2014 6:54:26 PM	14928
Surr: 2-Fluorobiphenyl	90.3	48.1-106		%REC	1	8/25/2014 6:54:26 PM	14928
Surr: 4-Terphenyl-d14	84.0	44-113		%REC	1	8/25/2014 6:54:26 PM	14928

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-005A

Client Sample ID: Rinsate
Collection Date: 8/21/2014 1:15:00 PM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	8/28/2014 3:34:13 PM	R20892
Toluene	ND	1.0		µg/L	1	8/28/2014 3:34:13 PM	R20892
Ethylbenzene	ND	1.0		µg/L	1	8/28/2014 3:34:13 PM	R20892
Xylenes, Total	ND	1.5		µg/L	1	8/28/2014 3:34:13 PM	R20892
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	8/28/2014 3:34:13 PM	R20892
Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	1	8/28/2014 3:34:13 PM	R20892
Surr: Dibromofluoromethane	100	70-130		%REC	1	8/28/2014 3:34:13 PM	R20892
Surr: Toluene-d8	91.9	70-130		%REC	1	8/28/2014 3:34:13 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical Report

Lab Order: 1408B57

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-006A

Client Sample ID: MW-34
Collection Date: 8/21/2014 10:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Toluene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Ethylbenzene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,2,4-Trimethylbenzene	51	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Naphthalene	4.2	2.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
2-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Acetone	ND	10		µg/L	1	8/28/2014 4:03:54 PM	R20892
Bromobenzene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Bromodichloromethane	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Bromoform	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Bromomethane	ND	3.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
2-Butanone	ND	10		µg/L	1	8/28/2014 4:03:54 PM	R20892
Carbon disulfide	ND	10		µg/L	1	8/28/2014 4:03:54 PM	R20892
Carbon Tetrachloride	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Chlorobenzene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Chloroethane	ND	2.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Chloroform	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Chloromethane	ND	3.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
2-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
4-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
cis-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Dibromochloromethane	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Dibromomethane	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,1-Dichloroethane	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,1-Dichloroethene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,2-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,3-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
2,2-Dichloropropane	ND	2.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,1-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Hexachlorobutadiene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57****Hall Environmental Analysis Laboratory, Inc.**Date Reported: **9/24/2014**

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-006A

Client Sample ID: MW-34
Collection Date: 8/21/2014 10:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
2-Hexanone	ND	10		µg/L	1	8/28/2014 4:03:54 PM	R20892
Isopropylbenzene	13	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
4-Isopropyltoluene	3.1	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
4-Methyl-2-pentanone	ND	10		µg/L	1	8/28/2014 4:03:54 PM	R20892
Methylene Chloride	ND	3.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
n-Butylbenzene	ND	3.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
n-Propylbenzene	10	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
sec-Butylbenzene	6.7	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Styrene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
tert-Butylbenzene	2.5	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
trans-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Trichlorofluoromethane	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Vinyl chloride	ND	1.0		µg/L	1	8/28/2014 4:03:54 PM	R20892
Xylenes, Total	ND	1.5		µg/L	1	8/28/2014 4:03:54 PM	R20892
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	8/28/2014 4:03:54 PM	R20892
Surr: 4-Bromofluorobenzene	125	70-130		%REC	1	8/28/2014 4:03:54 PM	R20892
Surr: Dibromofluoromethane	100	70-130		%REC	1	8/28/2014 4:03:54 PM	R20892
Surr: Toluene-d8	83.9	70-130		%REC	1	8/28/2014 4:03:54 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-34**Project:** Downgradient Wells 8-21-14**Collection Date:** 8/21/2014 10:00:00 AM**Lab ID:** 1408B57-006B**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	2.0	0.050		mg/L	1	8/22/2014 5:47:39 PM	R20754
Surr: BFB	378	70.9-130	S	%REC	1	8/22/2014 5:47:39 PM	R20754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-006C

Client Sample ID: MW-34
Collection Date: 8/21/2014 10:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	2.2	0.20		mg/L	1	8/25/2014 5:38:43 PM	14896
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/25/2014 5:38:43 PM	14896
Surr: DNOP	112	75.2-161		%REC	1	8/25/2014 5:38:43 PM	14896

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-006D

Client Sample ID: MW-34
Collection Date: 8/21/2014 10:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.70	0.50		mg/L	5	8/22/2014 5:05:22 PM	R20765
Chloride	180	10		mg/L	20	8/22/2014 5:17:46 PM	R20765
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	8/22/2014 5:05:22 PM	R20765
Bromide	2.3	0.50		mg/L	5	8/22/2014 5:05:22 PM	R20765
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	8/22/2014 5:05:22 PM	R20765
Phosphorus, Orthophosphate (As P _i)	ND	2.5		mg/L	5	8/22/2014 5:05:22 PM	R20765
Sulfate	14	2.5		mg/L	5	8/22/2014 5:05:22 PM	R20765
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	870	1.0	H	mg CO ₂ /L	1	8/25/2014 2:23:26 PM	R20804
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	1900	0.010		µmhos/cm	1	8/25/2014 2:23:26 PM	R20804
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	900	20		mg/L CaCO ₃	1	8/25/2014 2:23:26 PM	R20804
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	8/25/2014 2:23:26 PM	R20804
Total Alkalinity (as CaCO ₃)	900	20		mg/L CaCO ₃	1	8/25/2014 2:23:26 PM	R20804
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1380	100	*	mg/L	1	8/27/2014 4:44:00 PM	14958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-006E

Client Sample ID: MW-34
Collection Date: 8/21/2014 10:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.50	0.0020		mg/L	1	8/27/2014 4:19:24 PM	R20845
Cadmium	ND	0.0020		mg/L	1	8/27/2014 4:19:24 PM	R20845
Calcium	110	5.0		mg/L	5	8/27/2014 4:21:10 PM	R20845
Chromium	ND	0.0060		mg/L	1	8/27/2014 4:19:24 PM	R20845
Copper	ND	0.0060		mg/L	1	8/27/2014 4:19:24 PM	R20845
Iron	1.5	0.10	*	mg/L	5	8/27/2014 4:21:10 PM	R20845
Magnesium	21	1.0		mg/L	1	8/27/2014 4:19:24 PM	R20845
Manganese	2.9	0.010	*	mg/L	5	8/27/2014 4:21:10 PM	R20845
Potassium	2.8	1.0		mg/L	1	8/27/2014 4:19:24 PM	R20845
Silver	ND	0.0050		mg/L	1	8/28/2014 6:04:45 PM	R20883
Sodium	420	5.0		mg/L	5	8/28/2014 6:06:20 PM	R20883
Zinc	ND	0.010		mg/L	1	8/27/2014 4:19:24 PM	R20845
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Arsenic	ND	0.010		mg/L	10	9/3/2014 11:53:19 AM	R20973
Lead	ND	0.0010		mg/L	1	9/2/2014 3:36:20 PM	R20953
Selenium	ND	0.010		mg/L	10	9/3/2014 11:53:19 AM	R20973
Uranium	ND	0.0010		mg/L	1	9/2/2014 3:36:20 PM	R20953
EPA METHOD 245.1: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	9/3/2014 9:51:27 AM	15056

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-006F

Client Sample ID: MW-34
Collection Date: 8/21/2014 10:00:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	8/26/2014 5:45:28 PM	14929
Barium	0.39	0.0020		mg/L	1	8/26/2014 5:45:28 PM	14929
Cadmium	ND	0.0020		mg/L	1	8/26/2014 5:45:28 PM	14929
Chromium	ND	0.0060		mg/L	1	8/26/2014 5:45:28 PM	14929
Lead	0.0076	0.0050		mg/L	1	8/26/2014 5:45:28 PM	14929
Selenium	ND	0.050		mg/L	1	8/26/2014 5:45:28 PM	14929
Silver	ND	0.0050		mg/L	1	8/28/2014 5:41:12 PM	14992
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	8/29/2014 1:23:02 PM	15017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-007A

Client Sample ID: MW-35
Collection Date: 8/21/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Toluene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Ethylbenzene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,2,4-Trimethylbenzene	51	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Naphthalene	ND	2.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
2-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Acetone	ND	10		µg/L	1	8/28/2014 4:33:34 PM	R20892
Bromobenzene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Bromodichloromethane	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Bromoform	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Bromomethane	ND	3.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
2-Butanone	ND	10		µg/L	1	8/28/2014 4:33:34 PM	R20892
Carbon disulfide	ND	10		µg/L	1	8/28/2014 4:33:34 PM	R20892
Carbon Tetrachloride	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Chlorobenzene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Chloroethane	ND	2.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Chloroform	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Chloromethane	ND	3.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
2-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
4-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
cis-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Dibromochloromethane	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Dibromomethane	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,1-Dichloroethane	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,1-Dichloroethene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,2-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,3-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
2,2-Dichloropropane	ND	2.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,1-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Hexachlorobutadiene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57****Hall Environmental Analysis Laboratory, Inc.**Date Reported: **9/24/2014**

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-007A

Client Sample ID: MW-35
Collection Date: 8/21/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
2-Hexanone	ND	10		µg/L	1	8/28/2014 4:33:34 PM	R20892
Isopropylbenzene	5.9	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
4-Isopropyltoluene	2.3	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
4-Methyl-2-pentanone	ND	10		µg/L	1	8/28/2014 4:33:34 PM	R20892
Methylene Chloride	ND	3.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
n-Butylbenzene	ND	3.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
n-Propylbenzene	5.8	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
sec-Butylbenzene	3.7	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Styrene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
tert-Butylbenzene	2.2	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
trans-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Trichlorofluoromethane	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Vinyl chloride	ND	1.0		µg/L	1	8/28/2014 4:33:34 PM	R20892
Xylenes, Total	ND	1.5		µg/L	1	8/28/2014 4:33:34 PM	R20892
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	8/28/2014 4:33:34 PM	R20892
Surr: 4-Bromofluorobenzene	111	70-130		%REC	1	8/28/2014 4:33:34 PM	R20892
Surr: Dibromofluoromethane	99.2	70-130		%REC	1	8/28/2014 4:33:34 PM	R20892
Surr: Toluene-d8	85.5	70-130		%REC	1	8/28/2014 4:33:34 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-35**Project:** Downgradient Wells 8-21-14**Collection Date:** 8/21/2014 10:30:00 AM**Lab ID:** 1408B57-007B**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	1.0	0.050		mg/L	1	8/22/2014 6:47:59 PM	R20754
Surr: BFB	230	70.9-130	S	%REC	1	8/22/2014 6:47:59 PM	R20754

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Western Refining Southwest, Inc.**Client Sample ID:** MW-35**Project:** Downgradient Wells 8-21-14**Collection Date:** 8/21/2014 10:30:00 AM**Lab ID:** 1408B57-007C**Matrix:** Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	1.5	0.20		mg/L	1	8/25/2014 6:08:46 PM	14896
Motor Oil Range Organics (MRO)	ND	2.5		mg/L	1	8/25/2014 6:08:46 PM	14896
Surr: DNOP	122	75.2-161		%REC	1	8/25/2014 6:08:46 PM	14896

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: **1408B57**Date Reported: **9/24/2014**

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-007D

Client Sample ID: MW-35
Collection Date: 8/21/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGP
Fluoride	0.76	0.50		mg/L	5	8/22/2014 5:30:11 PM	R20765
Chloride	130	10		mg/L	20	8/22/2014 5:42:36 PM	R20765
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	8/22/2014 5:30:11 PM	R20765
Bromide	1.7	0.50		mg/L	5	8/22/2014 5:30:11 PM	R20765
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	8/22/2014 5:30:11 PM	R20765
Phosphorus, Orthophosphate (As P _i)	ND	2.5		mg/L	5	8/22/2014 5:30:11 PM	R20765
Sulfate	7.4	2.5		mg/L	5	8/22/2014 5:30:11 PM	R20765
CARBON DIOXIDE							Analyst: JRR
Total Carbon Dioxide	900	1.0	H	mg CO ₂ /L	1	8/25/2014 2:55:12 PM	R20804
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	1800	0.010		µmhos/cm	1	8/25/2014 2:55:12 PM	R20804
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO ₃)	950	20		mg/L CaCO ₃	1	8/25/2014 2:55:12 PM	R20804
Carbonate (As CaCO ₃)	ND	2.0		mg/L CaCO ₃	1	8/25/2014 2:55:12 PM	R20804
Total Alkalinity (as CaCO ₃)	950	20		mg/L CaCO ₃	1	8/25/2014 2:55:12 PM	R20804
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1340	100	*	mg/L	1	8/27/2014 4:44:00 PM	14958

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-007E

Client Sample ID: MW-35
Collection Date: 8/21/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS				Analyst: JLF			
Barium	0.67	0.0020		mg/L	1	8/27/2014 4:23:00 PM	R20845
Cadmium	ND	0.0020		mg/L	1	8/27/2014 4:23:00 PM	R20845
Calcium	83	1.0		mg/L	1	8/27/2014 4:23:00 PM	R20845
Chromium	ND	0.0060		mg/L	1	8/27/2014 4:23:00 PM	R20845
Copper	ND	0.0060		mg/L	1	8/27/2014 4:23:00 PM	R20845
Iron	3.5	0.10	*	mg/L	5	8/27/2014 4:24:43 PM	R20845
Magnesium	16	1.0		mg/L	1	8/27/2014 4:23:00 PM	R20845
Manganese	2.1	0.010	*	mg/L	5	8/27/2014 4:24:43 PM	R20845
Potassium	3.5	1.0		mg/L	1	8/27/2014 4:23:00 PM	R20845
Silver	ND	0.0050		mg/L	1	8/28/2014 6:08:13 PM	R20883
Sodium	380	5.0		mg/L	5	8/28/2014 6:09:49 PM	R20883
Zinc	ND	0.010		mg/L	1	8/27/2014 4:23:00 PM	R20845
EPA 200.8: DISSOLVED METALS				Analyst: DBD			
Arsenic	0.013	0.010	*	mg/L	10	9/3/2014 11:56:21 AM	R20973
Lead	ND	0.0010		mg/L	1	9/2/2014 3:41:40 PM	R20953
Selenium	0.015	0.010		mg/L	10	9/3/2014 11:56:21 AM	R20973
Uranium	ND	0.0010		mg/L	1	9/2/2014 3:41:40 PM	R20953
EPA METHOD 245.1: MERCURY				Analyst: MMD			
Mercury	ND	0.00020		mg/L	1	9/3/2014 9:57:00 AM	15056

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-007F

Client Sample ID: MW-35
Collection Date: 8/21/2014 10:30:00 AM
Matrix: Aqueous

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: JLF
Arsenic	ND	0.020		mg/L	1	8/26/2014 5:47:02 PM	14929
Barium	0.75	0.0020		mg/L	1	8/26/2014 5:47:02 PM	14929
Cadmium	ND	0.0020		mg/L	1	8/26/2014 5:47:02 PM	14929
Chromium	ND	0.0060		mg/L	1	8/26/2014 5:47:02 PM	14929
Lead	0.0054	0.0050		mg/L	1	8/26/2014 5:47:02 PM	14929
Selenium	ND	0.050		mg/L	1	8/26/2014 5:47:02 PM	14929
Silver	ND	0.0050		mg/L	1	8/28/2014 5:42:47 PM	14992
EPA METHOD 245.1: MERCURY							Analyst: MMD
Mercury	ND	0.00020		mg/L	1	8/29/2014 1:24:52 PM	15017

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1408B57

Date Reported: 9/24/2014

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-008A

Client Sample ID: Trip Blank
Collection Date:
Matrix: Trip Blank

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Toluene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Ethylbenzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Naphthalene	ND	2.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
2-Methylnaphthalene	ND	4.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Acetone	ND	10		µg/L	1	8/28/2014 5:03:11 PM	R20892
Bromobenzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Bromodichloromethane	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Bromoform	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Bromomethane	ND	3.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
2-Butanone	ND	10		µg/L	1	8/28/2014 5:03:11 PM	R20892
Carbon disulfide	ND	10		µg/L	1	8/28/2014 5:03:11 PM	R20892
Carbon Tetrachloride	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Chlorobenzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Chloroethane	ND	2.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Chloroform	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Chloromethane	ND	3.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
2-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
4-Chlorotoluene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
cis-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Dibromochloromethane	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Dibromomethane	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,1-Dichloroethane	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,1-Dichloroethene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,2-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,3-Dichloropropane	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
2,2-Dichloropropane	ND	2.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,1-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Hexachlorobutadiene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Analytical ReportLab Order: **1408B57**Date Reported: **9/24/2014****Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Western Refining Southwest, Inc.
Project: Downgradient Wells 8-21-14
Lab ID: 1408B57-008A

Client Sample ID: Trip Blank
Collection Date:
Matrix: Trip Blank

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: cadg
2-Hexanone	ND	10		µg/L	1	8/28/2014 5:03:11 PM	R20892
Isopropylbenzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
4-Isopropyltoluene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
4-Methyl-2-pentanone	ND	10		µg/L	1	8/28/2014 5:03:11 PM	R20892
Methylene Chloride	ND	3.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
n-Butylbenzene	ND	3.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
n-Propylbenzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
sec-Butylbenzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Styrene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
tert-Butylbenzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
trans-1,2-DCE	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Trichlorofluoromethane	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Vinyl chloride	ND	1.0		µg/L	1	8/28/2014 5:03:11 PM	R20892
Xylenes, Total	ND	1.5		µg/L	1	8/28/2014 5:03:11 PM	R20892
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%REC	1	8/28/2014 5:03:11 PM	R20892
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	8/28/2014 5:03:11 PM	R20892
Surr: Dibromofluoromethane	94.5	70-130		%REC	1	8/28/2014 5:03:11 PM	R20892
Surr: Toluene-d8	89.7	70-130		%REC	1	8/28/2014 5:03:11 PM	R20892

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	MB-14929		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	14929		RunNo:	20802			
Prep Date:	8/25/2014		Analysis Date:	8/26/2014		SeqNo:	605254		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								

Sample ID	LCS-14929		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	14929		RunNo:	20802			
Prep Date:	8/25/2014		Analysis Date:	8/26/2014		SeqNo:	605255		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.52	0.020	0.5000	0	104	85	115			
Barium	0.52	0.0020	0.5000	0	103	85	115			
Cadmium	0.52	0.0020	0.5000	0	104	85	115			
Chromium	0.51	0.0060	0.5000	0	102	85	115			

Sample ID	MB-14929		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	14929		RunNo:	20816			
Prep Date:	8/25/2014		Analysis Date:	8/26/2014		SeqNo:	605686		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0050								
Selenium	ND	0.050								

Sample ID	LCS-14929		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	14929		RunNo:	20816			
Prep Date:	8/25/2014		Analysis Date:	8/26/2014		SeqNo:	605687		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.51	0.0050	0.5000	0	101	85	115			
Selenium	0.52	0.050	0.5000	0	105	85	115			

Sample ID	MB		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	R20845		RunNo:	20845			
Prep Date:			Analysis Date:	8/27/2014		SeqNo:	606768		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	MB		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	R20845		RunNo:	20845			
Prep Date:			Analysis Date:	8/27/2014		SeqNo:	606768		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID	LCS		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	R20845		RunNo:	20845			
Prep Date:			Analysis Date:	8/27/2014		SeqNo:	606769		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	95.4	85	115			
Cadmium	0.48	0.0020	0.5000	0	96.1	85	115			
Calcium	50	1.0	50.00	0	99.6	85	115			
Chromium	0.50	0.0060	0.5000	0	99.6	85	115			
Copper	0.47	0.0060	0.5000	0	94.3	85	115			
Iron	0.51	0.020	0.5000	0	103	85	115			
Magnesium	50	1.0	50.00	0	100	85	115			
Manganese	0.49	0.0020	0.5000	0	97.9	85	115			
Potassium	49	1.0	50.00	0	98.0	85	115			
Sodium	49	1.0	50.00	0	98.3	85	115			
Zinc	0.48	0.010	0.5000	0	95.2	85	115			

Sample ID	MB-14992		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	14992		RunNo:	20883			
Prep Date:	8/27/2014		Analysis Date:	8/28/2014		SeqNo:	607541		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.0050								

Sample ID	LCS-14992		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	14992		RunNo:	20883			
Prep Date:	8/27/2014		Analysis Date:	8/28/2014		SeqNo:	607542		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.49	0.0050	0.5000	0	97.1	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R20845	RunNo:	20845					
Prep Date:		Analysis Date:	8/27/2014	SeqNo:	606770	Units:	mg/L			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R20845	RunNo:	20845					
Prep Date:		Analysis Date:	8/27/2014	SeqNo:	606771	Units:	mg/L			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.3	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.3	85	115			
Calcium	51	1.0	50.00	0	101	85	115			
Chromium	0.51	0.0060	0.5000	0	103	85	115			
Copper	0.49	0.0060	0.5000	0	97.2	85	115			
Iron	0.52	0.020	0.5000	0	103	85	115			
Magnesium	51	1.0	50.00	0	102	85	115			
Manganese	0.50	0.0020	0.5000	0	101	85	115			
Potassium	50	1.0	50.00	0	100	85	115			
Sodium	50	1.0	50.00	0	100	85	115			
Zinc	0.49	0.010	0.5000	0	97.7	85	115			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R20883	RunNo:	20883					
Prep Date:		Analysis Date:	8/28/2014	SeqNo:	607543	Units:	mg/L			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.0050								
Sodium	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R20883		RunNo: 20883					
Prep Date:			Analysis Date: 8/28/2014		SeqNo: 607544		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.48	0.0050	0.5000	0	95.4	85	115			
Sodium	47	1.0	50.00	0	95.0	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	LCS			SampType: LCS		TestCode: EPA 200.8: Dissolved Metals				
Client ID:	LCSW			Batch ID: R20953		RunNo: 20953				
Prep Date:				Analysis Date: 9/2/2014		SeqNo: 609801		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.4	85	115			
Lead	0.025	0.0010	0.02500	0	101	85	115			
Selenium	0.023	0.0010	0.02500	0	93.1	85	115			
Uranium	0.026	0.0010	0.02500	0	102	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R20953		RunNo: 20953					
Prep Date:			Analysis Date: 9/2/2014		SeqNo: 609802		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.024	0.0010	0.02500	0	96.9	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R20953			RunNo: 20953					
Prep Date:		Analysis Date: 9/2/2014			SeqNo: 609803		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R20953			RunNo: 20953					
Prep Date:		Analysis Date: 9/2/2014			SeqNo: 609804		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R20973		RunNo: 20973					
Prep Date:			Analysis Date: 9/3/2014		SeqNo: 610602		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.022	0.0010	0.02500	0	89.9	85	115			
Selenium	0.022	0.0010	0.02500	0	89.1	85	115			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals						
Client ID:	PBW	Batch ID: R20973			RunNo: 20973						
Prep Date:		Analysis Date: 9/3/2014			SeqNo: 610603		Units: mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic		ND	0.0010								
Selenium		ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	MB-15017		SampType:	MBLK		TestCode:	EPA Method 245.1: Mercury				
Client ID:	PBW		Batch ID:	15017		RunNo:	20896				
Prep Date:	8/28/2014		Analysis Date:	8/29/2014		SeqNo:	608095		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	ND	0.00020									

Sample ID	LCS-15017			SampType:	LCS		TestCode:	EPA Method 245.1: Mercury			
Client ID:	LCSW			Batch ID:	15017		RunNo:	20896			
Prep Date:	8/28/2014			Analysis Date:	8/29/2014		SeqNo:	608096		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	0.0049	0.00020	0.005000	0	98.4	80	120				

Sample ID	MB-15056		SampType:	MBLK		TestCode:	EPA Method 245.1: Mercury				
Client ID:	PBW		Batch ID:	15056		RunNo:	20955				
Prep Date:	9/2/2014		Analysis Date:	9/3/2014		SeqNo:	609874		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	ND	0.00020									

Sample ID	LCS-15056			SampType:	LCS		TestCode:	EPA Method 245.1: Mercury			
Client ID:	LCSW			Batch ID:	15056		RunNo:	20955			
Prep Date:	9/2/2014			Analysis Date:	9/3/2014		SeqNo:	609875		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	0.0055	0.00020	0.005000	0	110	80	120				

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R20765	RunNo:	20765					
Prep Date:		Analysis Date:	8/22/2014	SeqNo:	604385	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P)	ND	0.50								
Sulfate	ND	0.50								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R20765	RunNo:	20765					
Prep Date:		Analysis Date:	8/22/2014	SeqNo:	604386	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.47	0.10	0.5000	0	93.6	90	110			
Chloride	4.7	0.50	5.000	0	93.3	90	110			
Nitrogen, Nitrite (As N)	0.96	0.10	1.000	0	96.3	90	110			
Bromide	2.4	0.10	2.500	0	96.7	90	110			
Nitrogen, Nitrate (As N)	2.4	0.10	2.500	0	97.6	90	110			
Phosphorus, Orthophosphate (As P)	4.7	0.50	5.000	0	93.1	90	110			
Sulfate	9.5	0.50	10.00	0	95.3	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	MB-14896		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 14896		RunNo: 20738					
Prep Date:	8/21/2014		Analysis Date: 8/22/2014		SeqNo: 603778		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	0.20								
Motor Oil Range Organics (MRO)	ND	2.5								
Surr: DNOP	0.47		0.5000		93.5	75.2	161			

Sample ID	LCS-14896		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 14896		RunNo: 20738					
Prep Date:	8/21/2014		Analysis Date: 8/22/2014		SeqNo: 603880		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	2.9	0.20	2.500	0	115	65.8	162			
Surr: DNOP	0.27		0.2500		109	75.2	161			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R20754	RunNo:	20754					
Prep Date:		Analysis Date:	8/22/2014	SeqNo:	603970	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	20		20.00		98.2	70.9	130			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R20754	RunNo:	20754					
Prep Date:		Analysis Date:	8/22/2014	SeqNo:	603971	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.54	0.050	0.5000	0	109	80	120			
Surr: BFB	20		20.00		101	70.9	130			

Sample ID	1408B57-004BMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MW-11	Batch ID:	R20754	RunNo:	20754					
Prep Date:		Analysis Date:	8/22/2014	SeqNo:	603982	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	5.1	0.25	2.500	2.311	112	70.4	127			
Surr: BFB	230		100.0		234	70.9	130			S

Sample ID	1408B57-004BMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MW-11	Batch ID:	R20754	RunNo:	20754					
Prep Date:		Analysis Date:	8/22/2014	SeqNo:	603983	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	5.1	0.25	2.500	2.311	113	70.4	127	0.644	20	
Surr: BFB	240		100.0		235	70.9	130	0	0	S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.**Project:** Downgradient Wells 8-21-14

Sample ID	5mL rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R20892			RunNo: 20892					
Prep Date:		Analysis Date: 8/28/2014			SeqNo: 607980		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	5mL rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R20892	RunNo:	20892					
Prep Date:		Analysis Date:	8/28/2014	SeqNo:	607980	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	6.7		10.00		67.3	70	130			S
Surr: 4-Bromofluorobenzene	9.3		10.00		93.2	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.0	70	130			
Surr: Toluene-d8	9.4		10.00		93.8	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R20892	RunNo:	20892					
Prep Date:		Analysis Date:	8/28/2014	SeqNo:	607982	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	92.7	70	130			
Toluene	21	1.0	20.00	0	107	80	120			
Chlorobenzene	20	1.0	20.00	0	100	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R20892			RunNo: 20892					
Prep Date:		Analysis Date: 8/28/2014			SeqNo: 607982		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	105	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	96.6	70	130			
Surr: 1,2-Dichloroethane-d4	7.1		10.00		70.6	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.7	70	130			
Surr: Dibromofluoromethane	8.9		10.00		88.7	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	mb-14928	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	14928	RunNo:	20778					
Prep Date:	8/25/2014	Analysis Date:	8/25/2014	SeqNo:	604653	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	mb-14928	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	14928	RunNo:	20778					
Prep Date:	8/25/2014	Analysis Date:	8/25/2014	SeqNo:	604653	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	140		200.0		68.6	12.1	85.8			
Surr: Phenol-d5	100		200.0		51.9	17.7	65.8			
Surr: 2,4,6-Tribromophenol	100		200.0		50.5	26	138			
Surr: Nitrobenzene-d5	100		100.0		103	47.5	119			
Surr: 2-Fluorobiphenyl	100		100.0		104	48.1	106			
Surr: 4-Terphenyl-d14	85		100.0		84.5	44	113			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408B57

24-Sep-14

Client: Western Refining Southwest, Inc.

Project: Downgradient Wells 8-21-14

Sample ID	lcs-14928		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 14928		RunNo: 20778					
Prep Date:	8/25/2014		Analysis Date: 8/25/2014		SeqNo: 604654		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	89	10	100.0	0	89.2	50.3	109			
4-Chloro-3-methylphenol	200	10	200.0	0	101	51.2	113			
2-Chlorophenol	190	10	200.0	0	97.1	48.5	104			
1,4-Dichlorobenzene	79	10	100.0	0	79.2	39.5	106			
2,4-Dinitrotoluene	83	10	100.0	0	83.2	45.4	107			
N-Nitrosodi-n-propylamine	93	10	100.0	0	93.3	50.4	119			
4-Nitrophenol	120	10	200.0	0	59.6	15.5	62.2			
Pentachlorophenol	150	20	200.0	0	73.0	23.5	93.5			
Phenol	120	10	200.0	0	59.2	26.8	65.6			
Pyrene	93	10	100.0	0	92.6	54.4	108			
1,2,4-Trichlorobenzene	82	10	100.0	0	82.0	39.9	106			
Surr: 2-Fluorophenol	150		200.0		74.7	12.1	85.8			
Surr: Phenol-d5	110		200.0		53.8	17.7	65.8			
Surr: 2,4,6-Tribromophenol	140		200.0		71.4	26	138			
Surr: Nitrobenzene-d5	100		100.0		104	47.5	119			
Surr: 2-Fluorobiphenyl	100		100.0		101	48.1	106			
Surr: 4-Terphenyl-d14	97		100.0		97.4	44	113			

Sample ID	Icsd-14928		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 14928		RunNo: 20778					
Prep Date:	8/25/2014		Analysis Date: 8/25/2014		SeqNo: 604958		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	100	10	100.0	0	104	50.3	109	15.4	27.2	
4-Chloro-3-methylphenol	220	10	200.0	0	110	51.2	113	8.80	25.9	
2-Chlorophenol	160	10	200.0	0	78.7	48.5	104	21.0	22.5	
1,4-Dichlorobenzene	87	10	100.0	0	87.2	39.5	106	9.59	24.6	
2,4-Dinitrotoluene	110	10	100.0	0	111	45.4	107	28.6	25.3	RS
N-Nitrosodi-n-propylamine	100	10	100.0	0	104	50.4	119	11.3	23.6	
4-Nitrophenol	71	10	200.0	0	35.6	15.5	62.2	50.5	34.7	R
Pentachlorophenol	89	20	200.0	0	44.6	23.5	93.5	48.3	32.8	R
Phenol	110	10	200.0	0	56.9	26.8	65.6	3.96	25.5	
Pyrene	120	10	100.0	0	125	54.4	108	29.6	31.4	S
1,2,4-Trichlorobenzene	87	10	100.0	0	86.8	39.9	106	5.71	25.9	
Surr: 2-Fluorophenol	92		200.0		46.2	12.1	85.8	0	0	
Surr: Phenol-d5	110		200.0		53.0	17.7	65.8	0	0	
Surr: 2,4,6-Tribromophenol	100		200.0		52.2	26	138	0	0	
Surr: Nitrobenzene-d5	110		100.0		108	47.5	119	0	0	
Surr: 2-Fluorobiphenyl	110		100.0		112	48.1	106	0	0	S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit