## **GW-001**

# ANNUAL REPORT (2)

## 2011



LOGISTICS

April 12, 2012

Dave Cobrain New Mexico Environmental Department Hazardous Waste Bureau 2905 Rodeo Park Drive East, Bldg. 1 Santa Fe, NM 87505 Carl Chavez New Mexico Energy, Minerals & Natural Resources Dept. Oil Conservation Division 1220 South St. Francis Drive. Santa Fe, NM 87505

#### UPS Tracking #: 1Z 881 839 01 5530 7878 (delivery to NMED) UPS Tracking #: 1Z 881 839 01 5527 7884 (delivery to OCD)

 RE: Corrective Measures Study and Corrective Measures Implementation Investigation and Abatement Plan
 2011 Groundwater Remediation and Monitoring Annual Report Western Refining Southwest, Inc. – Bloomfield Refinery
 EPA ID #NMD089416416
 GW – 001

Dear Mr. Cobrain and Mr. Chavez,

Western Refining Southwest Inc. – Bloomfield Refinery submits the above referenced Annual Report pursuant to Section IV.A.2 of the July 2007 HWB Order, and in compliance with Section 22 of the facility's July 2010 Discharge Permit. This report summarizes the groundwater monitoring, remediation, and inspection activities conducted at the Bloomfield Refinery in 2011.

If you have any questions or would like to discuss any aspect of this report, please contact me at 505-632-4171 or Randy.Schmaltz@wnr.com.

Sincerely,

Soleworn James R. Schmaltz

Health, Safety, Environmental & Regulatory Director Western Refining Southwest, Inc. – Bloomfield Refinery

Cc: Brandon Powell, NMOCD Carl Chavez, NMOCD Allen Hains, Western Refining - El Paso

## 2011 Groundwater Remediation and Monitoring Annual Report

January – December 2011



Bloomfield Refinery Western Refining Southwest, Inc. #50 Rd 4990 Bloomfield, New Mexico 87413

Submitted: April 2012

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

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## **EXECUTIVE SUMMARY**

This Annual Report includes a summary of activities conducted at the Bloomfield Refinery in 2011 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 Bloomfield Refinery 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 2011.

#### **Groundwater Measurements**

Depth-to-groundwater and depth-to-product measurements were collected from the refinery 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 2011 and August 2011, respectively. 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 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 flows in the north west general direction, with groundwater under the process areas flowing towards the north boundary barrier wall and Hammond Ditch Collection System.

#### **Groundwater Monitoring**

Groundwater monitoring activities conducted in 2011 included the collection of groundwater samples and field data from the following four areas of the Bloomfield Refinery.

- Refinery Complex includes Refinery, Cross-Gradient, Downgradient, and RCRA Wells
- North Boundary Barrier includes observation (OW) and collection (CW) 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 2011 followed the guidelines outlined in the approved Facility-Wide Groundwater Monitoring Plan dated June 2010. Monitoring activities conducted in August 2011 followed the guidelines outlined in the approved Facility-Wide Groundwater Monitoring Plan dated June 2010.

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 2011. 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 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.

#### **Below-Grade Testing and Tank Inspections**

In compliance with the Refinery's Discharge Permit dated July 2010, underground process piping and sumps were inspected in 2011 to determine their integrity for service. All piping and sumps tested in 2011 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

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#### 1.1 Site Location and Description

Owner:	San Juan Refining Company, a Nev 1250 Washington Street Tempe, Arizona 85281	w Mexico Corporation	
Operator:	Western Refining Southwest, Inc. (Formerly Giant Industries Arizona, Inc.), an Arizona Corporation 1250 Washington Street Tempe, Arizona 85281		
Facility:	Bloomfield Refinery # 50 Road 4990 Bloomfield, New Mexico 87413	(physical address)	
	Western Refining Southwest, Inc. P.O. Box 159 Bloomfield, New Mexico 87413	(postal address)	
US EPA ID:	NMD089416416		

SIC Code: 2911

The Bloomfield Refinery 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 Bloomfield Refinery has an approximate refining capacity of 18,000 barrels per day. Various process units operated at the facility, including 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 Refinery is located on approximately 263 acres south of Bloomfield, New Mexico in San Juan County (Figure 1). The refinery complex is bisected by County Road 4990 (Sullivan Road), which runs east-west. The process units, tank farm, wastewater treatment system, raw water ponds, and fire training area are located north of the county road. The crude oil and product loading racks, LPG storage tanks and loading racks, 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 refinery 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 course 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).

Refinery offices are located on the western end of the facility, along with warehouse space, maintenance areas, and a storage yard containing used material (e.g., pipes, valves). Petroleum processing units, located in the northwest portion of the refinery, include the crude unit, fluidized cracking unit, catalytic polymerization unit, and hydrodesulfurization unit. The API Separator and the aeration lagoons are located in the north central section of the refinery.

In the central portion of the site, aboveground storage tanks (AST's) occupy a large percentage of the refinery property. Located on the south side of Sullivan Road are the terminal facilities used for loading product and off-loading crude, as well as gas storage and hazardous waste storage.

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.

#### **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 has 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 guality 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.

#### <u>1986</u>

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

#### <u>1987</u>

- 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.

#### <u>1988</u>

- 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.

#### <u>1989</u>

- 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.

#### <u>1990</u>

- 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.

#### <u>1991</u>

- 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.

#### <u>1992</u>

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

#### <u>1993</u>

- Began a program under a Consent Agreement with the United Stated Environment 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.

#### <u>1994</u>

- 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.

#### <u>1995</u>

- 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.

#### <u>1998</u>

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

#### <u>1999</u>

• 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.

#### <u>2001</u>

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

#### <u>2002</u>

• 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.

#### <u>2003</u>

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

#### <u>2004</u>

- 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 Naciemento 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.

#### <u>2005</u>

- 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 #1 and #2 and thirteen bioventing wells were drilled and construction of the River Terrace Bioventing Project was initiated.

#### <u>2006</u>

- 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.

#### <u>2007</u>

- 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.

#### <u>2008</u>

- 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.

#### <u>2009</u>

- 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.

#### <u>2010</u>

- 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.

#### <u>2011</u>

 In August 2011, 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.

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## SECTION 2.0 SCOPE OF ACTIVITIES

This Annual Report includes a summary of activities conducted at the Bloomfield Refinery in 2011 pursuant to the reporting requirements outlined in Section IV.A.2. of the July 2007 Consent Order issued by the New Mexico Environment Department Hazardous Waste Bureau (NMED-HWB), and Section 22 of Discharge Permit GW-001 issued to the Bloomfield Refinery 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 2011.

#### 2.1 Groundwater Monitoring Activities

Groundwater monitoring activities conducted in 2011 included the collection of groundwater samples and field data from the following four areas of the Bloomfield Refinery.

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

Groundwater monitoring activities conducted in April 2011 follow the guidelines outlined in the approved Facility-Wide Groundwater Monitoring Plan dated June 2010. Monitoring activities conducted in August 2011 follow the guidelines outlined in the approved Facility-Wide Groundwater Monitoring Plan dated June 2011. 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 2011 is included in Section 3.1.

#### 2.1.1 Fluid Measurements

Depth-to-groundwater and depth-to-product measurements were collected from the refinery 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 2011 and August 2011, respectively. Additional fluid measurements were collected at the sump wells periodically throughout the year to monitor fluid levels along the north side of the facility. 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, 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. A summary of the field measurements collected and procedures followed is provided in Section 3.1.2 and Appendix A.

#### 2.1.3 Refinery Complex Sampling

Groundwater samples were collected from wells located within the Refinery Complex during the Semi-Annual Sampling Event and Annual Sampling Event conducted in April 2011 and August 2011, respectively. 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 2011:

- Refinery Wells: MW-8, MW-30
- 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:

- Volatile Organic Compounds (VOCs) Benzene, Toluene, Ethlylbenzene, Xylenes (BTEX), and MTBE only by EPA Method 8260B
- Total Petroleum Hydrocarbons (TPH) Gasoline Range Organics (GRO) by EPA Modified Method 8015B (MW-1, MW-12, MW-37, and MW-38 only)
- TPH Diesel Range Organics (DRO) by EPA Modified Method 8015B (MW-1, MW-33, MW-12, MW-37, and MW-38 only)

Samples collected at MW-33 were inadvertently not analyzed for TPH-GRO in April 2011. Groundwater samples were not collected from MW-20 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 2011:

- Refinery Wells: MW-4, MW-8, RW-15, RW-18, MW-29, MW-30, MW-31, MW-40, and MW-44
- Cross-Gradient Wells: MW-1, MW-13, MW-26, 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-50, MW-51, MW-52, MW-53, MW-55, MW-59, MW-60, MW-62, MW-63, MW-64, MW-65, MW-67, and MW-68

Groundwater samples were not collected from RW-1, RW-9, MW-20, MW-21, RW-23, RW-28, RW-42, RW-43, MW-54, MW-56, MW-57, MW-58, MW-61, and MW-66 due to the presence of SPH. In addition, groundwater samples were not collected from 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
- Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270 (RCRA Investigation 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

Samples collected for total dissolved metals were inadvertently not analyzed for dissolved Mercury; however the same samples were analyzed for total mercury.

#### 2.1.4 North Boundary Barrier Sampling

Groundwater samples were collected from observation wells and specified collection wells in April 2011 and August 2011, with the exception of wells that contained separate-phase hydrocarbon (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 2011 and August 2011, 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 2011:

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

Groundwater samples were not collected from OW 1+50, OW 3+85, and OW 11+15 due to the presence of SPH. In addition, groundwater samples were not collected from OW 0+60, 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 2011 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 (only at OW wells)
- 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 2011:

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

Groundwater samples were not collected from OW 1+50, and OW 3+85 due to the presence of SPH. In addition, groundwater samples were not collected from OW 0+60, 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 (only at OW wells)
- 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 2011:

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

Surface water samples were not collected from Seep 4, Seep 5, Seep 7, and Seep 8 due to insufficient surface water for sample collection.

Surface water samples collected in April 2011 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

Samples collected for total dissolved metals were inadvertently not analyzed for dissolved Mercury; however the same samples were analyzed for total mercury.

#### Annual Sampling Event

Surface water samples were collected from the following locations during the Annual Sampling Event conducted in August 2011:

- Outfalls: Outfall 2, and 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 insufficient surface water for sample collection.

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

Samples collected for total dissolved metals were inadvertently not analyzed for dissolved Mercury; however the same samples were analyzed for total mercury.

#### 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 2011. 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 2011:

• 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

Samples collected for total dissolved metals were inadvertently not analyzed for dissolved Mercury; however the same samples were analyzed for total mercury.

#### 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 2011. Figure 3 shows the location of the outfalls and seeps in relation to the Bloomfield Refinery property. 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 Refinery 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 Refinery's 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 2011. The wells that operated as active recovery wells in 2011 are RW-1, RW-2, RW-9, RW-14, RW-15, RW-16, RW-17, RW-18, RW-22, RW-23, RW-18, RW-42, and RW-43. 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 3.2.1.

#### 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 Refinery personnel continued to monitor fluid levels on both sides of the barrier wall in 2011 by collecting depth-to-water and depth-to-product measurements. Figure 2 shows the location of the collection wells (CWs) and observation wells (OWs) along the north boundary barrier wall. A summary of the data collected along the north boundary barrier wall is provided in Section 3.2.2.

#### 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 refinery-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 3.2.3.

#### 2.2.4 River Terrace Remediation System

The River Terrace Bioventing System commenced operation in January 2006. Monitoring and remedial actions conducted in associated with this system are performed in compliance with the approved *Voluntary Measures Bioventing Monitoring Plan*. 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, which is then pumped to the Refinery's 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 2011 is included in Section 3.2.4.

#### 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 was tested to ensure

there exist no indications of leaks. Testing of the sump and sewer boxes was conducted between June 2011 and August 2011.

In addition, approximately 4,660 feet of underground piping was hydrostatically tested at Bloomfield Refinery. The piping was located in the Process Unit area, River Terrace transfer piping, Tank Farm transfer piping, and Terminals. A summary of the testing procedures performed and the testing results is presented in Section 3.3.

#### 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 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. Additional information regarding waste disposal activities is provided in Section 3.4.

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## 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 2011. Figure 8 and Figure 9 provide a summary of the BTEX concentrations detected during the April 2011 and August 2011 Sampling Events, respectively.

#### 3.1 Groundwater Monitoring

A summary of the groundwater analytical results collected over the past few are included in Table 3 through Table 10. 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. Sample results included in the analytical summary tables that exceed the respective sample results 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 2011. 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 2011, groundwater surface elevations were calculated. The groundwater elevation data was used to developed 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 2011. Figure 4 and Figure 5 represent the groundwater contours developed from data collected in April 2011 and August 2011, respectively. The groundwater contours show that groundwater flows in the general northwest direction.

Field measurements collected in April and August 2011 were also used to determine product thickness in areas where separate-phase hydrocarbon (SPH) was detected. In April 2011, SPH was identified in 21 wells. The product thickness detected ranged between 0.01 feet and 1.58 feet, with the most product detected at recovery well MW-57. In August 2011, SPH was identified in 21 wells. The product thickness ranged between 0.01 feet and 1.48 feet, with the most product detected at MW-57. Figure 6 and Figure 7 show a summary of the product thickness detected in April 2011 and August 2011, respectively.

#### 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 an Ultra meter 6P. 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 2011 and August 2011 sampling events.

#### 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 2011, with the following exceptions:

- 1, 2, 4-Trimethylbenzene was detected above the respective screening level of 15 ug/l at MW-4, MW-8, RW-15, RW-18, MW-30, and MW-31. The detected concentrations ranged between 30 ug/l and 3,900 ug/l, with the highest concentration detected at MW-30 in August 2011.
- 1,2-Dichloroethane was detected at RW-18 at 540 ug/l, which was above the respective screening level of 5 ug/l.
- 1,3,5-trimethylbenzene was detected above the respective screening level of 12 ug/l at MW-4, MW-8, RW-15, MW-30, and MW-31. The detected concentrations ranged between 13 ug/l and 830 ug/l, with the highest concentration detected at MW-30 in August 2011.
- 1-Methylnaphthalene was detected above the respective screening level of 2.3 ug/l at MW-8, RW-15, RW-18, and MW-40. The detected concentrations ranged between 25 ug/l and 720 ug/l, with the highest concentration detected at RW-18 in August 2011.
- 2-Methylnaphthalene was detected above the respective screening level of 150 ug/l at RW-15 and MW-31. The detected concentrations ranged between 170 ug/l and 270 ug/l, with the highest concentration detected at MW-31 in August 2011.
- Benzene was detected above the respective screening level of 5 ug/l at MW-4, RW-15, RW-18, MW-30, MW-31, and MW-40. The detected concentrations ranged between 23 ug/l and 6,300 ug/l, with the highest concentration detected at MW-30 in August 2011.
- 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 1,200 ug/l and 4,400 ug/l, with the highest concentration detected at MW-30 in August 2011.
- MTBE was detected above the respective screening level of 125 ug/l at RW-18. The detected concentration was 2,200 ug/l in August 2011.
- Naphthalene was detected above the respective screening level of 1.43 ug/l at MW-4, MW-8, RW-15, MW-30, MW-31, and MW-40. The detected concentrations ranged

between 20 ug/l and 960 ug/l, with the highest concentration detected at MW-30 in August 2011.

- Toluene was detected above the respective screening level of 750 ug/l at RW-15 and MW-30. The detected concentrations ranged between 790 ug/l and 5,600 ug/l, with the highest concentration detected at MW-30 in August 2011.
- 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 4,200 ug/l and 15,000 ug/l, with the highest concentration detected at MW-30 in August 2011.

General chemistry parameters detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

- Chloride was detected above the respective screening level of 250 mg/l at RW-15, RW-18, MW-30, MW-31, and MW-40. The detected concentrations ranged between 290 mg/l and 540 mg/l, with the highest concentration detected at MW-31.
- Sulfate was detected above the respective screening level of 600 mg/l at MW-8, RW-18, and MW-44. The detected concentrations ranged between 1,000 mg/l and 3,300 mg/l, with the highest concentration detected at RW-18.

Total metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

- Arsenic was detected above the respective screening level of 0.01 mg/l at MW-4 and MW-8, with the highest concentration detected at MW-8 (0.18 mg/l).
- Barium was detected above the respective screening level of 1.0 mg/l at MW-4, RW-15, RW-18, and MW-40. The detected concentrations ranged between 1.8 mg/l and 4.2 mg/l, with the highest concentration detected at RW-18.
- Chromium was detected above the respective screening level of 0.05 mg/l at MW-8 and RW-18, with the highest concentration detected at MW-8 (0.98 mg/l).

Dissolved metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

- Barium was detected above the respective screening level of 1.0 mg/l at MW-4, RW-15, and MW-40. The detected concentrations ranged between 1.3 mg/l and 1.8 mg/l, with the highest concentration detected at MW-4 and MW-40.
- Chromium was detected above the respective screening level of 0.05 mg/l at MW-8, with the highest concentration detected at 0.09 mg/l.
- Iron was detected above the respective screening level of 1.0 mg/l at MW-4, MW-8, RW-15, RW-18, and MW-40. The detected concentrations ranged between 4.6 mg/l and 18 mg/l, with the highest concentration detected at RW-15.
- Manganese was detected above the respective screening level of 0.2 mg/l at MW-4, MW-8, RW-15, RW-18, MW-29, MW-30, MW-31, and MW-40. The detected concentrations ranged between 0.44 mg/l and 6.2 mg/l, with the highest concentration detected at RW-15.

Total petroleum hydrocarbons detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

• Diesel range organics were detected above the respective screening level of 0.2 mg/l at MW-4, MW-8, RW-15, RW-18, MW-30, MW-31 and MW-40. The detected concentrations ranged between 0.48 mg/l and 470 mg/l, with the highest concentration detected at RW-18.

Dissolved mercury was inadvertently not sampled for in 2011; however it was included in the total metals analysis and the results were compared to the respective total mercury screening level. A summary of the analytical results for samples collected at the refinery wells in 2011 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 2011, with the following exceptions:

- 1, 2,4-Trimethylbenzene was detected above the respective screening level of 15 ug/l at MW-26, with a detected concentration of 830 ug/l.
- Benzene was detected above the respective screening level of 5 ug/l at MW-26, with a detected concentration of 26 ug/l.

General chemistry parameters detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

- Chloride was detected above the respective screening level of 250 mg/l at MW-26, MW-27, MW-32, and MW-33. The detected concentrations ranged between 300 mg/l and 690 mg/l, with the highest concentration detected at MW-32.
- Nitrate was detected above the respective screening level of 10 mg/l at MW-32, with a detected concentration of 48 mg/l.
  - 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 1,100 mg/l and 2,100 mg/l, with the highest concentration detected at MW-33.

Total metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

• Barium was detected above the respective screening level of 1.0 mg/l at MW-26, with a detected concentration of 2.3 mg/l.

Dissolved metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

- Barium was detected above the respective screening level of 1.0 mg/l at MW-26, with a detected concentration of 2.3 mg/l.
- Iron was detected above the respective screening level of 1.0 mg/l at MW-26, with a detected concentration of 6.0 mg/l.
- Manganese was detected above the respective screening level of 0.2 mg/l at MW-13, MW-26, and MW-27. The detected concentrations ranged between 1.4 mg/l and 3.0 mg/l, with the highest concentration detected at MW-27.

Total petroleum hydrocarbons detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

 Diesel range organics were detected above the respective screening level of 0.2 mg/l at MW-26, and MW-27, with the highest concentration detected at MW-26 (1.3 mg/l).

TPH-GRO was inadvertently not sampled for MW-33 in April 2011. However, the analysis was included in the August 2011 sampling results. Dissolved mercury was inadvertently not sampled for in 2011; however it was included in the total metals analysis and the results were compared to the respective total mercury screening level. A summary of the analytical results for samples collected at the Cross-Gradient Wells in 2011 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 2011, with the following exceptions:

- 1,2, 4-Trimethylbenzene was detected above the respective screening level of 15 ug/l at MW-34, and MW-35, with the highest concentration detected at MW-34 in August 2011 (65 ug/l).
- Benzene was detected above the respective screening level of 5 ug/l at MW-11, and MW-34, with the highest concentration detected at MW-11 (56 ug/l) in August 2011.
- Naphthalene was detected above the respective screening level of 1.43 ug/l at MW-34, with a concentration of 6.2 ug/l.

General chemistry parameters detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

• Chloride was detected above the respective screening level of 250 mg/l at MW-11 and MW-37, with the highest concentration detected at MW-11 (340 ug/l) in August 2011.

Total metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

• Lead was detected above the respective screening level of 0.015 mg/l at MW-11, with a detected concentration of 0.016 mg/l.

Dissolved metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

- Iron was detected above the respective screening level of 1.0 mg/l at MW-11, MW-34, MW-35, MW-37, and MW-38. The detected concentrations ranged between 3.0 mg/l and 12 mg/l, with the highest concentration detected at MW-11.
- Manganese was detected above the respective screening level of 0.2 mg/l at MW-11, MW-34, MW-35, MW-37, and MW-38. The detected concentrations ranged between 1.1 mg/l and 4.4 mg/l, with the highest concentration detected at MW-34.

Total petroleum hydrocarbons detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, 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, MW-37, and MW-38. The detected concentrations ranged between 0.21 mg/l and 1.2 mg/l, with the highest concentration detected at MW-34.

Dissolved mercury was inadvertently not sampled for in 2011; however it was included in the total metals analysis and the results were compared to the respective total mercury screening

level. A summary of the analytical results for samples collected at the Downgradient Wells in 2011 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 2011, with the following exceptions:

- 1, 2, 4-Trimethylbenzene was detected above the respective screening level of 15 ug/l at MW-55, and MW-65, with the highest concentration detected at MW-65 (1,900 ug/l) in August 2011.
- 1, 2-Dichloroethane was detected at MW-59 and MW-65, with the highest concentration detected at MW-65 (260 ug/l).
- 1,3,5-trimethylbenzene was detected above the respective screening level of 12 ug/l at MW-55 and MW-65, with the highest concentration detected at MW-65 (280 ug/l).
- 1-Methylnaphthalene was detected above the respective screening level of 2.3 ug/l at MW-55, MW-59, and MW-65. The detected concentrations ranged between 37 ug/l and 160 ug/l, with the highest concentration detected at MW-65 in August 2011.
- 2-Methylnaphthanele was detected above the respective screening level of 150 ug/l at MW-55 and MW-65, with the highest concentration detected at MW-65 (300 ug/l).
- Benzene was detected above the respective screening level of 5 ug/l at MW-55, MW-59, and MW-65. The detected concentrations ranged between 38 ug/l and 7,800 ug/l, with the highest concentration detected at MW-55 in August 2011.
- Ethylbenzene was detected above the respective screening level of 700 ug/l at MW-55 and MW-65, with the highest concentration detected at MW-65 (2,100 ug/l) in August 2011.
- MTBE was detected above the respective screening level of 125 ug/l at MW-55, MW-59, and MW-65. The detected concentration ranged between 330 ug/l and 7,800 ug/l, with the highest concentration detected at MW-55.
- Naphthalene was detected above the respective screening level of 1.43 ug/l at MW-55, MW-59, and MW-65. The detected concentrations ranged between 69 ug/l and 620 ug/l, with the highest concentration detected at MW-65 in August 2011.
- Xylenes were detected above the respective screening level of 620 ug/l at MW-65, with a detected concentration of 4,400 ug/l.

Semi-volatile organic compounds detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

- 1-Methylnaphthalene was detected above the respective screening level of 2.3 ug/l at MW-55, MW-59, and MW-65. The detected concentrations ranged between 13 ug/l and 91 ug/l, with the highest concentration detected at MW-65 in August 2011.
- Naphthalene was detected above the respective screening level of 1.43 ug/l at MW-55, MW-59, and MW-65. The detected concentrations ranged between 22 ug/l and 330 ug/l, with the highest concentration detected at MW-65 in August 2011.

General chemistry parameters detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

- Chloride was detected above the respective screening level of 250 mg/l at MW-52, MW-53, MW-55, and MW-64. The detected concentrations ranged between 420 mg/l and 920 mg/l, with the highest concentration detected at MW-53.
- Nitrate was detected above the respective screening level of 10 mg/l at MW-52, MW-53, MW-60, MW-63, and MW-64. The detected concentrations ranged between 11 mg/l and 67 mg/l, with the highest concentration detected at MW-63.
- Sulfate was detected above the respective screening level of 600 mg/l at MW-52, MW-53, and MW-60. The detected concentrations ranged between 1,000 mg/l and 1,200 mg/l, with the highest concentration detected at MW-52.

Total metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

- Barium was detected above the respective screening level of 1.0 mg/l at MW-55, with a detected concentration of 2.6 mg/l.
- Lead was detected above the respective screening level of 0.015 mg/l at MW-55, with a detected concentration of 0.023 mg/l.

Dissolved metals constituents detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

- Barium was detected above the respective screening level of 1.0 mg/l at MW-55, with a detected concentration of 2.6 mg/l.
- Iron was detected above the respective screening level of 1.0 mg/l at MW-55, MW-59, and MW-65. The detected concentrations ranged between 4.1 mg/l and 9.8 mg/l, with the highest concentration detected at MW-55.
- Manganese was detected above the respective screening level of 0.2 mg/l at MW-50, MW-51, MW-52, MW-53, MW-55, MW-59, MW-62, MW-63, and MW-65. The detected concentrations ranged between 0.5 mg/l and 5.6 mg/l, with the highest concentration detected at MW-55.
- Dissolved mercury was inadvertently not sampled for in 2011; however it was included in the total metals analysis and the results were compared to the respective total mercury screening level.
- Uranium was detected above the respective screening level of 0.03 mg/l at MW-63, with a detected concentration of 0.041 mg/l.

Total petroleum hydrocarbons detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

- Diesel range organics were detected above the respective screening level of 0.2 mg/l at MW-55, MW-59, MW-65, and MW-67. The detected concentrations ranged between
  - 0.426 mg/l and 9.8 mg/l, with the highest concentration detected at MW-65.

A summary of the analytical results for samples collected at the RCRA Wells in 2011 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 2011, 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 0.019 mg/l and 6.7 mg/l, with the highest concentration detected at CW 25-95 in April 2011.
- Ethylbenzene was detected above the respective screening level of 0.7 mg/l at CW 25-95 in April 2011. The detected concentration was 0.8 mg/l.

Total petroleum hydrocarbons detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, 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 0.31 mg/l and 2.8 mg/l, with the highest concentration detected at CW 0+60 in April 2011.

A summary of the analytical results for samples collected at the collection Wells in 2011 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 2011, with the following exceptions:

- Benzene was detected above the respective screening level of 0.005 mg/l at OW 16+60, and OW 25+70. The detected concentrations ranged between 0.079 mg/l and 4.4 mg/l, with the highest concentration detected at OW 25+70 I April 2011.
- MTBE was detected above the respective screening level of 0.125 mg/l at OW 11+15, OW 16+60, and OW 22+00. The detected concentrations ranged between 0.061 mg/l and 1.1 mg/l, with the highest concentration detected at OW 16+60 in April 2011.

Total petroleum hydrocarbons detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

• Diesel range organics were detected above the respective screening level of 0.2 mg/l at OW 11+15, OW 16+60, OW 22+00, OW 23+10, and OW 25+70. The detected concentrations ranged between 0.36 mg/l and 65 mg/l, with the highest concentration detected at OW 16+60 in April 2011.

A summary of the analytical results for samples collected at the observation wells in 2011 is provided in Table 7.

#### 3.1.5 San Juan River Bluff Sampling

#### Outfalls

Samples were collected from Outfall 2 and Outfall 3 in April and August 2011. Detectable analytes for all Outfall samples were detected at concentrations below their respective screening levels. Dissolved mercury was inadvertently not included in the analysis for samples

collected in 2011; however mercury was included in the total metals analysis and was not detected above the laboratory detection limit. A summary of the analytical results for samples collected at Outfall No.2 and Outfall No. 3 in 2011 is provided in Table 8.

#### <u>Seeps</u>

Samples were collected from Seep 1, Seep 2, Seep 3, Seep 6 and Seep 9 in 2011. The remaining seeps were not sampled due to lack of water for sample collection.

General chemistry parameters detected above the laboratory detection limit were below their respective screening levels in samples collected in 2011, with the following exceptions:

- Chloride was detected above the respective screening level of 250 mg/l at Seep 1, Seep 2, Seep 3, Seep 6, and Seep 9. The detected concentrations ranged between 230 mg/l and 2,800 mg/l, with the highest concentration detected at Seep 6 in April 2011.
- Sulfate was detected above the respective screening level of 600 mg/l at Seep 1, Seep 2, Seep 6, and Seep 9. The detected concentrations ranged between 1,400 mg/l and 7,300 mg/l, with the highest concentration detected at Seep 2 in April 2011.

A summary of the analytical results for samples collected at the Seeps in 2011 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 2011. Samples were collected in April 2011 and August 2011 upstream of the refinery, north of MW-46, North of MW-45, and downstream of the refinery. Figure 3 shows the location of the San Juan River samples in relation to the Bloomfield Refinery. In August 2011, samples were inadvertently not analyzed for carbon dioxide, alkalinity, total dissolved solids, and conductivity; however the analyses were included in the April 2011 sampling event. In addition, dissolved mercury was inadvertently not analyzed in 2011. However, it was included in the total metals analysis and the respective results are included in this report. A summary of the analytical results for samples collected along the San Juan River is provided in Table 10.

#### 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 2011. 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 Total Fluids Recovery Systems

#### 3.2.1 Groundwater Recovery System

In 2011, 13 wells operated as total fluids recovery wells. The wells used for total fluids recovery were RW-1, RW-2, RW-9, RW-14, RW-15, RW-16, RW-16, RW-17, RW-18, RW-22, RW-23, RW-28, RW-42, and RW-43. The estimated total gallons pumped (SPH and groundwater) from the recover wells in 2011 was approximately 1,222,992 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.

#### 3.2.2 North Boundary Barrier Wall Collection System

Depth-to-groundwater measurements collected in April 2011 and August 2011 indicate that the barrier wall continues to provide a hydraulic barrier for groundwater below the facility. Based on the data collected in 2011, seven of the 14 observation well contain little to no fluid (i.e. measuring less than 0.5 ft of fluid in the well at any one time). In comparing the thickness of between the collection wells and corresponding observation wells, on average the groundwater surface was over four feet lower on the river-side of the North Boundary Barrier Wall compared to the corresponding groundwater elevation on the refinery-side of the wall.

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

#### 3.2.3 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 Refinery's 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 2011, the total volume of fluids recovered at Tank 37 was approximately 3,569,076 gallons.

#### 3.2.4 East Outfall Recovery System

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

In 2011, the flow rate into Tank 38 varied depending on the operation of the Hammond Ditch. Cracking of the ditch's concrete lining over the last two years has resulted in a significant increase in recovered water volume through Tank 38. When the Hammond Ditch is not operational (between October 15<sup>th</sup> and April 15<sup>th</sup> of each year), the average recovery water flow rate through Tank 38 is approximately 15 gpm. When the Hammond Ditch is operational in 2011, the flow rate through Tank 38 increases to over 100 gpm. Tank 38 piping is equipped with a flow meter to measure the total gallons transferred to the WWTP. In 2011, the total fluid volume recovered at Tank 38 was approximately 19,052,082 gallons.

#### 3.3 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. Between June 2011 and August 2011, all water-draw sumps located in the Tank Farm and sewer boxes within the facility were cleaned out with a vacuum truck, visually inspected, and hydrostatically tested for a minimum of 90 minutes to insure integrity. Liquid levels that did not change over time were considered acceptable for service. Boxes that passed the hydrostatic testing were emptied using the vacuum truck and returned to normal service. All sumps tested in 2011 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 4,660 feet of underground piping was hydrostatically tested at Bloomfield Refinery in 2011. The piping was located in the Process Unit area, River Terrace transfer piping, Tank Farm transfer piping, and Terminals. 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. No issues were identified during underground piping testing in 2011. Appendix D summarizes the underground piping testing and up-dated tank inspection schedule.

#### 3.4 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 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 2011 is provided in Appendix E.

## SECTION 4.0 CONCLUSIONS

The following is a summary of conclusions based on monitoring and inspection data collected in 2011.

#### 4.1 Groundwater Monitoring

Western has in-place a Facility-Wide Groundwater Monitoring program that is up-dated annually as required under the 2077 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 2011 and August 2011 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 2011. 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.

Based on the analytical results for groundwater monitoring collected in 2011, the following constituents were detected at concentrations in groundwater above the respective most conservative screening levels.

Volatile Organic Compounds:	General Chemistry:	<b>Dissolved Metals:</b>
1,2,4-trimethylbenzene	Chloride	Barium
1,2-Dichlorethane	Sulfate	Chromium
1,3,5-trimethylbenzene	Nitrate	Iron
1-Methylnaphthalene	Total Metals:	Manganese
2-Methylnaphthalene	Arsenic	Uranium
Benzene	Barium	
Ethylbenzene	Chromium	
MTBE	lead	
Naphthalene		
Toluene		
Xylenes		

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 2011. 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.

#### 4.4 Below-Grade Testing and Tank Inspections

In compliance with the Refinery's Discharge Permit dated July 2010, underground process piping and sumps were inspected in 2011 to determine their integrity for service. All piping and sumps tested in 2011 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

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Well ID	Date	Measuring Point Elevation (ft amsl)	Total Well Depth (ft below TOC)	· · · · · · · · · · · · · · · · · · ·	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)				
MW-1	4/11/2011	5519.21	21.56	NPP	17.47	5501.74	NPP				
	8/16/2011	5519.21	21.56	NPP	16.99	5502.22	NPP				
MW-03	4/11/2011	5539.27	36.75	NPP	36.53	5502.74	NPP				
	8/16/2011	5539.27	36.75	NPP	36.43	5502.84	NPP				
MW-04	4/11/2011	5527.78	30.48	NPP	27.23	5500.55	NPP				
	8/17/2011	5527.78	30.48	NPP	27.27	5500.51	NPP				
MW-05	4/11/2011	5548.56	37.20	NPP	NWP -	NWP	NPP				
	8/17/2011	5548.56	37.20	NPP	NWP	NWP	NPP				
MW-06	4/11/2011	5554.61	48.00	NPP	NWP	NWP	NPP				
	8/17/2011	5554.61	48.00	NPP	NWP	NWP	NPP				
MW-07	4/11/2011	5527.66	62.61	NPP	27.25	5500.41	NPP				
	8/17/2011	5527.66	62.61	NPP	27.65	5500.01	NPP				
MW-08	4/11/2011	5534.58	35.93	NPP	31.94	5502.64	NPP				
	8/17/2011	5534.58	35.93	NPP	31.72	5502.86	NPP				
MW-11	4/11/2011	5510.31	22.94	NPP	11.76	5498.55	NPP				
	8/16/2011	5510.31	22.94	NPP	11.64	5498.67	NPP				
MW-12	4/11/2011	5501.61	14.98	NPP	10.48	5491.13	NPP				
	8/16/2011	5501.61	14.98	NPP	10.92	5490.69	NPP				
MW-13	4/11/2011	5542.04	52.89	NPP	40.55	5501.49	NPP				
	8/16/2011	5542.04	52.89	NPP	40.61	5501.43	NPP				
MW-20	4/11/2011	5519.90	27.13	20.71	21.33	5499.07	0.62				
	8/18/2011	5519.90	27.13	20.73	21.34	5499.05	0.61				
MW-21	4/11/2011	5521.99	30.38	21.80	21.86	5500.18	0.06				
	8/18/2011	5521.99	30.38	21.84	21.87	5500.14	0.03				
MW-25	4/11/2011	5533.99	41.20	32.85	33.01	5501.11	0.16				
	8/17/2011	5533.99	41.20	NPP	32.97	5501.02	NPP				
MW-26	4/11/2011	5517.88	25.11	NPP	17.50	5500.38	NPP				
10107	8/16/2011	5517.88	25.11	NPP	17.58	5500.30	NPP				
MW-27	4/11/2011	5518.67	24.42	NPP	18.89	5499.78	NPP				
MW-29	8/16/2011	5518.67	24.42 28.62	NPP NPP	20.26 23.23	5498.41	NPP NPP				
10100-29	4/11/2011 8/17/2011	5524.97	28.62	NPP NPP	23.23	5501.74 5501.93	NPP NPP				
MW-30	4/11/2011	5536.83	40.13	NPP	34.42	5502.41	NPP NPP				
10100-00	8/17/2011	5536.83	40.13	NPP	34.03	5502.80	NPP				

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Ta. ( Fluid Level Measurements Summary

Well ID	Date	Measuring Point Elevation (ft amsl)	<b>Total Well</b> <b>Depth</b> (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
MW-31	4/11/2011	5536.24	39.16	NPP	34.24	5502.00	NPP
	8/16/2011	5536.24	39.16	NPP	34.30	5501.94	NPP
MW-32	4/11/2011	5525.64	27.51	NPP	25.23	5500.41	NPP
	8/16/2011	5525.64	27.51	NPP	25.27	5500.37	NPP
MW-33	4/11/2011	5521.79	25.51	NPP	22.52	5499.27	NPP
	8/16/2011	5521.79	25.51	NPP	22.81	5498.98	NPP
MW-34	4/11/2011	5511.63	20.96	NPP	14.47	5497.16	NPP
	8/16/2011	5511.63	20.96	NPP	14.43	5497.20	NPP
MW-35	4/11/2011	5518.95	26.45	NPP	22.38	5496.57	NPP
	8/16/1934	5518.95	26.45	NPP	22.41	5496.54	NPP
MW-36	4/11/2011	5516.95	23.26	NPP	21.02	5495.93	NPP
***************************************	8/17/2011.	5516.95	23.26	NPP	20.98	5495.97	NPP
MW-37	4/11/2011	5519.62	27.58	NPP	23.60	5496.02	NPP
	8/16/2011	5519.62	27.58	NPP	23.63	5495.99	NPP
MW-38	4/11/2011	5519.19	26.82	NPP	23.85	5495.34	NPP
	8/16/2011	5519.19	26.82	NPP	23.96	5495.23	NPP
MW-39	4/11/2011	5520.83	38.34	NPP	25.80	5495.03	NPP
······	8/8/2011	5520.83	38.34	NPP	25.88	5494.95	NPP
MW-40	4/11/2011	5527.31	30.07	NPP	28.38	5498.93	NPP
	8/17/2011	5527.31	30.07	NPP	28.37	5498.94	NPP
MW-41	4/11/2011	5526.41	31.62	26.71	27.30	5499.58	0.59
	8/8/2011	5526.41	31.62	26.95	27.55	5499.34	0.60
MW-44	4/11/2011	5535.44	50.91	NPP	34.00	5501.44	NPP
	8/17/2011	5535.44	50.91	NPP	34.22	5501.22	NPP
MW-45	4/11/2011	5506.36	16.92	11.98	12.13	5494.35	0.15
	8/8/2011	5506.36	16.92	NPP	11.89	5494.47	NPP
MW-46	4/11/2011	5504.65	10.39	NPP	NWP	NWP	NPP
	8/8/2011	5504.65	10.39	NPP	NWP	NWP	NPP
MW-47	4/11/2011	5506.77	14.28	12.85	13.28	5493.83	0.43
	8/8/2011	5506.77	14.28	13.47	13.48	5493.30	0.01
P-03	4/11/2011	5510.77	22.73	NPP	11.25	5499.52	NPP
	8/8/2011	5510.77	22.73	NPP	11.26	5499.51	NPP

Tهـ ۱ Fluid Level Measurements Summary

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Fluid Level Measure	ments Summary

Well ID	Date	Measuring Point Elevation	Total Well Depth	Depth To Product	Depth To Water	Corrected Groundwater Elevation	SPH Thickness
		(ft amsl)	(ft below TOC)	(ft below TOC)	(ft below TOC)	(ft amsl)	(ft)
MW - 50	4/11/2011	5518.79	20.00	NPP	17.10	5501.69	NPP
	8/22/2011	5518.79	20.00	NPP	16.69	5502.10	NPP
MW - 51	4/11/2011	5515.58	20.00	NPP	14.94	5500.64	NPP
	8/22/2011	5515.58	20.00	NPP	14.55	5501.03	NPP
MW - 52	4/11/2011	5538.63	41.00	NPP	36.47	5502.16	NPP
	8/22/2011	5538.63	41.00	NPP	36.31	5502.32	NPP
MW - 53	4/11/2011	5541.32	41.50	NPP	39.05	5502.27	NPP
	8/22/2011	5541.32	41.50	NPP	38.97	5502.35	NPP
MW - 54	4/11/2011	5530.08	38.00	32.9	33.31	5497.10	0.41
	8/22/2011	5530.08	38.00	32.84	33.23	5497.16	0.39
MW - 55	4/11/2011	5519.84	27.25	NPP	22.04	5497.80	NPP
	8/22/2011	5519.84	27.25	NPP	21.27	5498.57	NPP
MW - 56	4/11/2011	5519.31	23.75	19.5	20.45	5499.62	0.95
	8/22/2011	5519.31	23.75	19.74	20.83	5499.35	1.09
MW - 57	4/11/2011	5521.17	24.25	21.27	22.85	5499.58	1.58
	8/22/2011	5521.17	24.25	21.3	22.78	5499.57	1.48
MW - 58	4/11/2011	5520.29	27.00	21.03	21.09	5499.25	0.06
	8/22/2011	5520.29	27.00	20.9	21.99	5499.17	1.09
MW - 59	4/11/2011	5545.20	44.25	NPP	43.43	5501.77	NPP
	8/25/2011	5545.20	44.25	NPP	43.49	5501.71	NPP
MW - 60	4/11/2011	5543.71	45.50	NPP	42.58	5501.13	NPP
	8/25/2011	5543.71	45.50	NPP	42.67	5501.04	NPP
MW - 61	4/11/2011	5539.41	10.25	36.65	37.00	5502.69	0.35
	8/8/2011	5539.41	10.25	36.67	37.25	5502.62	0.58
MW - 62	4/11/2011	5561.32	58.25	NPP	55.38	5505.94	NPP
	8/23/2011	5561.32	- 58.25	NPP	56.26	5505.06	NPP
MW - 63	4/11/2011	5547.26	46.00	NPP	44.93	5502.33	NPP
	8/24/2011	5547.26	46.00	NPP	45.00	5502.26	NPP
MW - 64	4/11/2011	5552.29	52.25	NPP	50.16	5502.13	NPP
	8/24/2011	5552.29	52.25	NPP	50.22	5502.07	NPP
MW - 65	4/11/2011	5539.62	44.25	NPP	37.05	5502.57	NPP
	8/22/2011	5539.62	44.25	NPP	37.06	5502.56	NPP
MW - 66	4/11/2011	5544.62	43.25	41.83	41.92	5502.77	0.09
	8/8/2011	5544.62	43.25	41.87	. 41.92	5502.74	. 0.05

		Measuring	· · · · · · · · · · · · · · · · · · ·			Corrected	
		Point		Depth To	Depth To	Groundwater	SPH
Well ID	Date	Elevation	Depth	Product	Water	Elevation	Thickness
•		(ft amsl)	(ft below TOC)	(ft below TOC)	(ft below TOC)	(ft amsl)	(ft)
MW - 67	4/11/2011	5523.31	25.14	NPP	21.44	5501.87	NPP
	8/22/2011	5523.31	25.14	NPP	21.01	5502.30	NPP
MW - 68	4/11/2011	5517.37	20.58	NPP	16.84	5500.53	NPP
	8/22/2011	5517.37	20.58	NPP	16.58	5500.79	NPP
MW-69	4/11/2011	5508.51	12.08	NPP	NWP	NWP	NPP
	8/22/2011	5508.51	12.08	NPP	11.91	5496.60	NPP
RW-01	4/11/2011	5529.34	40.80	32.6	32.97	5496.67	0.37
	8/8/2011	5529.34	40.80	31.00	31.62	5498.22	0.62
RW-02	4/11/2011	5526.94	35.86	NPP	28.10	5498.84	NPP
	8/8/2011	5526.94	35.86	NPP	26.59	5500.35	NPP
RW-03	4/11/2011	5520.35	34.57	NPP	22.43	5497.92	NPP
	8/8/2011	5520.35	34.57	21.95	21.97	5498.40	0.02
RW-09	4/11/2011	5523.21	34.04	NPP	28.35	5494.86	NPP
•	8/8/2011	5523.21	34.04	24.00	24.01	5499.21	0.01
RW-14	4/11/2011	5537.50	41.94	36.77	36.97	5500.69	0.20
	8/8/2011	5537.50	41.94	35.02	36.14	5502.26	1.12
RW-15	4/11/2011	5536.83	43.43	NPP	37.23	5499.60	NPP
	8/8/2011	5536.83	43.43	NPP	34.95	5501.88	NPP
RW-16	4/11/2011	5535.45	41.48	NPP	38.59	5496.86	NPP
	8/8/2011	5535.45	41.48	34.01	34.32	5501.38	0.31
RW-17	4/11/2011	5533.84	41.89	NPP	32.97	5500.87	NPP
	8/8/2011	5533.84	41.89	NPP	33.06	5500.78	NPP
RW-18	4/11/2011	5529.38	37.58	NPP	35.41	5493.97	NPP
	8/8/2011	5529.38	37.58	NPP	35.43	5493.95	NPP
RW-19	4/11/2011	5530.51	36.64	NPP	30.67	5499.84	NPP
	8/8/2011	5530.51	36.64	NPP	30.29	5500.22	NPP
RW-22	4/11/2011	5524.44	35.60	27.87	29.44	5496.26	1.57
	8/8/2011	5524.44	35.60	NPP	26.01	5498.43	NPP
RW-23	4/11/2011	5521.38	35.53	NPP	30.50	5490.88	NPP
	8/8/2011	5521.38	35.53	23.34	23.35	5498.04	0.01
RW-28	4/11/2011	5527.93	36.99	29.3	29.55	5498.58	0.25
	8/8/2011	5527.93	36.99	29.4	29.65	5498.48	0.25
RW-42	4/11/2011	5527.48	32.02	27.05	27.70	5500.30	0.65
	8/8/2011	5527.48	32.02	27.15	28.05	5500.15	0.90
RW-43	4/11/2011	5520.02	24.03	20.61	20.68	5499.40	0.07
	8/8/2011	5520.02	24.03	21.65	21.70	5498.36	0.05

Ta. 1 Fluid Level Measurements Summary

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		F		easurements	Summary	Fluid Level Measurements Summary											
Well ID	Date	Measuring Point Elevation (ft amsl)	<b>Total Well</b> <b>Depth</b> (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)										
	4/44/0044	5500.00	40.00	NPP	40.05	5494.37	NPP										
OW 0+60	4/11/2011	5506.62	12.26	NPP NPP	12.25		NPP NPP										
	8/15/2011	5506.62	12.26		12.03 14.32	5494.59 5493.89	0.22										
OW 1+50	<u>4/11/2011</u> 8/15/2011	5508.03 5508.03	<u>    14.36</u> 14.36	<u>14.10</u> 14.28	14.32	5493.73	0.22										
					13.69	5493.63	0.08										
OW 3+85	4/11/2011 8/15/2011	5507.31 5507.31	15.06 15.06	<u>13.68</u> 13.77	13.78	5493.54	0.01										
	4/11/2011	5507.51	13.67	NPP	13.66	5493.93	NPP										
OW 5+50	8/15/2011	5507.59	13.67	NPP	13.63	5493.95	NPP										
4/11/2011	5504.78	14.67	NPP	NWP	<u>5493.90</u> NWP	NPP											
OW 6+70	8/15/2011	5504.78	14.67	NPP	NWP	NWP	NPP										
	4/11/2011	5506.53	15.99	NPP	NWP	NWP	NPP										
OW 8+10	8/15/2011	5506.53	15.99	· NPP	NWP	NWP	NPP										
	4/11/2011	5506.53	16.59	12.67	12.68	5494.03	0.01										
OW 11+15	8/15/2011	5506.70	16.59	NPP	12.55	5494.05	NPP										
	4/11/2011	5508.14	12.96	NPP	NWP	NWP	NPP										
OW 14+10				NPP NPP	NWP NWP	NWP NWP	NPP NPP										
· · · · · · · · · · · · · · · · · · ·	8/15/2011	5508.14	12.96	NPP		5495.51	NPP NPP										
OW 16+60	4/11/2011	5508.43	15.21	NPP NPP	12.92		NPP										
	8/15/2011	5508.43	15.21		13.14	5495.29											
OW 19+50	4/11/2011	5508.03	13.00	NPP	12.66	5495.37	NPP										
	8/15/2011	5508.03	13.00	NPP	NWP	NWP	NPP										
OW 22+00	4/11/2011	5506.91	14.16	NPP	11.92	5494.99	NPP										
	8/15/2011	5506.91	14.16	NPP NPP	13.06	5493.85	NPP NPP										
OW 23+10	4/11/2011	5514.12	18.34	NPP NPP	16.37	5497.75	NPP NPP										
	8/15/2011	5514.12	18.34		16.41	5497.71											
OW 23+90	4/11/2011	5515.18	18.01	NPP	17.18	5498.00	NPP										
	8/15/2011	5515.18	18.01	NPP	17.21	5497.97	NPP										
OW 25+70	4/11/2011	5509.00	13.98	NPP	10.84	5498.16	NPP										
	8/15/2011	5509.00	13.98	NPP	10.87	5498.13	NPP										
CW 0+60	4/11/2011	5506.68	14.09	NPP NPP	9.09	5497.59	NPP NPP										
	8/15/2011	5506.68	14.09		8.54	5498.14											
CW 1+50	4/11/2011	5505.13	13.74	NPP	7.54	5497.59	NPP										
	8/15/2011	5505.13	13.74	NPP NPP	7.08	5498.05	NPP										
CW 3+85	4/11/2011	5503.87	13.11		6.13	5497.74											
	8/15/2011	5503.87	13.11	NPP	5.95	5497.92	NPP										
CW 5+50	4/11/2011	5503.76	12.27	NPP	6.61	5497.15	NPP										
	8/15/2011	5503.76	12.27	NPP	6.53	5497.23	NPP										
CW 6+70	4/11/2011	5503.84	11.45	NPP	6.83	5497.01	NPP										
	8/15/2011	5503.84	11.45	NPP	6.90	5496.94	NPP										

# Ta. 1 Fluid Level Measurements Summary

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)
014 0 40	4/11/2011	5504.02	11.63	NPP	7.84	5496.18	NPP
CW 8+10	8/15/2011	5504.02	11.63	NPP	7.68	5496.34	NPP
014/01/45	4/11/2011	5503.80	12.60	NPP	7.97	5495.83	NPP
CW 8+45	8/15/2011	5503.80	12.60	NPP	7.80	5496.00	NPP
0144445	4/11/2011	5503.95	12.27	NPP	6.14	5497.81	NPP
CW 11+15	8/15/2011	5503.95	12.27	NPP	6.18	5497.77	NPP
014/44/40	4/11/2011	5504.39	13.05	NPP	6.60	5497.79	NPP
CW 14+10	8/15/2011	5504.39	13.05	NPP	6.32	5498.07	NPP
014/40.00	4/11/2011	5504.32	12.86	NPP	6.35	5497.97	NPP
	8/15/2011	5504.32	12.86	NPP	6.12	5498.20	NPP
01440.50	4/11/2011	5504.52	9.99	NPP	6.60	5497.92	NPP
CW 19+50	8/15/2011	5504.52	9.99	NPP	6.51	5498.01	NPP
0144 00 100	4/11/2011	5508.04	12.34	NPP	8.95	5499.09	NPP
	8/15/2011	5508.04	12.34	NPP	8.90	5499.14	NPP
CW 23+10 -	4/11/2011	5510.04	14.65	NPP	10.60	5499.44	NPP
	8/15/2011	5510.04	14.65	NPP	10.55	5499.49	NPP
014 00 00	4/11/2011	5507.32	11.72	NPP	8.10	5499.22	NPP
CW 23+90	8/15/2011	5507.32	11.72	NPP	7.97	5499.35	NPP
0144.05.05	4/11/2011	5505.90	12.25	NPP	Active Rec	overy Well	NPP
CW 25+95	8/15/2011	5505.90	12.25	NPP	Active Recovery Well		NPP
	1/4/2011	5508.27	53.08	NPP	52.57	5455.70	NPP
-	1/17/2011	5508.27	53.08	NPP	52.56	5455.71	NPP
	1/31/2011	5508.27	53.08	NPP	52.57	5455.70	NPP
SW1-0206	2/17/2011	5508.27	53.08	NPP	52.58	5455.69	NPP
	8/18/2011	5508.27	53.08	NPP	52.61	5455.66	NPP
	9/19/2011	5508.27	53.08	NPP	52.68	5455.59	NPP
	11/16/2011	5508.27	53.08	NPP	52.58	5455.69	NPP
	1/4/2011	5507.75	27.69	NPP	26.05	5481.70	NPP
-	1/17/2011	5507.75	27.69	NPP	26.02	5481.73	NPP
-	1/31/2011	5507.75	27.69	NPP	25.99	5481.76	NPP
SW2-0206	2/17/2011	5507.75	27.69	NPP	25.98	5481.77	NPP
Ī	8/18/2011	5507.75	27.69	NPP	25.76	5481.99	NPP
-	9/19/2011	5507.75	27.69	NPP	25.81	5481.94	NPP
	11/16/2011	5507.75	27.69	NPP	25.37	5482.38	NPP
	1/4/2011	5505.29	52.56	NPP	25.97	5479.32	NPP
-	1/17/2011	5505.29	52.56	NPP	26.02	5479.27	NPP
-	1/31/2011	5505.29	52.56	NPP	26.09	5479.20	NPP

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Ta، ۱ Fluid Level Measurements Summary

Well ID	Date	Measuring Point Elevation (ft amsl)	<b>Total Well</b> <b>Depth</b> (ft below TOC)	Depth To Product (ft below TOC)	Depth To Water (ft below TOC)	Corrected Groundwater Elevation (ft amsl)	SPH Thickness (ft)
SW3-0206	2/17/2011	5505.29	52.56	NPP	26.20	5479.09	NPP
Ē	8/18/2011	5505.29	52.56	NPP	26.46	5478.83	NPP
Ī	9/19/2011	5505.29	52.56	NPP	26.15	5479.14	NPP
Ī	11/16/2011	5505.29	52.56	NPP	25.90	5479.39	NPP
	1/4/2011	5504.45	42.34	NPP	32.62	5471.83	NPP
Ī	1/17/2011	5504.45	42.34	NPP	32.61	5471.84	NPP
Ē	1/31/2011	5504.45	42.34	NPP	32.56	5471.89	NPP
SW4-0206	2/17/2011	5504.45	42.34	NPP	32.56	5471.89	NPP
Ī	8/18/2011	5504.45	42.34	NPP	33.03	5471.42	NPP
Ī	9/19/2011	5504.45	42.34	NPP	33.10	5471.35	NPP
Ĩ	11/16/2011	5504.45	42.34	NPP	32.91	5471.54	NPP
	1/4/2011	5514.34	52.24	NPP	34.28	5480.06	NPP
	1/17/2011	5514.34	52.24	NPP	34.35	5479.99	NPP
-	1/31/2011	5514.34	52.24	NPP	34.35	5479.99	NPP
SW5-0206	2/17/2011	5514.34	52.24	NPP	34.37	5479.97	NPP
Ī	8/18/2011	5514.34	52.24	NPP	35.07	5479.27	NPP
ľ	9/19/2011	5514.34	52.24	NPP	35.05	5479.29	NPP
ľ	11/16/2011	5514.34	52.24	NPP	34.56	5479.78	NPP
	1/4/2011	5519.72	47.41	NPP	42.15	5477.57	NPP
[	1/17/2011	5519.72	47.41	NPP	41.36	5478.36	NPP
Ī	1/31/2011	5519.72	47.41	NPP	41.26	5478.46	NPP
SW6-0206	2/17/2011	5519.72	47.41	NPP	41.20	5478.52	NPP
Ī	8/18/2011	5519.72	47.41	NPP	42.53	5477.19	NPP
ļ.	9/19/2011	5519.72	47.41	NPP	42.83	5476.89	NPP
Ī	11/16/2011	5519.72	47.41	NPP	42.23	5477.49	NPP
	1/4/2011	5517.63	32.95	NPP	18.05	5499.58	NPP
-	1/17/2011	5517.63	32.95	NPP	18.03	5499.60	NPP
	1/31/2011	5517.63	32.95	NPP	18.09	5499.54	NPP
SW7-0206	2/17/2011	5517.63	32.95	NPP	18.33	5499.30	NPP
-	8/18/2011	5517.63	32.95	NPP	19.48	5498.15	NPP
ŀ	9/19/2011	5517.63	32.95	NPP	19.20	5498.43	NPP
-	11/16/2011	5517.63	32.95	NPP	18.73	5498.90	NPP

## Ta. 1 Fluid Level Measurements Summary

Notes:

NPP = No Product Present

NWP = No Water Present

ft = feet

TOC = top-of-casing

amsl = above mean sea level

SPH = Separate-Phase Hydrocarbon

Table 2Groundwater Field Parameter Summary

Jacotion A	8. •. •. •. •* ·	Total Disolved	Electrical		Temperature	Dissolved	Oxidation
Location ID	Date	Solids	Conductivity	pН		S Oxygen	Reduction Potential
UI.		(mg/l)	(mmhos/cm)		(⁰F)	(mg/l).	(mV)
	Aug-11	533	762	6.80	68.6	10.8	240
MW-1	Apr-11	541	766	6.77	52.2	4.08	241
	Aug-10	588	841	7.04	63.6	1.83	282
	Aug-11	nś	ns	ns	ns	ns	ns
MW-3	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	1712	2297	6.9	58.8	1.37	226.0
MW-4	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	1725	2323	6.94	64.7	1.49	266
	Aug-11	ns	ns	ns	ns	ns	ns
MW-5	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	ns	ns	ns	ns	ns	ns
MW-6	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	ns	ns	ns	ns	ns	ns
MW -7	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	1722	2306	6.90	58.8	1.37	226
MW-8	Apr-11	2289	2951	4.79	55.0	5.30	251
	Aug-10	1712	2258	6.60	58.9	2.14	276
	Aug-11	1986	2645	6.90	60.3	1.41	209
MW-11	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	1906	2545	7.03	66.4	1.98	254
	Aug-11	356	520	7.00	62.2	0.48	209
MW-12	Apr-11	1077	1476	6.94	51.1	2.58	245
	Aug-10	390	563	7.03	64.3	0.63	286
	Aug-11	2590	3312	6.80	61.9	1.87	252
MW-13	Apr-11	3163	3958	6.64	59.7	3.92	210
	Aug-10	2977	3816	6.97	62.9	1.13	255
	Aug-11	ns	ns	ns	ns	ns	ns
MW-20	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	ns	ns	ns	ns	ns	ns
MW-21	Apr-11	ns	ns	ns	ns	ns	ns
-	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	ns	ns	ns	ns	ns	ns
MW-25	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	2077	2751	6.9	63.3	1.6	230.0
MW-26	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	2046	2698	6.83	64.4	1.3	300
	Aug-11	2908	3741	6.9	60.8	1.0	289.0
MW-27	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	2211	2890	6.95	61.7	1.4	262
	Aug-11	797	1116	7.0	60.1	2.4	226.0
MW-29	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	772	1083	6.78	60.7	2.0	289

Table 2Groundwater Field Parameter Summary

Location ID	Date	Total Disolved Solids (mg/l)	Electrical Conductivity (mmhos/cm)	рН	Temperature (°F) <sup>*</sup>	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)
	Aug-11	2293	2986	6.9	62.2	1.1	151.0
MW-30	Apr-11	2419	3119	6.5	59.8	3.7	129.0
	Aug-10	2309	3014	6.82	62.5	1.2	206
	Aug-11	2598	3359	7.0	62.4	1.3	184.0
MW-31	Apr-11	ns	ns	ns	ns	<sup>·</sup> ns	ns
•	Aug-10	2857	3681	6.96	63.8	0.4	211
	Aug-11	3930	4901	7.1	59.2	5.4	189.0
MW-32	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	4148	51	6.99	61.3	6.4	. 274
	Aug-11	3468	4336	7.0	60.8	0.8	244.0
MW-33	Apr-11	3202	4017	6.9	57.4	2.2	212.0
	Aug-10	2973	3794	7.01	60.9	4.4	292
	Aug-11	1517	2073	7.0	59.1	0.6	176.0
MW-34	 Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	1286	1772	7.12	63.6	2.9	233
	Aug-11	1396	1921	7.1	60.4	1.1	154.0
MW-35	Apr-11	1313	1787	6.9	57.1	3.1	237.0
	Aug-10	1268	1742	7.05	62.3	1.4	246
MW-36	Aug-11	ns	ns	ns	ns	ns	ns
	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	1785	2405	7.1	60.3	0.6	209.0
MW-37	Apr-11	1668	2236	7.1	58.3	2.4	234.0
·	Aug-10	1686	2276	6.97	63.3	0.9	275
	Aug-11	954	1335	7.0	59.9	0.6	223.0
MW-38	Apr-11	1045	1447	7:1	58.4	1.5	226.0
	_ Aug-10	939	1317	6.99	64.7	0.6	276
	Aug-11	ns	ns	ns	ns	ns	ns
MW-39	Apr-11	ns	ns	ns	ns	ns	ns .
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	2129	2837	7.1	66.5	1.5	167.0
MW-40	Apr-11	· ns	ns	ns	ns	ns	ns
	Aug-10	2106	2790	7.00	68.8	1.0	281
MW-41	Aug-11	ns	ns	ns	ns	ns	ns
10100-41	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10 Aug-11	ns 3682	ns 4626	ns 7.0	ns 60.5	ns 2.2	ns 231.0
MW-44	Aug-11 Apr-11		ns	7.0 ns	00.5	2.2 NS	 
10100 44	Aug-10	4306	5296	6.78	60.6	2.6	320
	Aug-11	ns	ns	ns	ns	ns	ns
MW-45	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	ns	ns	ns	ns	ns	ns
MW-46	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	ns	ns	ns	ns	ns	ns
MW-47	Apr-11	ns	ns	ns	ns	ns	ns
t	Aug-10	ns	ns	ns	ns	ns	ns

Table 2Groundwater Field Parameter Summary

Location ID	Date	Total Disolved Solids (mg/l)	Electrical Conductivity (mmhos/cm)	рН	Temperature (ºF)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)
	Aug-11	453	650	6.7	59.5	6.1	183.0
MW-50	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	425	612	7.12	61.4	0.7	248
	Aug-11	351	509	6.9	61.1	4.8	181.0
MW-51	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	459	664	7.12	63.1	0.5	273
	Aug-11	3255	4139	6.9	60.7	3.1	201.0
MW-52	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	2801	3602	7.07	62.2	0.6	291
	Aug-11	3658	4574	6.9	59.6	3.6	215.0
MW-53	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	3394	4288	7.14	61.6	0.6	242
	Aug-11	ns	ns	ns	ns	ns	ns
MW-54	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	2284	3001	7.0	60.6	1.7	198.0
MW-55	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	2440	3160	6.85	61.1	1.3	277
	Aug-10 Aug-11	ns	ns	ns	ns	ns	ns
MW-56	Apr-11	ns	ns	ns	ns		ns
10100-00	Aug-10						
	Aug-10 Aug-11	ns ns	ns	ns	ns	ns	ns
MW-57	Aug-11 Apr-11	ns	ns ns	ns	ns ns	ns ns	ns
10101-01	Aug-10	ns	ns	ns ns	ns	ns	ns
	Aug-10 Aug-11	ns	ns		ns	ns	ns ns
MW-58	Apr-11	ns	ns	ns ns	ns	ns	ns
10100-00	Aug-10	1928	2562	6.95	65.3	1.7	279
	Aug-10 Aug-11	1812	2423	6.8	62.0	2.1	221.0
MW-59	Aug-11 Apr-11	ns	ns	ns	 ns	ns	ns
10100-00	Aug-10	1523	2067	6.90	62.4	0.6	287
	Aug-10 Aug-11	2743	3551	7.0	62.6	1.8	200.0
MW-60	Aug-11 Apr-11	ns			ns		
10100-00	Aug-10	1939	ns 2567	ns 6.88	61.5		ns 284
	Aug-10 Aug-11	ns		0.00 ns	01.5	0.7	ns
MW-61	Apr-11	ns	ns			ns	
14144-01	Aug-10	ns	ns	ns ns	ns ns	ns	ns ns
	Aug-10 Aug-11	5203	6247	7.0	60.5	50' cord -didn't reach	189.0
MW-62	Aug-11 Apr-11	<u>5205</u>	ns	ns	ns	ns	ns
101002	Aug-10	5330	6458	6.93	62.4	50' cord -didn't reach	297
	Aug-10 Aug-11	2651	3416	6.6	63.9	1.7	238.0
MW-63	Aug-11 Apr-11			ns	ns	ns	230.0 ns
11117-00	Aug-10	3809	4764	7.06	68.3	0.4	222
	Aug-10 Aug-11	4026	4989	6.7	61.5	4.2	235.0
MW-64		1	-				
10100-04	Apr-11	ns 4270	<u>ns</u>		ns 65.5	ns 4.6	251
	Aug-10	4279	5302	7.06	65.5	4.6	251
MME	Aug-11	2189	2866	7.1	63.0	0.6	169.0
MW-65	Apr-11	ns	ns	ns 7.05	ns cf. 0	ns	ns DAE
	Aug-10	2103	2787	7.05	65.8	0.4	245

Table 2Groundwater Field Parameter Summary

Location ID	Date	Total Disolved Solids (mg/l)	Electrical Conductivity (mmhos/cm)	рН	Temperature (°F)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)
	Aug-11	ns	ns	ns	ns	ns	ns
MW-66	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
104/07	Aug-11	712	1017	7.0	58.7	1.2	170.0
MW-67	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-11	809	1150	7.00	60.9	0.9	218
MW-68	Apr-11	ns	ns	ns	ns	ns	ns
1.00	Aug-11	ns	ns	ns	ns	ns	ns
MW-69	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-11	204	299	6.6	62.3	ns	212.0
Outfall No. 2	Apr-11	588	826	6.7	51.6	ns	218.0
	Aug-10	271	388	6.95	65.8	ns	271
	Aug-11	206	301	6.6	60.4	ns	238.0
Outfall No. 3		325	466	6.7	52.7	ns	197.0
	Aug-10	219	317	6.94	64.9	ns	274
	Aug-10 Aug-11	ns	ns	ns	ns	ns	ns
RW-1	Apr-11	ns	ns	ns	ns	ns	ns
1.1.4.4-1	Aug-10						
		ns	ns	ns	ns	ns	ns
	Aug-11	ns	ns	ns	ns	<u></u>	ns
RW-2	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	ns	ns	ns	ns	ns	ns
RW-3	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
DIALO	Aug-11	<u> </u>	ns	ns	ns	ns	ns
RW-9	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	2234	2925	6.91	62.0	1.4	241
<b>D</b> 1414	Aug-11	ns	ns	ns	ns	ns	ns
RW-4	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
<b>D</b> 14(45	Aug-11	2410	3130	6.8	60.9	4.1	243.0
RW-15	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	2540	3295	7.05	61.9	0.6	278
	Aug-11	ns	ns	ns	ns	ns	ns
RW-16	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	ns	ns	ns	ns	ns	ns
RW-17	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns .	ns	ns	ns	ns
	Aug-11	4098	5074	6.8	63.8	3.4	229.0
RW-18	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	4451	5434	6.94	65.8	2.3	132
	Aug-11	ns	ns	ns	ns	ns	ns
RW-19	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	ns	ns	ns	ns	ns	ns
RW-22	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns

Table 2Groundwater Field Parameter Summary

Location ID	Date	Total Disolved Solids (mg/l)	Electrical Conductivity (mmhos/cm)	рĤ	Temperature (°F)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)
	Aug-11	ns	ns	ns	ns	ns	ns
RW-23	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	1401	1911	7.00	64.2	2.2	241
	Aug-11	ns	ns	ns	ns	ns	ns
RW-28	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	ns	ns	ns	ns	ns	ns
RW-42	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	ns	ns	ns	ns	ns	ns
	Aug-11	ns	ns	ns	ns	ns	ns
RW-43	Apr-11	ns	ns	ns	ns	ns	ns
	Aug-10	1993	2647	6.75	70.0	130.0	124
	Aug-11	708	1005	6.6	68.2	3.0	155.0
	Apr-11	783	1092	6.7	52.6	4.8	168.0
CW 0+60	Aug-10	757	1067	6.82	67.2	2.6	280
	Apr-10	842	1197	7.0	52.7	2.3	289.0
	Aug-11	902	1271	7.0	69.9	1.2	138.0
	Apr-11	1127	1559	7.1	60.0	2.6	63.0
CW 25+95	Aug-10	960	1343	6.96	66.5	1.1	141
	Apr-10	675	965	7.0	52.2	1.3	255.0
	Aug-11	ns	ns	ns	ns		
_	Apr-11	ns	· ns	ns	ns	ns	ns
OW 0+60	Aug-10	1056	1469	6.75	67.2	2.1	77
	Apr-10	1122	1573	6.9	54.9		
	Aug-11	ns	ns	ns	ns	ns	ns
_	Apr-11	ns	ns	ns	ns	ns	ns
OW 1+50	Aug-10	ns	ns	ns	ns	ns	ns
	Apr-10	2023	2720	6.9	56.2	NR <sup>2</sup>	NR <sup>2</sup>
	Aug-11	ns	ns	ns	ns	ns	ns
	Apr-11	ns	ns	ns	ns	ns	ns
OW 3+85	Aug-10	2486	3224	6.71	66.2	2.2	78
	Apr-10	2371	3137	6.9	54.7		NR <sup>2</sup>
	Aug-11	ns	ns	ns	ns	ns	ns
014 5. 50	Apr-11	ns	ns	ns	ns	ns	ns
OW 5+50	Aug-10	2773	3577	6.76	69.1	1.9	114
	Apr-10	ns	ns	ns	ns	ns	ns
	Aug-11	ns	ns	ns	ns	ns	ns
01410.70	Apr-11	ns	ns	ns	ns	ns	ns
OW 6+70	Aug-10	ns	ns	ns	ns	ns	ns
	Apr-10	ns	ns	ns	ns	ns	ns
	Aug-11	ns	ns	ns	ns	ns	ns
·	Apr-11	ns	ns	ns	ns	ns	ns
OW 8+10	Aug-10	ns	ns	ns	ns	ns	ns
	Apr-10	, ns	ns	ns	ns	ns	ns
	Aug-11	1346	1857	6.8	66.7	2.3	202.0
0444	Apr-11	ns	ns	ns	ns	ns	ns
OW 11+15	Aug-10	ns	ns	ns	ns	ns	ns
	Apr-10	1394	1932	6.9	55.8		

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Table 2Groundwater Field Parameter Summary

Location ID	Date	Total Disolved Solids (mg/l)	Electrical Conductivity (mmhos/cm)	рH	Temperature (°F)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)
	Aug-11	ns	ns	ns	ns	ns	ns
OW 14+10	Apr-11	ns	ns	ns	ns	ns	ns
011 14:10	Aug-10	ns	ns	ns	ns	ns	ns
	Apr-10	ns	ns	ns	ns	ns	ns
	Aug-11	2011	2746	6.9	70.1	1.4	184.0
OW 16+60	Apr-11	1943	2567	6.8	58.3	5.5	200.0
000 10100	Aug-10	1982	2631	6.79	68.5	2.9	199
	Apr-10	1921	2601	6.9	58.3		
	Aug-11	ns	ns	ns	ns	ns	ns
OW 19+50	Apr-11	ns	ns	ns	ns	ns	ns
000 19:30	Aug-10	3568	4496	6.87	68.9	1.7	292
	Apr-10	3129	4005	6.9	54.7		
	Aug-11	2888	3739	7.0	69.4	2.5	149.0
OW 22+00	Apr-11	2468	3178	6.9	54.3	2.8	250.0
000 22+00	Aug-10	2953	3804	6.85	68.6	1.5	286
	Apr-10	2326	3075	6.8	52.4		
	Aug-11	1072	1503	7.0	69.1	1.3	128.0
OW 23+10	Aug-11	939	1304	7.0	57.6	1.9	192.0
000 23710	Aug-10	982	1379	6.90	69.5	1.1	272
	Apr-10	1070	1505	6.9	55.7		
	Aug-11	869	1228	7.0	69.0	1.8	151.0
OW 23+90	Aug-11	855	1193	7.0	58.4	2.7	203.0
011 23190	Aug-10	822	1159	6.97	67.8	2.1	238
	Apr-10	845	1203	6.9	56.1		
	Aug-11	544	781	7.0	69.3	1.1	171.0
OW 25+70	Apr-11	830	1160	7.0	56.1	1.5	190.0
000 25770	Aug-10	850	1199	6.94	70.4	1.0	273
	Apr-10	773	1100	6.9	51.8		
Notes:							

Notes:

ns = no sample collected

mV = millivolts

mg/l = milligrams per liter mmhos/cm = micro siemens per centimeter

			R	W-1				W-4				MW-8				RV	N-9			RV	V-15	1.10.10.10		RV	V-18	
		Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Apr-11	Aug-10	Aug-09	Aug-08	Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Aug-10	Aug-09	A
Organic Compounds (ug/L)	Sector States	1000		2.54	and the set			and the second		STREET, STREET,			Care a colo					Contraction (		MARINE STR		En la company			2.4.2 0.5	
1,1,1,2-Tetrachloroethane	5.24E+00 (5	) ((		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		
1,1,1-Trichloroethane	6.00E+01 (3	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		
1,1,2,2-Tetrachloroethane	1.00E+01 (3	)		< 10	< 10	< 20	< 20	< 40	< 20	< 2.0		< 2.0	< 2.0	< 2.0		< 100	< 40		< 40	< 200	< 100	< 40	< 40	< 40		-
1,1,2-Trichloroethane	5.00E+00 (2	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		-
1,1-Dichloroethane	2.50E+01 (3			< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		+
1,1-Dichloroethene	and the second second second second second			< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		+
1,1-Dichloropropene	0.002.00 (0			< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		+
1,2,3-Trichlorobenzene				< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		+
	0.005.00 /5			< 10	< 10	< 20	< 20	< 40	< 20	< 2.0		< 2.0	< 2.0	< 2.0		< 100	< 40		< 40	and the second s	Concession of the second s	< 40		A CONTRACTOR OF A CONTRACTOR O		
1,2,3-Trichloropropane	9.60E-02 (5				a second state of the state of	or the state of th	a a constant a second character	A REPORT OF A PROPERTY OF A REPORT OF		and an a state of the local division of the		stated and and a local division of the local	< 1.0	< 1.0			And a second second second second			< 200	< 100		< 40	< 40		-
1,2,4-Trichlorobenzene	7.00E+01 (2			< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0		and the second se		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		-
1,2,4-Trimethylbenzene	1.50E+01 (1			550	520	130	310	450	690	30		56	95	<1.0		390	710		1700	2200	1600	2900	400	240		-
1,2-Dibromo-3-chloropropane	2.00E-01 (2	)		< 10	< 10	< 20	< 20	< 40	< 20	< 2.0		< 2.0	< 2.0	< 2.0		< 100	< 40		< 40	< 200	< 100	< 40	< 40	< 40		_
1,2-Dibromoethane (EDB	5.00E-02 (2	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		
1,2-Dichlorobenzene	6.00E+02 (2	) (		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		
1,2-Dichloroethane (EDC	5.00E+00 (2	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	540	<20		
1,2-Dichloropropane	5.00E+00 (2	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		T
1,3,5-Trimethylbenzene	1.20E+01 (1	)		51	80	38	32	120	230	13		18	62	<1.0		56	110		510	670	430	680	< 20	25		T
1,3-Dichlorobenzene				< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		T
1,3-Dichloropropane	7.30E+02 (1	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		T
1,4-Dichlorobenzene	7.50E+01 (2	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		+
1-Methylnaphthalene	2.30E+00 (1			130	130	< 40	< 40	<80	61	25		16	13	<4.0		< 200	<80		110	< 400	< 200	92	720	320		+
2.2-Dichloropropane				< 10	< 10	< 20	< 20	< 40	< 20	< 2.0		< 2.0	< 2.0	< 2.0		< 100	< 40		< 40	< 200	< 100	< 40	< 40	< 40		-
2-Butanone	7.06E+03 (5	)		< 50	< 50	< 100	< 100	< 200	< 100	< 10		< 10	< 10	< 10		< 500	< 200		< 200	< 1000	< 500	< 200	< 200	< 200		+
	7.30E+02 (1				< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 1000	< 50	< 20				+
2-Chlorotoluene	1.30E+02 (1	)		< 5.0						and a state of the		and the second s					and the second sec				A COLUMN TO A COLUMN TWO IS NOT		< 20	< 20		+
2-Hexanone				< 50	< 50	< 100	< 100	< 200	< 100	< 10		< 10	< 10	< 10		< 500	< 200		< 200	< 1000	< 500	< 200	< 200	< 200		-
2-Methylnaphthalen		)	-	190	190	49	49	<80	88	37		27	22	<4.0		<200	<80		170	<100	<200	150	< 80	< 80		-
4-Chlorotoluene	2.60E+03 (1	) (		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		-
4-Isopropyltoluene				17	11	< 10	< 10	< 20	14	< 1.0		1.3	4.7	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		
4-Methyl-2-pentanon				< 50	< 50	< 100	< 100	< 200	< 100	< 10		< 10	< 10	< 10		< 500	< 200		< 200	< 1000	< 500	< 200	< 200	< 200		
Acetone	2.18E+04 (5	)		< 50	< 50	< 100	< 100	< 200	< 100	< 10		19	< 10	< 10		< 500	< 200		< 200	< 1000	< 500	< 200	< 200	< 200		T
Benzene	5.00E+00 (2	)		140	200	160	570	220	530	1.4		<1.0	24	<1.0		3900	9500		2800	4300	3000	6000	42	230		T
Bromobenzene	2.00E+01 (1	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		T
Bromodichloromethane	1.17E+00 (5	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		T
Bromoform	8.50E+00 (1	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		+
Bromomethane	8.66E+00 (5	)		< 15	< 15	< 30	< 30	< 60	< 30	< 3.0		< 3.0	< 3.0	< 3.0		< 150	< 60		< 60	< 300	< 150	< 60	< 60	< 60		+
Carbon disulfide		)		< 50	< 50	< 100	< 100	< 200	< 100	< 10		< 10	< 10	< 10		< 500	< 200		< 200	< 1000	< 500	< 200	< 200	< 200		+
Carbon Tetrachloride	and the second se	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		+
Chlorobenzene	1.00E+02 (2	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		+
Chloroethane	1.002102 (2	1		< 10	< 10	< 20	< 20	< 40	< 20	< 2.0		< 2.0	< 2.0	< 2.0		< 100	< 40		< 40	< 200	< 100	< 40	< 40	< 40		+
the second s	1.005+02 /2			And and the second s				and the second se	< 10			< 1.0	< 1.0	< 1.0		and the Construction of th	< 20				and the second se		and the second state of th	and the second se		+
Chloroform	1.00E+02 (3	)		< 5.0	< 5.0	< 10	< 10	< 20	and the second division of the second divisio	< 1.0		and the second se	and the second se	the subscription of a state of the state of		< 50	and the second sec		< 20	< 100	< 50	< 20	< 20	< 20		4
Chloromethane	1.78E+01 (5	)		< 15	< 15	< 30	< 30	< 60	< 30	< 3.0		< 3.0	< 3.0	< 3.0		< 150	< 60		< 60	< 300	< 150	< 60	< 60	< 60		4
cis-1,2-DCE	7.00E+01 (2	)	-	< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		-
cis-1,3-Dichloropropene			-	< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		+
Dibromochloromethane	1.47E+00 (5	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		1
Dibromomethane	3.70E+02 (1	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		-
Dichlorodifluoromethane	3.95E+02 (5	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		
Ethylbenzen	7.00E+02 (2	)		140	210	69	45	56	110	9.9		15	47	<1.0		370	890		2500	3600	2500	4100	90	48		1
Hexachlorobutadien	8.60E-01 (1	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		T
Isopropylbenzen	6.79E+02 (5	)		110	110	42	57	60	56	2.4		3.5	12	<1.0		<20	67		80	<100	64	150	29	<20		T
Methyl tert-butyl ether (MTBE	1.25E+02 (5	)		36	21	< 10	< 10	<20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	3400		71	<100	< 50	30	2200	1600		+
Methylene Chloride	And the second statement of th	)		< 15	< 15	< 30	< 30	< 60	< 30	< 3.0		< 3.0	< 3.0	< 3.0		< 150	< 60		< 60	< 300	< 150	< 60	< 60	< 60		T
Naphthalene	and the second data was not as a s	)		230	260	100	120	100	170	20		18	19	<2.0		<100	110		470	590	380	620	< 40	70		+
n-Butylbenzen				16	16	< 10	< 10	34	36	2.3		<1.0	<1.0	<1.0		< 50	<20		25	<100	< 50	73	36	<20		+
n-Propylbenzen				120	140	37	59	59	60	3.7		6.8	13	<1.0		<50	88		270	370	230	390	52	22		+
sec-Butylbenzen				28	23	< 10	10	< 20	12	< 1.0		1.4	3.2	< 1.0		< 50	< 20		< 20	< 100	< 50	17	< 20	< 20		+
	1.00E+02 (2			< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20		and the second se		+
				and the second se		and the second se	and the second se		and the second se	and the second division of the second divisio	and the second se	and the second se	and the second se										< 20	< 20		+
tert-Butylbenzen				< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		+
Tetrachloroethene (PCE		)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		+
Toluen		)		< 5.0	< 5.0	< 10	< 10	<20	< 10	11		<1.0	210	<1.0		<50	<20		790	<100	2000	1000	< 20	< 20		
trans-1,2-DCE		)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		
trans-1,3-Dichloropropen		)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		
Trichloroethene (TCE	) 5.00E+00 (2	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0	/	< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		
Trichlorofluoromethane	1.29E+03 (5	)		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		T
Vinyl chloride	1.00E+00 (3	) ((		< 5.0	< 5.0	< 10	< 10	< 20	< 10	< 1.0		< 1.0	< 1.0	< 1.0		< 50	< 20		< 20	< 100	< 50	< 20	< 20	< 20		T
	6.20E+02 (3			14	67	140	140	650	1600	76		37	480	<1.5		550	2200		9700	16000	11000	21000	< 30	93		-

International problem         Internatinternatintera problem         Internatintera problem <th>Aug-11 Aug-1</th> <th>Aug-08</th> <th></th> <th></th> <th>Aug-11</th> <th>Aug-08</th> <th></th> <th></th> <th>Aug-11</th> <th>Aug-09 Aug-08</th> <th></th> <th>Apr-11</th> <th>Aug-11</th> <th>Aug. 09</th> <th></th> <th></th> <th>Aug 11</th> <th>A.v. 00</th> <th></th> <th></th> <th>Aug 11</th> <th></th> <th></th>	Aug-11 Aug-1	Aug-08			Aug-11	Aug-08			Aug-11	Aug-09 Aug-08		Apr-11	Aug-11	Aug. 09			Aug 11	A.v. 00			Aug 11		
Stem Vote Support Components of a series of	Aug-11 Aug-1	Aug-08	Aug-09	Aug-10	Aug-11	Aug-08	Aug-09	AUG-10	I AUG-11														
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $									1	Aug-00 Aug-00	Aug to	Api-II	nugiti	Aug-00	Aug-09	Aug-10	Aug-11	Aug-08	Aug-09	Aug-10	Aug-11		
12.Debinsone         160-10         n		< 10	< 10				< 50			< 10 < 10				< 10	< 10			< 10	< 10			7.00E+01 (2)	
13.0600000000000000000000000000000000000	 	the second se																	and the second se				
i i diamonester         Store II         m	 														and the second se								
Hidde Number 236-00 (1)         -        -        -         -	 									and the second se												7.50E+01 (2)	
24.8 Holosophical 385401 (b)         -        -         -         -<	 	< 10	< 10				< 50			< 10 < 10				< 10				< 10	< 10				
24-0-decomponent         1164-02         0         -        -	 	< 10	< 10											< 10	< 10			< 10	< 10			3.65E+03 (5)	2,4,5-Trichlorophenol
j Admenyster         Solid S	 																						2,4,6-Trichlorophenol
Skampinger         Skampin	 and a second	and the second se																					
24-Denotemary         2176-00         0         -        -	 	and a state of the								a starting and the second starting of t	Construction of Female Street,			and the second s	and the second descent the second sec							and the second se	
23-Bin requestions         33-Bin (1)         -        -         -        - <td> </td> <td>and the second difference of the second s</td> <td></td> <td></td> <td></td> <td></td> <td>and the second sec</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td>and the second se</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	 	and the second difference of the second s					and the second sec		-					and the second se									
	 Colorest and the second s																						
2-Chiogebres       138-12       0       -	 						and the second se			the second s													
2.Mathy pathware         1.054-01         1         -         4.0         4.0         -        -         -        - <td> </td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>and the second se</td> <td></td> <td>and the second se</td> <td></td> <td></td> <td></td> <td></td> <td></td>	 						and the second se											and the second se					
Description         Description <thdescription< th=""> <thdescription< th=""></thdescription<></thdescription<>	 	79	88				<50			12 < 10				82	34			540	410				
Bit Properties         ·        <	 	< 10	12				< 50			< 10 < 10				< 10	< 10			< 10	< 10			1.80E+03 (1)	2-Methylphenol
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	 																					1.10E+02 (1)	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	 																						
3.140 control $m$ <	 					in the second																	
4.6-Dinto-merry physics         i<         i<         i<<         i<<         i<<<         i<<<         i<<<         i<<<         i<<<<         i<<<<         i<<<<         i<<<<         i<<<<         i<<<<<         i<	 	and the second se				Constant State of the	and the second se							and the second se	and the second sec			and the second design of the s					
44Bronchendy plowy late       ·<       ·<       ·<       ·<       ·<       ·<       ·<       ·<       ·<       ·<       ·<       ·<       ·<       ·<       ·<       ·<       ·<       ·<       ·<<	 	and the second se		and the second s										and the second sec					and the second se				
4-Chiors-methylphend         ·<         ·<         ·<         ·< <td> </td> <td></td> <td>-</td> <td></td>	 											-											
4-Choopheny prepriete       -	 	< 10	< 10				< 50			< 10 < 10				< 10	< 10			< 10	< 10				
4-Nincening         3.06+00         (1)           < 20         < 20           <          <                                  <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <        <	 													< 10	< 10				< 10			3.40E-01 (1)	4-Chloroaniline
4 - Nitrophenol         -	 									and the second								and the second se					
Accange/Internel 215E+03 (6)           -<         -<         -<         -<         -<         -<         -<         -<         -<         -<         -<         -<         -<         -<         -<         -<         -< <th< td=""><td> and the second difference of the second s</td><td>and the second se</td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td>in the second</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>3.40E+00 (1)</td><td></td></th<>	 and the second difference of the second s	and the second se						-				in the second										3.40E+00 (1)	
Assemptive         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·	 									and the second se													
Anime       120E+01 (f)	 at a starting the second se	and the second se					and the second sec		-	and the second					and the second se			the second secon	and the second se			2.192+03 (5)	
Antracent         110E+04         65           <10         <          <10         <          <10         <          <10         <         <         <10         <10          <         <10         <10          <         <10         <10         <          <10         <10         <          <10         <10         <          <10         <10         <10         <          <10         <10         <10         <          <10         <10         <          <10         <10         <         <         <10         <10         <          <10         <10         <          <10         <10         <          <10         <10         <          <10         <10         <          <10         <10         <          <10         <10         <          <10         <10         <          <10         <10         <          <10         <10         <          <10 <th< td=""><td> and the second se</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1.20E+01 (1)</td><td></td></th<>	 and the second se																					1.20E+01 (1)	
Berz(a)antraces         921E-01         6)           <10         <10           <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10	 	< 10	< 10				< 50			< 10 < 10				< 10	< 10			< 10	< 10				
Benzolajorna         200E-01         (2)              <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <         <        <         <         <	 	< 10	< 10							< 10 < 10				< 10	< 10			< 10	< 10			1.20E-01 (1)	Azobenzene
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	 																		and the second s				
Benzo(g,h.)perylem         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<         ·<<         ·<         ·<         ·<         ·<	 		and the second s								-								and the second s				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	 																		and the second s			9.21E-01 (5)	
Benzoic acid         1.50E+06         (1)           < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20         < 20	 									and the second se								and the second se				9.21E+00 (5)	
Benzyl alcohol         180E+04         (1)          <10         <10         <          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10           <10         <10          <10         <10          <10         <10           <10         <10          <         <10         <10          <         <10         <10          <         <10         <10          <         <10         <10          <         <10         <10          <         <10         <10          <         <10         <10          <         <10         <10	 						and the local division of the local division			and a strength of the local strength of the st	and the second second				the second se			and the second se	the second			and the second se	and the second
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	 						< 50																
Bis(2-chloroisoprop/)ether         9.00E+00         (5)           <10         <10           <10         <10           <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10         <10          <10	 	the second se	and the second se							and the second se									< 10			1.10E+02 (1)	Bis(2-chloroethoxy)methane
Bis(2-ethyl)phthalate         6.00E+00         (2)          31         < 10          < 10         22           < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 50           < 10         < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10         < 10          < 10         < 10	 and the second		and the state of the local division of the l				and the second sec			and the second se													
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          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10          < 10         < 10	 									and the second se							-						
Carbazole       -	 									and the second se									the second se				
Chrysene       9.21E+01       (5)         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10	 	and the second se	and the second design of the s																			3.50E+01 (1)	
Dibenz(a,h)anthracene       9.21E-02       (5)         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <	 													and the second se								9.21E+01 (5)	
Diethyl phthalate       2.92E+04       (5)        -       (10)         (10)         (10)         (10)         (10)         (10)         (50)         (10)         (10)         (10)         (10)         (10)         (10)         (10)         (10)         (10)         (10)         (10)         (10)         (10)         (10)         (10)         (10)         (10)         (10)         (10)       (10)         (10)       (10)         (10)       (10)        (10)       (10)        (10)       (10)        (10)       (10)        (10)       (10)        (1	 	< 10	< 10				< 50			< 10 < 10				< 10	< 10				< 10			and the second second second	
Dimethyl phthalate       3.65E+05       (5)         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <10       <10         <	 	< 10													< 10				<10				Dibenzofuran
Di-n-bulyi phthalate       3.65E+03       (5)        <10       <10        <       <10       <10        <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       < <t< td=""><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>and the state of the</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	 									and the state of the													
Di-noctyl phthalate       -       -       -         -       -       <       10       12       -       -       <       10       -       -       <	 																		and the second sec				
Fluoranthene       1.46E+03       (5)        < 10       < 10       <       < 10       < 10        < 10       < 10        < 10       < 10        < 10       < 10        < 50         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10         < 50         < 10       < 10         < 50         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10         < 50         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10	 																		and the second s	and the second s		3.00E+03 (5)	
Fluorene 1.46E+03 (5)	 									and the second se				and the second se					and the second sec		and the second s	1.46E+03 (5)	
	 														and the second se								
	 	< 10	< 10							< 10 < 10				< 10	< 10			< 10	< 10			1.00E+00 (2	Hexachlorobenzene
Hexachlorobutadiene 8.60E-01 (1) <10 <10 <10 <10 <10 <10 <10 <10 <50 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <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         < 50         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10         < 50         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10         < 50         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10         < 10       < 10        < 10       < 10         < 10       < 10        < 10       < 10        < 10       < 10        < 10	 																						
	 	and the second se	and the second s																				
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 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10	 																	and the second distance of the local distanc					
Sophicitier 1/012-02 (0) 150 290 48 96 11 <10 74 310 280	 																						
Nitrobenzene 1.49E+01 (5) <10 <10 <10 <10 <10 <10 <10 <10 <50 <10 <10	 	< 10	< 10							< 10 < 10								< 10	< 10				
N-Nitrosodimethylamine 1.32E-02 (5) <10 <10 <10 <10 <10 <10 <10 <10 <50 <10 <10 <10 <10	 		and the second division of the second divisio																	-			
N-Nitrosodipropylamine 9.60E-03 (1) <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10	 					and the second se																	
N-Nitrosodiphenylamine       1.37E+02       (5)        <10       <10        <10       <10        <10       <10        <10       <10        <50         <10       <10          Pentachlorophenol       1.00E+00       (2)        <40	 			the second second second second																			
Pentachlorophenol       1.00E+00       (2)        < 40       <       <       < 40       <        < 40       <        < 40       <        < 40       <        <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <       <      <	 	and the second sec	and the second se		and the second second									and the second se	and a reason of the local data was the local data in the local data was the local data wa				and the second s				
Phenalitinene 1.10E+03 (5)	 and the second se																						
Pyrene 1.10E+03 (5) <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10 <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 <50 <10 <10 <10 <10	 	< 10	< 10				< 50												< 10				

<2.0 0 330 22 <2.0 <c  3.50 2  &lt;2.0 <c  &lt;10.0 <c  &lt;10.0 <c  1100 11  1100 11  1100 11  1100 11  &lt;0.02 <c  &lt;0.02 <c  &lt;0.002 &lt;0  &lt;0.005 &lt;0  &lt;0.005 &lt;0  &lt;0.005 &lt;0  &lt;0.005 &lt;0  &lt;0.005 &lt;0  &lt;0.002 &lt;0</c </c </c </c </c </c 	0.31         0.           250         11           <0.50         2.           <0.10         2.           <0.00         2.           <0.00         2.           <0.00            <0.50            <0.50            <0.50            <0.50         3           1100         11           <0.02         0.0           1100         11           <0.02            <0.02            <0.02            <0.002            <0.002            <0.005            <0.005            <0.005	ug-11         Aug-10           0.21         0.25           150         180           2.3*         <0.50           2.0         2.60           0.50         <2.5           3.0         3.20           990         1000           100         1000           100         1000           0.021         0.046           1.9         2.7           0.002         <0.002           .066         0.14           0057         0.05           0.05         <0.05           0.05         <0.05	Aug-09 0.29 180 <2.0 2.70 <0.10 <0.05 6.50 1100 1100 1100 <0.02 2 <0.002 2 0.0084 0.0081	0.23 190 <0.10 3.50 <0.10 <0.50 4.40 1000 1000 1000 <0.02 <b>1.3</b> <0.002	0.72 190 8.6* 1.10  <0.50 1000 62 <20 <20 <20 0.18 0.13	Apr-11	Aug-10 1.4 96 <2.0 0.64 0.21 <0.50 1300 <5.0 <5.0 <5.0 <0.02	Aug-09 0.33 20 <0.10 0.23 0.50 <0.50 <100 110 110 110 12002	Aug-08 0.69 180 0.12 1.60 <b>24.00</b> <0.50 <b>790</b> 220 230 230	Aug-11	Aug-10 <1.0 230 <1.0 4.90 <1.0 <5.0 6.30 1300 1300 1300	Aug-09 <1.0 160 <1.0 4.50 <1.0 <5.0 280.00 920 1000 1000	Aug-08	Aug-11 <0.5 <b>380</b> <0.50 7.70 <0.50 <2.5 2.90 1100 1200 1200	Aug-10 0.25 470 <2.0 7.80 0.33 <0.50 <0.50 1200 1200 1200	Aug-09 <0.10 <0.10 1.60 <0.10 <0.50 1.30 980 1100 1100	Aug-08 0.29 420 <2.0 7.80 <0.10 <0.50 0.76 1200 1200 1200	Aug-11 <2.0 310 <2.0 3.20 <2.0 <10 3300 480 520 520	Aug-10 <2.0 380 <2.0 4.30 <2.0 <10 1700 950 950	Aug-09
330 2 <2.0 <c  3.50 2  &lt;2.0 <c  &lt;10.0 <c  &lt;10.0 <c  1100 11  1100 11  1100 11  &lt;10.0 <c  &lt;10.0 <c -</c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c 	250         11           <0.50         2           2.30         2           2.30         2           <0.10         <0           <0.50         <0           <0.50         3           1100         11           1100         11           <0.02         0.0           <0.02         0.0           <0.002         <0.0           <0.002         <0.0           <0.005         <0.0           <0.005         <0           <0.005         <0	150         180           2.3"         <0.50           2.0         2.60           0.50         <2.5           3.0         3.20           990         1000           100         1000           100         1000           0.021         0.046           1.9         2.7           0.002         <0.002           .066         0.14           0057         <0.05           0.05         <0.05	180           <2.0           2.70           <0.10           <0.05           6.50           1100           1100           <0.02           2           <0.002           0.0084	190           <0.10           3.50           <0.10           <0.50           4.40           1000           1000           1000           <0.02           1.3           <0.002	190 8.6* 1.10  <0.50 1000 62 <20 <20 <20 0.18 0.13		96 <2.0 0.64 0.21 <0.50 1300 <5.0 <5.0 <5.0	20 <0.10 0.23 0.50 <0.50 410 100 110 110	180 0.12 1.60 <b>24.00</b> <0.50 <b>790</b> 220 230		230 <1.0 4.90 <1.0 <5.0 6.30 1300 1300	160 <1.0 4.50 <1.0 <5.0 280.00 920 1000		380 <0.50 7.70 <0.50 <2.5 2.90 1100 1200	470 <2.0 7.80 0.33 <0.50 <0.50 1200 1200	460 <0.10 1.60 <0.10 <0.50 1.30 980 1100	420 <2.0 7.80 <0.10 <0.50 0.76 1200 1200	310 <2.0 3.20 <2.0 <10 3300 480 520	380 <2.0 4.30 <2.0 <10 1700 950 950	
330 2 <2.0 <c  3.50 2  &lt;2.0 <c  &lt;10.0 <c  &lt;10.0 <c  1100 11  1100 11  1100 11  &lt;10.0 <c  &lt;10.0 <c -</c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c </c 	250         11           <0.50	150         180           2.3"         <0.50	180           <2.0	190           <0.10	190 8.6* 1.10  <0.50 1000 62 <20 <20 <20 0.18 0.13		96 <2.0 0.64 0.21 <0.50 1300 <5.0 <5.0 <5.0	20 <0.10 0.23 0.50 <0.50 410 100 110 110	180 0.12 1.60 <b>24.00</b> <0.50 <b>790</b> 220 230		230 <1.0 4.90 <1.0 <5.0 6.30 1300 1300	160 <1.0 4.50 <1.0 <5.0 280.00 920 1000		380 <0.50 7.70 <0.50 <2.5 2.90 1100 1200	470 <2.0 7.80 0.33 <0.50 <0.50 1200 1200	460 <0.10 1.60 <0.10 <0.50 1.30 980 1100	420 <2.0 7.80 <0.10 <0.50 0.76 1200 1200	310 <2.0 3.20 <2.0 <10 3300 480 520	380 <2.0 4.30 <2.0 <10 1700 950 950	
<2.0 <0 3.50 2 <2.0 <0 <10.0 <0 <10.0 <0 1100 11 1100 11 1100 11 <0.02 <0 <0.02 <0 <0.002 <0 <0.005 <0 <0.0	<0.50	2.3*         <0.50	<2.0	<0.10 3.50 <0.10 <0.50 4.40 1000 1000 1000 <0.02 <b>1.3</b> <0.002	8.6* 1.10  <0.50 1000 62 <20 <20 <20 0.18 0.13		<2.0 0.64 0.21 <0.50 <b>1300</b> <5.0 <5.0 <5.0	<0.10 0.23 0.50 <0.50 410 100 110 110	0.12 1.60 <b>24.00</b> <0.50 <b>790</b> 220 230		<1.0 4.90 <1.0 <5.0 6.30 1300 1300	<1.0 4.50 <1.0 <5.0 280.00 920 1000		<0.50 7.70 <0.50 <2.5 2.90 1100 1200	<2.0 7.80 0.33 <0.50 <0.50 1200 1200	<0.10 1.60 <0.10 <0.50 1.30 980 1100	<2.0 7.80 <0.10 <0.50 0.76 1200 1200	<2.0 3.20 <2.0 <10 <b>3300</b> 480 520	<2.0 4.30 <2.0 <10 <b>1700</b> 950 950	
3.50 2 <2.0 <c  &lt;10.0 <c  &lt;10.0 <c  1100 11  1100 11  1100 11  &lt;10.0 <c  2.1 10  &lt;0.02 <c  &lt;0.002 &lt;0  &lt;0.005 &lt;0  &lt;0.025 <c  &lt;0.005 &lt;0  &lt;0</c </c </c </c </c </c 	2:30         2           <0.10	2.0         2.60           0.50         <0.50	2.70 <0.10 <0.05 6.50 1100 1100 1100 2.002 2.002 2.0002 0.0084	3.50 <0.10 <0.50 4.40 1000 1000 1000 <0.02 <b>1.3</b> <0.002	1.10  <0.50 1000 62 <20 <20 0.18 0.13		0.64 0.21 <0.50 <b>1300</b> <5.0 <5.0 <5.0	0.23 0.50 <0.50 410 100 110 110	1.60 <b>24.00</b> <0.50 <b>790</b> 220 230		4.90 <1.0 <5.0 6.30 1300 1300	4.50 <1.0 <5.0 280.00 920 1000		7.70 <0.50 <2.5 2.90 1100 1200	7.80 0.33 <0.50 <0.50 1200 1200	1.60 <0.10 <0.50 1.30 980 1100	7.80 <0.10 <0.50 0.76 1200 1200	3.20 <2.0 <10 <b>3300</b> 480 520	4.30 <2.0 <10 <b>1700</b> 950 950	
3.50 2 <2.0 <c  &lt;10.0 <c  &lt;10.0 <c  1100 11  1100 11  1100 11  &lt;10.0 <c  2.1 10  &lt;0.02 <c  &lt;0.002 &lt;0  &lt;0.005 &lt;0  &lt;0.025 <c  &lt;0.005 &lt;0  &lt;0</c </c </c </c </c </c 	2.30         2           <0.10	0.50         <0.50	<0.10 <0.05 6.50 1100 1100 1100 1100 2 <0.02 <b>2</b> <0.002 0.0084	<0.10 <0.50 4.40 1000 1000 <0.02 <b>1.3</b> <0.002	 <0.50 1000 62 <20 <20 <b>0.18</b> 0.13		0.64 0.21 <0.50 <b>1300</b> <5.0 <5.0 <5.0	0.50 <0.50 410 100 110 110	24.00 <0.50 790 220 230		<1.0 <5.0 6.30 1300 1300	<1.0 <5.0 280.00 920 1000		7.70 <0.50 <2.5 2.90 1100 1200	7.80 0.33 <0.50 <0.50 1200 1200	1.60 <0.10 <0.50 1.30 980 1100	7.80 <0.10 <0.50 0.76 1200 1200	3.20 <2.0 <10 <b>3300</b> 480 520	4.30 <2.0 <10 <b>1700</b> 950 950	
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<0.02 <( 2.1 1 <0.002 <0 <0.006 <0 <0.005 <0 <0.25 <( <0.005 <0 <0.002 <0. <0.002 <0	<0.02 0.0 1.7 1 <0.002 <0. <0.006 0.0 <0.005 0.0 <0.05 <0 <0.005 <0.	.021         0.046           1.9         2.7           0.002         <0.002	<0.02 <b>2</b> <0.002 0.0084	<0.02 <b>1.3</b> <0.002	0.18 0.13				230		1300	1000		1200	1200	1100	1200			
2.1             <0.002	1.7         1           <0.002	1.9         2.7           0.002         <0.002	<b>2</b> <0.002 0.0084	<b>1.3</b> <0.002	0.13		< 0.02	-0.00	and the second second								1200	020	300	
2.1             <0.002	1.7         1           <0.002	1.9         2.7           0.002         <0.002	<b>2</b> <0.002 0.0084	<b>1.3</b> <0.002	0.13		<0.02		-0.00		-0.00	-0.00			and the second					
<0.002 <0 <0.006 <0 <0.005 <0 <0.25 <0 <0.005 <0 <0.005 <0 <0.000 <0 <0.002 <0 <0.005 <0 <0 <0.005 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 	<0.002 <0. <0.006 0.0 <0.005 0.0 <0.05 <0 <0.005 <0.	0.002         <0.002           .066         0.14           0057         0.016           0.05         <0.05	<0.002 0.0084	<0.002			and the second se	<0.02	< 0.02		<0.02	< 0.02		< 0.02	< 0.02	<0.02	<0.02	0.1	< 0.02	
<0.006 <0 <0.005 <0 <0.25 <0 <0.005 <0 <0.0002 <0 <0.0002 <0	<0.006 0.0 <0.005 0.0 <0.05 <0 <0.005 <0.	.066         0.14           0057         0.016           0.05         <0.05	0.0084				0.1	0.034	<0.020		3.3	0.23		1.8	1.6	1.7	1.2	4.2	1.3	
<0.005 <0 <0.25 <0 <0.005 <0 <0.0002 <0 <0.002 <0	<0.005 0.0 <0.05 <0 <0.005 <0.	0057         0.016           0.05         <0.05			0.009		< 0.002	< 0.002	<0.002		<0.002	<0.002		< 0.002	< 0.002	< 0.002	< 0.002	0.013	0.0025	
<0.25 <0 <0.005 <0 <0.0002 <0.	<0.05 <0 <0.005 <0.	0.05 <0.05 0.005 <0.005	0.0081	< 0.006	0.98		3.7	0.021	0.0071		0.007	<0.006		< 0.006	<0.006	< 0.006	<0.006	0.17	0.075	
<0.005 <0 <0.0002 <0. <0.02 <0	<0.005 <0.	.005 <0.005		< 0.005	0.0086		< 0.005	<0.005	< 0.005		0.012	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	0.055	< 0.025	
<0.005 <0 <0.0002 <0. <0.02 <0			< 0.05	< 0.05	< 0.05		< 0.05	< 0.05	< 0.05		< 0.05	<0.25		< 0.05	< 0.05	< 0.05	< 0.05	<0.10	<0.25	
<0.02 <0	0.0002 <0.0	and the second se	< 0.005	< 0.005	< 0.005		< 0.005	<0.005	< 0.005		< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	< 0.005	
<0.02 <0		.0002 <0.0008	< 0.002	< 0.0002	0.074		0.0003	<0.0002	< 0.0002		<0.0008	< 0.0002		< 0.0002	< 0.0002	<0.0002	< 0.001	0.0059	0.0025	
							0.0000						States and states and	0.0002	-0.0002	-0.0002	-0.001	0.0000	0.0020	COLOR DE CARE OF
	<0.02 0.0	0061 <0.02	< 0.02	<0.02	0.0032		< 0.02	< 0.02	< 0.02		<0.02	< 0.02		0.011	< 0.02	< 0.02	< 0.02	0.0034	<0.02	
1.0	and the second se	1.8 1.9	1.7	1.3	0.014		0.025	0.025	<0.02		3.2	0.25		1.3	1.5	1.5	1.2	0.0034	0.048	
<0.002 <0		0.002 <0.002	<0.002	< 0.002	< 0.002		<0.023	< 0.023	<0.002		<0.002	<0.002	and the second sec							
				and the second sec	and the second se			and the second se	a construction of the state of					< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	
110		130 150	130		190		200	150			160	140		79	160	150	130	420	110	
		0.006 <0.006	< 0.006	< 0.006	0.09		3.2	< 0.006	0.007		< 0.006	<0.006		< 0.006	<0.006	<0.006	< 0.006	<0.006	< 0.006	
		.006 <0.006	0.017	< 0.006	<0.006		< 0.006	<0.006	< 0.006		<0.006	< 0.006		< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	
3.9 3	3.7 1	12 12	12	9.6	4.6		34	0.042	0.082		1.5	2.3		18	14	7.2	5.3	11	3	
<0.005 <0	<0.005 <0.	.005 <0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005		< 0.005	0.007		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
40	5	53 57	52		36		30	12			54	39		48	54	51	44	120	98	
2.5	2.5 2	2.6 3.3	3.2	3.1	2.4		9.9	0.61	0.027		2.1	2.2		1.2	2.3	4	2.8	6.2	0.56	
																		and the second se		
- 41	3	3.9 3.6	5.3		3.1		3.1	1.9			4.6	29		6.5	and the second se			and the second se	7	
		and the second se		<0.25					<0.25										<0.05	
and the second sec	and the second se	and the second sec		and the local data of the state of the	and the second sec		A A CONTRACTOR OF A DESIGNATION OF A DESIGNATIONO OF A DESIGNATIONO OF A DESIGNATIONO OF A	and the second se	and the second second second second		and the second se	the second s	the state of the lot o	and the second se		a discourse of the second s	and the second second second second			
					and the second se				and the second						the second data data and the second	and the second designed and the second s		and the second se		
				and the second sec																
the second se		and the second sec												and the second se						
<0.05 0.	0.052 0.	<0.05	<0.05	<0.05	0.22		0.17	<0.05	0.096		<0.05	< 0.05		0.052	< 0.05	< 0.05	0.054	0.063	< 0.05	
	and the second second							Sector Sector				and the second second				San Starting	the second s			
																3	6		0.23	
<0.005 <0	< 0.005 < 0	0.01 <0.010	< 0.01	< 0.010	0.011	<.001	< 0.001	0.21	< 0.001		< 0.05	< 0.05		0.79	<1.00	2.0	1.0	< 0.02	< 0.02	
0.14 0	0.21 0.0	.069 0.045	0.056	0.11	0.0099	0.0019	0.015	0.047	0.0077		0.37	0.89		2.5	3.6	2.5	4.1	0.09	0.048	
0.014 0.	0.067 0.	0.14 0.14	0.65	1.6	0.076	0.002	0.037	0.48	< 0.001		0.55	2.2		9.7	16	11	21	< 0.002	0.093	
0.036 0.	0.021 <0.	.001 <0.010	< 0.003	< 0.010	< 0.001	<.001	< 0.001	< 0.001	< 0.001		<.005	3.4		0.071	<0.10	<0.10	<0.10	2.2	1.6	
and the second of the second o	Contraction of the	Charles and the	Sector States	Sala Marsal	Contraction of the	Star Anna		Contraction Process	Land States States	Contraction of the		CONSTRUCTION OF			1000				1	
65	47 1	1.1 1.1	9	17	0.48		0.34	<1.0	0.55		8.8	14		1.8	5.7	9.4	48	470	910	
			6.4										and the second diversity of the second se			and the second s				
							and the second sec													
	40        2.5            4.1        4.1        4.1        4.1        5.70        5.70        <0.005	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	40          53         57           2.5         2.5         2.6         3.3            4.1          3.9         3.6            <0.05         <0.25         0.0063         <0.05            <0.005         <0.005         <0.0063         <0.005            <0.005         <0.005         <0.0005         <0.005            <0.001         <0.001         <0.001         <0.001            <0.014         <0.22         <0.16         <0.57            <0.014         <0.21         <0.069         <0.045            <0.014         <0.067         <0.14         <0.14            <0.036         <0.021         <0.001         <0.010            <0.336         <0.21         <0.001         <0.010            <0.336         <0.21         <0.001         <0.010              <0.021         <0.001         <0.010               <0.011         <0.010 <t< td=""><td><math display="block">\begin{array}{c ccccccccccccccccccccccccccccccccccc</math></td><td><math display="block"> \begin{array}{c ccccccccccccccccccccccccccccccccccc</math></td><td><math display="block"> \begin{array}{c ccccccccccccccccccccccccccccccccccc</math></td></t<>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

Table 3 Refinery Wells Analytical Summary

A

 (ug/l):

 tene
 7.00E+01
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 tene
 6.00E+02
 (.

 tene
 .
 .

 tene
 7.50E+01
 (2.
 .

 tene
 2.30E+00
 (1.
 .

 nol
 3.65E+03
 (6.
 .

 nol
 3.65E+03
 (6.
 .

 nol
 3.65E+03
 (6.
 .

 nol
 3.65E+03
 (6.
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 nol
 7.30E+02
 (5.)
 .

 nol
 7.30E+02
 (5.)
 .

 nol
 7.30E+01
 (5.)
 .

 nol
 7.30E+01
 (5.)
 .

 nol
 7.30E+02
 (1.)
 .

 nol
 1.83E+02
 (5.)
 .

 nol
 1.80E+02
 (1.)
 .

 nol
 1.10E+02
 (1.)
 .

1.50E-01 ( 1.80E+02 ( --3.40E-01 (

er e 3.40E+00 ol e 2.19E+03

 $\bigcirc$ 

 Idene

 1.20E+01
 (1)

 cene
 1.10E+04
 (5)

 zene
 1.20E-01
 (1)

 cene
 9.21E-01
 (5)

 zrrene
 2.00E-01
 (2)

 hene
 9.21E-01
 (5)

 viene

 hene
 9.21E+00
 (5)

 acid
 1.50E+05
 (1)

 cohol
 1.80E+04
 (1)

 hane
 1.10E+02
 (1)

 ether
 1.60E+00
 (5)

 alate
 6.00E+00
 (2)

 alate
 3.50E+01
 (1)

 azole

 seree
 9.21E+01
 (5)

 cene
 9.21E+01
 (5)

 rene
 9.21E+02
 (5)

 malate
 3.65E+03
 (5)

 rene
 1.46E+03
 (5)

 rene
 1.46E+03
 (5)

 rene
 1.00E+00
 (2)

 diene
 5.00E+01

	r	_	MV	V-20			MM	/-21			RV	1-23			RW	V-28			MA	V-29				MW-30		-
	ľ	Aug-11			Aug-08	Aug-11	Aug-10		Aug-08	Aug-11	Aug-10		Aug-08	Aug-11			Aug-08	Aug-11	Aug-10		Aug-08	Aug-11	Apr-11	Aug-10	Aug-09	Aug-08
Volatile Organic Compounds (ug/L)	1000000		1.1.5	1	riag oo	nog II	ring in	10900								1109 00	riag oo	ring in	riagito	nug-00	nug oo	nug	Aprili	Augrio	Aug-03	Aug-00
1,1,1,2-Tetrachloroethane 5.24E+	00 (5)										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
1,1,1-Trichloroethane 6.00E+	01 (3)										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
1,1,2,2-Tetrachloroethane 1.00E+	01 (3)										< 100	< 100	< 200					< 2.0	< 2.0	< 2.0	< 2.0	< 200		< 200	< 200	< 200
1,1,2-Trichloroethane 5.00E+	00 (2)										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
1,1-Dichloroethane 2.50E+	01 (3)										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
1,1-Dichloroethene 5.00E+	00 (3)										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
1,1-Dichloropropene -											< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
1,2,3-Trichlorobenzene -	-										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
1,2,3-Trichloropropane 9.60E-	and the second se										< 100	< 100	< 200					< 2.0	< 2.0	< 2.0	< 2.0	< 200		< 200	< 200	< 200
1,2,4-Trichlorobenzene 7.00E+	and the second se										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
1,2,4-Trimethylbenzene 1.50E+											2400	1900	3600					< 1.0	< 1.0	< 1.0	< 1.0	3900		4100	5900	4500
1,2-Dibromo-3-chloropropane 2.00E-											< 100	< 100	< 200					< 2.0	< 2.0	< 2.0	< 2.0	< 200		< 200	< 200	< 200
1,2-Dibromoethane (EDB) 5.00E-(											< 50 < 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
1,2-Dichlorobenzene 6.00E+												< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
1,2-Dichloroethane (EDC) 5.00E+											< 50 < 50	< 50 < 50	< 100 < 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
1,2-Dichloropropane 5.00E+ 1,3,5-Trimethylbenzene 1.20E+											520	270	790					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
1,3-Dichlorobenzene -	01 (1)										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	830		900	1500	950
1,3-Dichloropropane 7.30E+	02 (1)										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
1.4-Dichlorobenzene 7.50E+											< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100 < 100		< 100 < 100	< 100	< 100
1-Methylnaphthalene 2.30E+											460	290	< 400					< 4.0	< 4.0	< 4.0	< 4.0	< 400		< 400	< 100 < 400	< 100
2,2-Dichloropropane -	00 (1)										< 100	< 100	< 200					< 2.0	< 2.0	< 2.0	< 2.0	< 200		< 200	< 200	< 200
2-Butanone 7.06E+	03 (5)										< 500	< 500	< 1000					< 10	< 10	< 10	< 10	< 1000		< 1000	< 1000	< 1000
2-Chlorotoluene 7.30E+											< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 1000	< 1000	< 1000
2-Hexanone -	-										< 500	< 500	< 1000					< 10	< 10	< 10	< 10	< 1000		< 1000	< 1000	< 1000
2-Methylnaphthalene 1.50E+	-02 (1)										460	350	500					< 4.0	< 4.0	< 4.0	< 4.0	< 400		< 400	450	< 400
4-Chlorotoluene 2.60E+											< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
4-Isopropyltoluene -	-										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
4-Methyl-2-pentanone -	-										< 500	< 500	< 1000					< 10	< 10	< 10	< 10	< 1000		< 1000	< 1000	< 1000
Acetone 2.18E+	-04 (5)										< 500	< 500	< 1000					< 10	14	< 10	< 10	< 1000		< 1000	1600	< 1000
Benzene 5.00E+	-00 (2)										4500	6200	9800					< 1.0	< 1.0	< 1.0	< 1.0	6300		5800	9500	6700
Bromobenzene 2.00E+	-01 (1)										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
Bromodichloromethane 1.17E+	00 (5)										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
Bromoform 8.50E+	00 (1)										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
Bromomethane 8.66E+	-00 (5)										< 150	< 150	< 300					< 3.0	< 3.0	< 3.0	< 3.0	< 300		< 100	< 300	< 300
Carbon disulfide 1.04E+											< 500	< 500	< 1000					< 10	< 10	< 10	< 10	< 1000		< 1000	< 1000	< 1000
Carbon Tetrachloride 5.00E+											< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
Chlorobenzene 1.00E+	02 (2)										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
Chloroethane -	-										< 100	< 100	< 200					< 2.0	< 2.0	< 2.0	< 2.0	< 200		< 200	< 200	< 200
Chloroform 1.00E+											< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
Chloromethane 1.78E+											< 150	< 150	< 300					< 3.0	< 3.0	< 3.0	< 3.0	< 300		< 100	< 300	< 300
cis-1,2-DCE 7.00E+	01 (2)										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
cis-1,3-Dichloropropene -	-										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
Dibromochloromethane 1.47E+											< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
Dibromomethane 3.70E+											< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
Dichlorodifluoromethane 3.95E+											< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
Ethylbenzene 7.00E+											1100	1500	1600					< 1.0	< 1.0	< 1.0	< 1.0	4400		4100	6300	4500
Hexachlorobutadiene 8.60E-											< 50	< 50 75	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
Isopropylbenzene 6.79E+											86 1300	1200	110 1500					< 1.0	< 1.0	< 1.0	< 1.0	< 100		120	220	< 100
Methyl tert-butyl ether (MTBE) 1.25E+ Methylene Chloride 5.00E+											< 150	< 150	< 300					< 3.0	< 3.0	< 3.0	1.0	< 100 < 300		< 100 < 300	< 100	< 100 < 300
											790	570	870					< 2.0	< 2.0	< 2.0	< 2.0				< 300	
Naphthalene 1.43E+ n-Butylbenzene -	00 (3)										96	81	130					< 1.0	< 1.0	< 1.0	< 1.0	<b>960</b> < 100		<b>970</b> < 100	<b>1400</b> < 100	<b>950</b> < 100
n-Propylbenzene -											210	140	210					< 1.0	< 1.0	< 1.0	< 1.0	610		600	890	610
sec-Butylbenzene -	-										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
Styrene 1.00E+	02 (2)										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
tert-Butylbenzene -											< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
Tetrachloroethene (PCE) 5.00E+											< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
Toluene 7.50E+											<50	<50	<100					< 1.0	< 1.0	< 1.0	< 1.0	5600		3600	8000	6700
trans-1,2-DCE 1.00E+											< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
trans-1,3-Dichloropropene 4.30E-	5-7										< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
			-								< 50	< 50	< 100					< 1.0	< 1.0	< 1.0	< 1.0	< 100		< 100	< 100	< 100
	H00 (2)																									
Trichloroethene (TCE) 5.00E+											< 50	< 50	< 100					< 1.0	< 1.0	< 1.0		and the second division of the second divisio				
	03 (5)																	< 1.0 < 1.0			< 1.0	< 100 < 100		< 100 < 100 < 100	< 100 < 100	< 100 < 100

Table 3 **Refinery Wells Analytical Summary** 

		Г		MV	V-20			MV	V-21				-23				V-28				V-29				MW-30		
			Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Apr-11	Aug-10	Aug-09	Aug-
neral Chemistry (mg/l):																245534Darie											121223
Fluoride	1.6	(3)										<1.0	<1.0	0.4					< 0.5	0.33	0.4	0.36	<2.0		0.12	<1.0	0.1
Chloride	250	(3)										87	100	76					79	69	52	57	290		290	230	21
Nitrite	1	(2)										<1.0	<1.0	< 0.10					2.5*	< 0.10	< 0.10	<0.10	9.5*		<2.0		*<0.
Bromide	-	-										1.10	5.10	<1.0					<0.5	0.43	0.45	0.40	0.25		4.90	4.60	5.6
Nitrate	10	(3)										<1.0	<1.0	<0.10						1.90	0.93	0.99	9.50		<0.10	<2.0	*<0
Phosphorus	-	-										<5.0	<5.0	<0.50					< 0.50	< 0.50	< 0.50	<0.50	<0.50		<0.50	<5.0	<0.
Sulfate	600	(6)										<5.0	11.00	3.20					210	210	160	160	9		47	24	1
Carbon Dioxide	-	-										900	860	850					230	240	190	200	1300		1300	1100	15
Alkalinity	-	-										900	890	780					260	240	210	210	1400		1300	1200	14
Bicarbonate		-										900	890	780					260	240	210	210	1400		1300	1200	14
tal Metals (mg/l):	Care Core	3776				an said for the	26201299	F M ASS	S. and Server	a state and	Turner and the second				and the second second	and the second second		Same States		Sandar and			Salar Sheet	at Selection	million to the	CONTRACTOR OF	Provide State
Arsenic	0.01	(2)										< 0.02	< 0.02	<0.02					< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		< 0.02	< 0.02	<0
Barium	1	(3)										2.5	1.7	1.4					0.034	0.054	0.028	0.072	0.84		0.77	0.91	0.
Cadmium	0.005	(2)										<0.002	< 0.002	<0.002					< 0.002	< 0.002	<0.002	< 0.002	< 0.002		< 0.002	<0.002	<0.
Chromium	0.05	(3)										<0.006	< 0.006	<0.006					<0.006	< 0.006	<0.006	<0.006	<0.006		< 0.006	<0.006	<0.
Lead	0.015	(2)										0.067	0.0096	0.013					< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	<0.
Selenium	0.05	(2)										< 0.05	< 0.25	<0.25					< 0.05	< 0.05	< 0.05	<0.25	< 0.05		< 0.05	<0.05	<0
Silver	0.05	(3)										< 0.005	< 0.005	< 0.005					< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	<0.
Mercury	0.002	(3)										< 0.0002	< 0.0002	< 0.0002					< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002		< 0.0002	< 0.0002	<0.0
solved Metals (mg/l):	A CARLES		and the second	and a set	( Standard )	Advanta Austra		Service and		A CONTRACTOR										1. IT		232323	Mark I Fully				1000
Arsenic	0.1	(3)										< 0.02	< 0.02	<0.02					0.0015	< 0.02	<0.02	< 0.02	0.0036		< 0.02	< 0.02	<0
Barium	1	(3)										2.4	1.3	1.4					0.026	0.027	< 0.02	< 0.02	0.83		0.74	0.7	0.
Cadmium	0.01	(3)										< 0.002	< 0.002	< 0.002					< 0.002	< 0.002	<0.002	< 0.002	< 0.002		< 0.002	<0.002	<0
Calcium	-	-										140	120	110					82	90	53		150		150	190	-
Chromium	0.05	(3)										<0.006	< 0.006	<0.006					< 0.006	< 0.006	<0.006	< 0.006	<0.006		<0.006	<0.006	<0
Copper	1	(3)										< 0.006	< 0.006	<0.006					< 0.006	< 0.006	<0.006	< 0.006	<0.006		<0.006	<0.006	<0
Iron	1	(3)										11	1.1	2.9					< 0.02	< 0.02	< 0.02	<0.02	0.14		0.1	0.4	0.
Lead	0.05	(3)										0.006	0.0086	0.013					< 0.005	< 0.005	<0.005	< 0.005	< 0.005		< 0.005	<0.005	<0.
Magnesium	-	-										58	52	47					20	23	14		36		35	42	
Manganese	0.2	(3)										6.1	4.6	4.6					1.4	1.6	0.87	0.97	1.5		1.4	1.7	1
Mercury	-	-																									
Potassium	-	-										8.2	6.8	6.3					2.7	2.5	2.2	NS <sup>3</sup>	3.6		3.3	4	N
Selenium	0.05	(3)										< 0.05	< 0.05	<0.25					0.0026	< 0.05	< 0.05	<0.25	0.015		< 0.05	<0.05	<0
Silver	0.05	(3)										<0.005	< 0.005	<0.005					< 0.005	< 0.005	<0.005	< 0.005	<0.005		< 0.005	<0.005	<0.
Sodium	-	-										220	200	170					130	120	110		580		570	600	-
Uranium	0.03	(3)										< 0.001	< 0.001	< 0.001					0.0026	0.002	0.0017	0.002	< 0.001		< 0.001	< 0.001	<0.
Zinc	10	(3)										< 0.05	0.058	< 0.05					0.15	< 0.05	< 0.05	0.059	0.026		< 0.05	< 0.05	<0
ganics (mg/l):				124		A Charles	-	and the second	1000				Cardina Card	Star Andrewski	1.000	TRUE AND A	STREE !!	Contact and	BREAK THE	C. Marshall	Long- The st	A STATE OF A		CHARACTER.		SIX MILESSE	12-04
Benzene	0.005	(2)										4.5	6.2	9.8					< 0.001	< 0.001	< 0.001	< 0.001	6.3	6.7	5.8	9.5	6
Toluene	0.75	(3)										< 0.05	< 0.05	< 0.001					< 0.001	< 0.001	< 0.001	< 0.001	5.6	5	3.6	8	6
Ethylbenzene	0.7	(2)										1.1	1.5	1.6					< 0.001	< 0.001	< 0.001	< 0.001	4.4	3.7	4.1	6.3	4
Xylene	0.62	(3)										2.7	2.2	9.7					< 0.0015	< 0.0015	< 0.0015	< 0.0015	15	14	14	24	1
MTBE	0.125	(5)										1.3	1.2	1.5					0.0012	< 0.001	< 0.001	< 0.001	<0.10	<0.1	<0.10	< 0.032	<0
tal Petroleum Hydrocarbons (mg/l):		11-/1	15-12-12-120		A TONIC			1		The second						Contraction of the		Stanks (S		Children and Children				(Contractor)			
Diesel Range Organics	0.2	(4)										240	36	48					<0.20	<0.20	<0.20	<0.20	4.5		7.0	24	6
Gasoline Range Organics	-	-										25	36	70					< 0.05	< 0.05	< 0.05	< 0.05	90		63	84	6
outonino nunge organico		-										<50	<5.0	<2.5					<2.5	<2.5	<2.5	<2.5	<2.5		<2.5	<5.0	<2

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			1.5.5	MV	V-31	1			V-40				/-42			RW	/-43			MV	V-44	
		1	Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Aug-10	Aug-09	Aug-0
eneral Chemistry (mg/l):	THE P				Read and the second second	1100 1213	SSL SALA		A CORESPONDENCE											11 A	Que Harston	COLORS S
Fluoride	1.6	(3)	0.13	0.16	0.21	0.15	< 0.50	0.24	0.28	0.33						<1.0			0.25	0.13	0.19	0.62
Chloride	250	(3)	540	660	720	740	320	320	310	310						280			59	65	69	72
Nitrite	1	(2)	<1.0*	<2.0	<2.0	<1.0	16*	*15	<2.0	<2.0						<1.0			<1.0*	<0.10	*<1.0	<0.1
Bromide	-	-	3.00	12.00	15.00	17.00	4.40	4.10	4.00	4.40						3.70			0.20	0.23	0.27	0.28
Nitrate	10	(3)		0.95	0.14	<0.10	16*	*15	<0.10	<2.0						<1.0				0.19	*<1.0	<0.1
Phosphorus	-	-	< 0.50	< 0.50	< 0.50	< 0.50	<2.5	< 0.0025	< 0.50	< 0.50						6.00			<10	<10	< 0.50	<0.5
Sulfate	600	(6)	9	4.8	22.0	6.4	<2.5	<0.50	< 0.50	< 0.50						15.00			3200	3200	2900	300
Carbon Dioxide		-	1000	1100	1000	1100	1100	1100	1100	1200						1000			340	340	330	360
Alkalinity	-		1100	1100	1100	1100	1200	1100	1100	1200						1000			360	340	350	350
Bicarbonate		-	1100	1100	1100	1100	1200	1100	1100	1200						1000			360	340	350	350
otal Metals (mg/l):			Constant States	D. Constanting	State State	11.52 Barris	and the second	the state	and a strong of		State States	A STREET		S. Statistics	NA STREET	Secolar and		The second second	STON SERVICE	Ser Seren	Contraction of the	
Arsenic	0.01	(2)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02						< 0.02			< 0.02	< 0.02	< 0.02	<0.0
Barium	1	(3)	0.8	0.79	0.81	1.1	2	2.3	2.8	1.8						7.5			< 0.02	<0.02	< 0.02	<0.0
Cadmium	0.005	(2)	< 0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002						< 0.002			< 0.002	< 0.002	< 0.002	<0.0
Chromium	0.05	(3)	<0.006	<0.006	<0.006	<0.006	<0.006	0.012	<0.006	< 0.006						0.14			< 0.006	<0.006	< 0.006	<0.0
Lead	0.015	(2)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.006	0.0075	< 0.005						0.03			< 0.005	< 0.005	< 0.005	<0.0
Selenium	0.05	(2)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.25	< 0.25						< 0.05			< 0.05	< 0.05	< 0.05	<0.2
Silver	0.05	(3)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005						< 0.005			< 0.005	< 0.005	< 0.005	<0.0
Mercury	0.002	(3)	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002						0.0009			< 0.0002	< 0.0002	< 0.0002	<0.00
issolved Metals (mg/l):		11-11										CERCERCE.		10-15-15-1	-						0.0001	
Arsenic	0.1	(3)	0.0063	< 0.02	< 0.02	< 0.02	0.0055	< 0.02	< 0.02	< 0.02						< 0.02			< 0.002	< 0.02	< 0.02	< 0.0
Barium	1	(3)	0.76	0.72	0.81	1.1	1.8	1.7	1.7	1.8						2.6			0.014	< 0.02	0.7	<0.0
Cadmium	0.01	(3)	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002						< 0.002			< 0.002	< 0.002	< 0.002	<0.0
Calcium		-	110	140	150		95	100	86	91						120			480	470	190	470
Chromium	0.05	(3)	< 0.006	< 0.006	<0.006	< 0.006	<0.006	< 0.006	< 0.006	< 0.006			1			< 0.006			< 0.006	<0.006	< 0.006	<0.0
Copper	1	(3)	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006						< 0.006			< 0.006	< 0.006	< 0.006	<0.0
Iron	1	(3)	0.14	0.1	0.12	0.21	5	4.6	6.2	5.5						0.85			< 0.02	< 0.02	0.4	0.08
Lead	0.05	(3)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005						< 0.005			< 0.005	<0.005	< 0.005	<0.00
Magnesium	-	-	53	67	63	NS <sup>3</sup>	44	47	41	42						61			68	68	42	64
Manganese	0.2	(3)	0.44	0.47	0.51	0.71	2.3	2.2	2.3	2.5						2.8			0.0029	0.025	1.7	1.7
Mercury	-	-																		0.020		
Potassium		-	4.2	4.4	4.7	NS <sup>3</sup>	3.8	3.8	3.8	3.5						40			8.2	8.1	4	8
Selenium	0.05	(3)	0.029	< 0.05	<0.05	< 0.05	0.014	< 0.05	< 0.05	<0.25						< 0.05			< 0.002	<0.05	< 0.05	<0.2
Silver	0.05	(3)	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005						< 0.005			< 0.002	< 0.005	< 0.005	<0.00
Sodium	0.00	(0)	610	630	690	-0.000	540	500	540	520						410			920	940	600	900
Uranium	0.03	(3)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001						< 0.001			< 0.002	< 0.001	< 0.001	0.00
Zinc	10	(3)	0.029	< 0.05	<0.05	< 0.05	0.14	<0.05	0.057	0.063						< 0.05			0.086	< 0.05	< 0.05	<0.0
rganics (mg/l):	10	(3)	0.025	~0.05	~0.05	~0.00	0.14	~0.00	0.007	0.005						~0.05			0.000	<0.05	<0.05	<0.0
Benzene	0.005	(2)	2.9	3.8	3.3	3.3	0.023	0.04	0.019	0.034						8.9			< 0.001	<.001	< 0.001	< 0.00
Toluene	0.005	(2)	0.46	<0.10	<0.10	0.024	< 0.005	<.005	< 0.005	<.001						0.62			< 0.001	<.001	< 0.001	
	0.75	(3)	1.2	1.6		0.83	0.0053	<.005	< 0.005	0.0056						0.81				and the second se		<.00
Ethylbenzene		(2)		3.8	0.83	1.6	< 0.0053	<.005		0.0038									< 0.001	<.001	< 0.001	<.00
Xylene	0.62	(3)	4.2					and the second se	< 0.0075	and the second se						5.1			< 0.0015	<.0015	< 0.0015	<.00
MTBE	0.125	(5)	<0.10	<0.10	<0.10	<.02	< 0.005	11	0.011	0.016						3.6			0.0013	1.1	0.0011	<.00
otal Petroleum Hydrocarbons (mg/l):	0.0	145	4.4	4.0			0.7	00	47	44						00			-0.00	0.00		-
Diesel Range Organics	0.2	(4)	1.1	1.8	5.1	5.1	9.7	26	17	41						89			< 0.20	0.22	<1.0	<1.0
Gasoline Range Organics	-	-	25	30	19	19	8	5.8	5.4	5.1						48			< 0.05	< 0.05	< 0.05	<.05
Motor Oil Range Organics	-	-	<2.5	<2.5	<0.50	<5.0 Notes:	<2.5	3.4	<5.0	<5.0						<25			<2.5	<2.5	<5.0	<5.0

				W-1				V-13		-	MW-26			MW-27			MW-32				V-33	_
	in section	Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Au
tile Organic Compounds (ug	/L)			A BLANK	al de la serie		1.	112/2012							143.3.2.3		199	Section 25				
1,1,1,2-Tetrachloroethane	5.24E+00 (5)	< 1.0		<2.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<2.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<2.0	<
1,1,1-Trichloroethane	6.00E+01 (3)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	<
	1.00E+01 (3)	< 2.0		<2.0	<2.0	< 2.0		<2.0	<2.0	< 20	< 20	< 10	< 2.0	<2.0	<2.0	< 2.0	<2.0	<2.0	< 2.0		<1.0	<
	5.00E+00 (2)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	<
the second se	1 1			<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
	2.50E+01 (3)	< 1.0								< 10	< 10	< 5.0	< 1.0	<1.0								-
the destination of the second destination of the	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	
1,1-Dichloropropene		< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
1,2,3-Trichloropropane	9.60E-02 (5)	< 2.0		<2.0	<2.0	< 2.0		<2.0	<2.0	< 20	< 20	<10	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
	1.50E+01 (1)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	830	830	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
	2.00E-01 (2)	< 2.0		<2.0	<1.0	< 2.0		<2.0	<1.0	< 20	< 20	< 10	< 2.0	<2.0	<1.0	< 2.0	<2.0	<1.0	< 2.0		<2.0	+
	11			<1.0	<2.0	< 1.0		<2.0	<2.0	< 10	< 10	< 5.0	< 1.0	<1.0	<2.0	< 1.0	<1.0	<2.0	< 1.0		<1.0	+
	5.00E-02 (2)	< 1.0								< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	+
and the second state of the se	6.00E+02 (2)	< 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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
And a second	7.30E+02 (1)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
		< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	+
	7.50E+01 (2)									< 40	< 40	< 3.0	< 4.0	<4.0	<4.0	< 4.0	<4.0	<4.0	< 4.0		<4.0	-
and the second	2.30E+00 (1)	< 4.0		<4.0	<4.0	< 4.0		<4.0	8.1							and the second s	and the second s				and the second se	-
2,2-Dichloropropane		< 2.0		<2.0	<2.0	< 2.0		<2.0	<2.0	< 20	< 20	< 10	< 2.0	<2.0	<2.0	< 2.0	<2.0	<2.0	< 2.0		<2.0	+
	7.06E+03 (5)	< 10		<10.0	<10.0	< 10		<10.0	<10.0	< 100	< 100	< 50	< 10	<10.0	<10.0	< 10	<10.0	<10.0	< 10		<10.0	-
2-Chlorotoluene	7.30E+02 (1)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
2-Hexanone		< 10		<10.0	<10.0	< 10		<10.0	<10.0	< 100	< 100	< 50	< 10	<1.0	<10.0	< 10	<10.0	<10.0	< 10		<1.0	
2-Methylnaphthalene	1.50E+02 (1)	< 4.0		<4.0	<4.0	< 4.0		<4.0	<4.0	< 40	< 40	<20	< 4.0	<4.0	<4.0	< 4.0	<4.0	<4.0	< 4.0		<4.0	
and the second	2.60E+03 (1)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
		< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	<5	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
4-Isopropyltoluene									<1.0	< 100	< 100	< 50	< 10	<10.0	<1.0	< 10	<10.0	<1.0	< 10		<10.0	-
4-Methyl-2-pentanone		< 10		<10.0	<1.0	< 10		<10.0						and the second s							and the Party of the local division of the	
Acetone	2.18E+04 (5)	< 10		<10.0	<10.0	< 10		<10.0	<10.0	< 100	< 100	< 50	< 10	<10.0	<10.0	< 10	<10.0	<10.0	< 10		<10.0	
Benzene	5.00E+00 (2)	< 1.0		18	<1.0	< 1.0		<1.0	<1.0	26	26	<10	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Bromodichloromethane	1.17E+00 (5)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
and the second	8.50E+00 (1)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
	8.66E+00 (5)	< 3.0		<1.0	<1.0	< 3.0		<1.0	<1.0	< 30	< 30	< 15	< 3.0	<1.0	<1.0	< 3.0	<1.0	<1.0	< 3.0		<1.0	
	1.04E+03 (5)	< 10		<10.0	<10.0	< 10		<10.0	<10.0	< 100	< 100	< 50	< 10	<10.0	<10.0	< 10	<10.0	<10.0	< 10		<10.0	
and the second	5.00E+00 (2)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
												< 5.0			<1.0		<1.0	<1.0	< 1.0		<1.0	
And the second	1.00E+02 (2)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10		< 1.0	<1.0		< 1.0	and the second se				and the second sec	-
Chloroethane		< 2.0		<2.0	<2.0	< 2.0		<2.0	<2.0	< 20	< 20	< 10	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Chloromethane	1.78E+01 (5)	< 3.0		<1.0	<1.0	< 3.0		<1.0	<1.0	< 30	< 30	< 15	< 3.0	<1.0	<1.0	< 3.0	<1.0	<1.0	< 3.0		<1.0	
cis-1.2-DCE	7.00E+01 (2)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
	1.47E+00 (5)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
and the second	3.70E+02 (1)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	-
													1.0		1.0	10	<1.0	<1.0	1.0			-
	3.95E+02 (5)			<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0			< 1.0		<1.0	-
	7.00E+02 (2)			<1.0	<1.0	< 1.0		<1.0	<1.0	46	46	<5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	-
	8.60E-01 (1)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Isopropylbenzene	6.79E+02 (5)	) < 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	93	93	<5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
lethyl tert-butyl ether (MTBE)	1.25E+02 (5	< 1.0		<1.0	<1.0	1.0		1.2	1.7	< 10	< 10	9.5	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
	5.00E+00 (2			<3.0	<3.0	< 3.0		<3.0	<3.0	< 30	< 30	< 15	< 3.0	<3.0	<3.0	< 3.0	<3.0	<3.0	< 3.0		<3.0	
	1.43E+00 (5			<2.0	<2.0	< 2.0		<2.0	<2.0	110	110	<10	< 2.0	<2.0	<2.0	< 2.0	<2.0	<2.0	< 2.0		<2.0	
n-Butylbenzene		< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
						< 1.0		<1.0	<1.0	110	110	<5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
n-Propylbenzene		< 1.0		<1.0	<1.0											< 1.0	<1.0	<1.0	< 1.0		<1.0	-
sec-Butylbenzene		< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	15	14	<10	< 1.0	<1.0	<1.0						and the second se	-
	1.00E+02 (2)			<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
	7.50E+02 (3			<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
trans-1,2-DCE	and a subscription of the			<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	t
								-	<1.0			< 5.0	< 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		< 10	< 10					and the second s		and the second se	and the second se			
	5.00E+00 (2			<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	-
Trichionofluoromethane		) < 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
	1.00E+00 (3	) < 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Vinyl chloride	1.00E+00 115			-1.0						10												

		-		W-1	A	A		V-13		A	MW-26	A	A	MW-27			MW-32	153 2004		M	N-33	
	in the said	Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	) Au
mi Volatile Organic Compour	nds (ug/l):		4		TEX STATE			-					augestine.									
1,2,4-Trichlorobenzene	7.00E+01 (2)				<10				<10			<10			<10			<10				<
1,2-Dichlorobenzene					<10				<10			<10			<10			<10				<
1,3-Dichlorobenzene					<10				<10			<10			<10			<10				<
1,4-Dichlorobenzene	7 505 104 (2)				<10				<10			<10			<10			and the second s		-		<
																		<10				
1-Methylnaphthalene					<10				<10			<10			<10			<10				
2,4,5-Trichlorophenol	3.65E+03 (5)				<10				<10			<10			<10			<10			/	
2,4,6-Trichlorophenol	3.65E+01 (5)				<10				<10			<10			<10			<10				
2,4-Dichlorophenol	1.10E+02 (5)				<10				<10			<10			<10			<10				
2,4-Dimethylphenol					<10				<10			<10			<10			<10				
					<20							<20			<20			and the second s				
2,4-Dinitrophenol									<20									<20				-
2,4-Dinitrotoluene					<10				<10			<10			<10			<10				
2,6-Dinitrotoluene	3.70E+01 (1)				<10				<10			<10			<10			<10				
2-Chloronaphthalene	2.90E+03 (1)				<10				<10			<10			<10			<10				
2-Chlorophenol	1.83E+02 (5)				<10				<10			<10			<10			<10				-
2-Methylnaphthalene					<10				<10			<10			<10			<10				-
	the second se				<10							<10			<10				-			
2-Methylphenol	and a second s								<10									<10				-
2-Nitroaniline	1.10E+02 (1)				<10				<10			<10			<10			<10				
2-Nitrophenol					<10				<10			<10			<10			<10				
3,3'-Dichlorobenzidine	1.50E-01 (1)				<10				<10			<10			<10			<10				
3+4-Methylphenol					<10				<10			<10			<10			<10				
3-Nitroaniline					<10				<10			<10			<10			<10				-
	-														and the second second second second			and the same of the local division in the same of the				
4,6-Dinitro-2-methylphenol					<20				<20			<20			<20			<20				-
4-Bromophenyl phenyl ether					<10				<10			<10			<10			<10				
4-Chloro-3-methylphenol					<10				<10			<10			<10			<10				
4-Chloroaniline	3.40E-01 (1)				<10				<10			<10			<10			<10				
4-Chlorophenyl phenyl ether					<10				<10			<10			<10			<10				+
	2 405 400 (4)				<10				a second second second second			<10			and the second state of the							-
4-Nitroaniline	3.40E+00 (1)								<10						<10			<10				-
4-Nitrophenol					<10				<10			<10			<10			<10				
Acenaphthene	2.19E+03 (5)				<10				<10			<10			<10			<10				
Acenaphthylene					<10				<10			<10			<10			<10				
Aniline	1.20E+01 (1)				<10				<10			<10			<10			<10				-
					<10				<10			<10			<10			and an and the second s				
Anthracene												and the second se						<10				-
Azobenzene	intercontent and the state of t				<10				<10			<10			<10			<10				
Benz(a)anthracene					<10				<10			<10			<10			<10				
Benzo(a)pyrene	2.00E-01 (2)				<10				<10			<10			<10			<10				
Benzo(b)fluoranthene					<10				<10			<10			<10			<10				1
Benzo(g,h,i)perylene	0.212 01 (0)				<10				<10			<10			<10			<10				
	0.045+00 (5)								<10			<10			the second s							
Benzo(k)fluoranthene	An and the second descent second descent second descent second descent second descent second descent second des				<10							and the second se			<10			<10				
Benzoic acid					<20				<20			<20			<20			<20				
Benzyl alcohol	1.80E+04 (1)				<10				<10			<10			<10			<10				
Bis(2-chloroethoxy)methane	1.10E+02 (1)				<10				<10			<10			<10			<10				
Bis(2-chloroethyl)ether	1.19E-01 (5)				<10				<10			<10			<10			<10				
Bis(2-chloroisopropyl)ether					<10				<10			<10			<10			<10				
Bis(2-ethylhexyl)phthalate	and the second se								<10			<10			<10			the state of the local division of the state				
1 1 1					<10										No. of Concession, Name of Street, or other			<10				-
Butyl benzyl phthalate	3.50E+01 (1)				<10				<10			<10			<10			<10				-
Carbazole					<10				<10			<10			<10			<10				
Chrysene	9.21E+01 (5)				<10				<10			<10			<10			<10				-
Dibenz(a,h)anthracene					<10				<10			<10			<10			<10				1
Dibenzofuran	01 (0)				<10				<10			<10			<10			<10				-
	2025-04				a strength to you in the local party of							and the second se			the new second se			the second s				
Diethyl phthalate					<10				<10			<10			<10			<10				-
Dimethyl phthalate					<10				<10			<10			<10			<10				
Di-n-butyl phthalate	3.65E+03 (5)				<10				<10			<10			<10			<10				
Di-n-octyl phthalate					<10				<10			<10			<10			<10				-
Fluoranthene	1.46E+03 (5)				<10				<10			<10			<10			<10				-
Fluorene	and a second second second second second				<10				<10			<10			<10			<10				1
																						-
Hexachlorobenzene					<10				<10			<10			<10			<10				-
Hexachlorobutadiene					<10				<10			<10			<10			<10				
Hexachlorocyclopentadiene	5.00E+01 (2)				<10				<10			<10			<10			<10				
Hexachloroethane	3.65E+01 (5)				<10				<10			<10			<10			<10				1
Indeno(1,2,3-cd)pyrene					<10				<10			<10			<10			<10				1
	7.07E+02 (5)				<10				<10			<10			<10			<10				-
									and the second sec													-
Naphthalene					<10				<10			<10			<10			<10				
Nitrobenzene	And the statement of the				<10				<10			<10			<10			<10				
N-Nitrosodimethylamine					<10				<10			<10			<10			<10				
N-Nitrosodi-n-propylamine					<10				<10			<10			<10			<10				
N-Nitrosodiphenylamine					<10				<10			<10			<10			<10				-
									<40													and and the state
Pentachlorophenol	and the second se				<40				and the second s			<40			<40			<40				-
Phenanthrene	and a second s				<10				<10			<10			<10			<10				
	5.00E+00 (3)				<10				<10			<10			<10			<10				
Phenol	5.00E+00 (3)																					
Phenol Pyrene					<10				<10			<10			<10			<10				

				M	N-1			M	N-13			MW-26			MW-27		-	MW-32			M	N-33	
	a starting		Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Aug
eneral Chemistry (mg/l):				123	- Real Provider						1911						1.						
Fluoride	1.6	(3)	0.54		0.56	0.53	0.15		0.11	0.16	< 0.50	0.34	0.32	0.4	0.39	0.38	0.22	0.2	0.21	0.3		0.36	0.
Chloride	250	(3)	11		15	16	230		230	200	300	320	400	380	240	180	690	900	840	530		400	6
Nitrite	1	(2)	<0.10		< 0.10	<0.10	<2.0		<2.0	<2.0	< 0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0		<2.0	<
Bromide	-	-	0.10		0.12	0.30	2.70		2.80	2.60	4.30	4.40	5.20	3.10	1.80	1.30	4.60	4.80	7.90	2.40		1.90	5.
Nitrate	10	(3)	0.99		1.40	0.69	5.80		5.40	5.80	< 0.50	1.90	<0.10	<0.1	<0.1	< 0.10	48	34	37	0.29		28	1
Phosphorus	-	-	< 0.50		< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	<2.5	< 0.50	< 0.50	<0.50	< 0.50	<0.5	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	<0
Sulfate	600	(6)	110		150	70	1100		1100	1000	<2.5	0.99	< 0.50	1500	1000	960	1600	1700	1500	2100		1300	1
Carbon Dioxide	-	-	270		280	250	880		900	840	1100	1100	1100	380	290	280	170	160	150	200		130	1
Alkalinity		-	290		280	270	940		900	890	1200	1100	1100	410	290	290	180	160	170	210		130	1
Bicarbonate			290		280	270	940		900	890	1200	1100	1100	410	290	290	180	160	170	210		130	1
otal Metals (mg/l):			200		200	210	040		000	000	1200	1100	1100	1 410	200	200	100	100	110	210		150	
Arsenic	0.01	(2)	< 0.02		< 0.02	< 0.02	< 0.02		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.0002	< 0.02	< 0.02	<0.02		< 0.02	<(
Barium	1	(3)	0.038		0.099	0.18	0.027		0.027	0.023	2.3	2.3	2.4	0.088	0.084	0.02	0.031	0.02	0.033	0.023		<0.02	<
Cadmium	0.005	(2)	< 0.002		< 0.002	< 0.002	<0.002		< 0.002	and the second division in which the second	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.023		< 0.02	
Chromium	0.005	(2)	< 0.002		< 0.002	<0.002	<0.002		<0.002		< 0.002	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002		< 0.002	
Lead	0.05	(2)	< 0.005		< 0.005	< 0.005	< 0.005		< 0.005		< 0.005	< 0.005	0.008	< 0.005	< 0.005	0.007	< 0.005	< 0.005	and the second design of the s	and the second sec			
Selenium	0.015		< 0.005		< 0.005	< 0.005	< 0.005		< 0.005	<0.25	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.05	< 0.005	0.0074	< 0.005		< 0.005	
		(2)			< 0.005	< 0.005					< 0.005	< 0.005	< 0.005	< 0.005					< 0.05	< 0.05		< 0.05	<
Silver	0.05	(3)	< 0.005				< 0.005		< 0.005						< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	
Mercury	0.002	(3)	< 0.0002		< 0.0002	< 0.0002	< 0.001		0.0002	< 0.0002	<0.0002	<0.0002	< 0.0002	<0.0002	<0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002		< 0.0002	2 <0.
ssolved Metals (mg/l):	0.1	101				-0.00	1 0 0000	-			0.000	-0.00	-0.00	1 0 0005	-0.00		0.0044						_
Arsenic	0.1	(3)	< 0.001		< 0.02	< 0.02	0.0028		< 0.02	< 0.02	0.009	<0.02	<0.02	0.0025	< 0.02	< 0.02	0.0044	< 0.02	< 0.02	0.0025		< 0.02	<(
Barium	1	(3)	0.026		0.025	< 0.02	0.024		0.024	0.022	2.3	2.1	2.2	0.046	0.03	0.03	0.019	0.022	0.022	0.02		< 0.02	<(
Cadmium	0.01	(3)	< 0.002		< 0.002	< 0.002	< 0.002		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002		< 0.002	-
Calcium	-	-	77		77	63	300		270	240	130	120	120	380	260	230	350	360	330	410		260	2
Chromium	0.05	(3)	< 0.006		< 0.006	< 0.006	< 0.006		< 0.006		< 0.006	< 0.006	< 0.006	< 0.006	<0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006		< 0.006	
Copper	1	(3)	< 0.006		< 0.006	< 0.006	< 0.006		< 0.006	and the second section in the second	<0.006	<0.006	<0.006	< 0.006	<0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006		< 0.006	
Iron	1	(3)	0.023		0.039	0.041	< 0.02		< 0.02	< 0.02	6	6	7.2	0.13	0.2	0.4	< 0.02	< 0.02	< 0.02	< 0.02		< 0.02	<(
Lead	0.05	(3)	< 0.005		< 0.005	< 0.005	0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	<0
Magnesium		-	19		20	16	88		94	76	45	41	41	54	39	33	50	57	52	55		39	
Manganese	0.2	(3)	0.039		0.027	0.031	1.4		1.4	1.3	2.7	2.8	2.9	3	2.6	2.1	< 0.002	< 0.002	< 0.002	0.083		< 0.002	<0
Mercury	State of the	-																					
Potassium	-	-	2.4		2.3	2.6	4.4		4.3	4	3.9	3.7	3.7	2.6	2.7	2.7	4.4	4.4	4.8	1.9		4.5	1
Selenium	0.05	(3)	0.0014		< 0.05	< 0.05	0.012		< 0.05	< 0.05	0.014	< 0.05	< 0.05	0.0095	< 0.05	< 0.05	0.031	< 0.05	< 0.05	0.024		< 0.05	<(
Silver	0.05	(3)	< 0.005		< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	<0
Sodium	-	-	78		77	85	600		600	540	500	470	460	530	390	350	790	910	780	780		600	5
Uranium	0.03	(3)	0.0029		0.0022	0.002	0.01		0.0078	0.008	< 0.001	< 0.001	< 0.001	0.0015	0.0021	0.0014	0.013	0.0083	0.01	0.017		0.0064	0.
Zinc	10	(3)	0.057		< 0.05	< 0.05	0.068		< 0.05	<0.05	0.072	< 0.05	< 0.05	0.053	<0.05	< 0.05	0.099	< 0.05	< 0.05	0.052		< 0.05	<(
rganics (mg/l):	S. C. I LUIS		and and	XI	- Castact			10. 12.	2. 12. 2. 2.	Station B		12120120	1.0.000	L'anton	2711-532	13.38.14	1.8.2.9		All said				
Benzene	0.005	(2)	< 0.001	< 0.001	< 0.001	0.018	< 0.001	< 0.001	< 0.001	< 0.001	0.026	0.026	0.1	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0
Toluene	0.75	(3)	< 0.001		< 0.001	< 0.001	< 0.001			< 0.001	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0
Ethylbenzene	0.7	(2)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	0.046	0.046	0.086	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0
Xylene	0.62	(3)	< 0.0015		< 0.0015			< 0.002			< 0.015	< 0.015	< 0.015	< 0.0015		< 0.0015		< 0.0015		< 0.0015		< 0.001	
MTBE	0.125	(5)				< 0.001	0.001	< 0.001			< 0.001	< 0.001	0.93	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.002	< 0.002	<0
otal Petroleum Hydrocarbons			-0.001	-0.001	-0.001	-0.001	0.001	-0.001	0.001	0.001	0.001	-0.001	0.00	-0.001	0.001	0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	_ ~0
Diesel Range Organics	0.2	(4)	< 0.20	<0.20	<0.20	<0.20	<0.20		<0.20	0.34	1.3	<0.2	2.4	0.45	<0.20	0.47	<0.20	< 0.20	<0.20	<0.20	<0.20	< 0.20	1
Gasoline Range Organics		(4)	<0.20	<0.20	< 0.20	0.067	<0.20		< 0.20	< 0.05	4.0	< 0.2	4.3	<0.05	< 0.20	< 0.05	<0.20	< 0.20	<0.20		and the second se		<(
0 0		-				and the second division of the second divisio				<2.5	<2.5		4.3	< 2.5	< 2.5	<2.5	< 2.5	a submer a state of some state of the		< 0.05		< 0.05	<0
Motor Oil Range Organics	-		<2.5	<2.5	<2.5	<2.5	<2.5		<2.5	-2.0	52.5	<2.5	5/0	1 5/0	5/0	5/0	5/0	<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 - No screening level or analytical result available \* - Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet holdtime - - = Analyte inadvertantly not included in analysis.

mg/l= milligrams per liter

		-		MW-1		A 41		N-13	1.	A	MW-26	A 00	A	MW-27	A 00		MW-32				N-33	1.
	La carte a Sector	Aug-1	1 Apr-	11 Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Au
atile Organic Compounds (ug	ı/L)			Martine Stand		of the second						1		1.1.1.1.1.1			All Aller					1. 2.4
1,1,1,2-Tetrachloroethane	5.24E+00 (5)	< 1.0	)	<2.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<2.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<2.0	
1,1,1-Trichloroethane	6.00E+01 (3)	< 1.0	)	<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 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		0.0	<2.0	< 2.0		<2.0	<2.0	< 20	< 20	< 10	< 2.0	<2.0	<2.0	< 2.0	<2.0	<2.0	< 2.0		<1.0	
and the second		and and a second design of the	the same in the same is not only in the same is not on	the same of the local data and the same of	<1.0	< 1.0		<1.0	And the owner of the owner of the owner	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	and the same do not the same time	< 1.0		and the second se	-
	5.00E+00 (2)	< 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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
1,2,3-Trichlorobenzene		< 1.0		10	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
	0.005.00 //5/	and the second second		and the second se	A DESCRIPTION OF THE OWNER OWNER OF THE OWNER OWNER OF THE OWNER OWNE	< 2.0		<2.0	<2.0	< 20	< 20	<10	< 2.0	<2.0	<2.0	< 2.0	<2.0	<2.0	< 2.0		<2.0	-
1,2,3-Trichloropropane	9.60E-02 (5)	< 2.0		<2.0	<2.0							the factor of the second second second						and the second design of the s				
1,2,4-Trichlorobenzene	7.00E+01 (2)	< 1.0	)	<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 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	830	830	< 5.0	< 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	<1.0	< 2.0		<2.0	<1.0	< 20	< 20	< 10	< 2.0	<2.0	<1.0	< 2.0	<2.0	<1.0	< 2.0		<2.0	T
1,2-Dibromoethane (EDB)	5.00E-02 (2)	< 1.0		<1.0	<2.0	< 1.0		<2.0	<2.0	< 10	< 10	< 5.0	< 1.0	<1.0	<2.0	< 1.0	<1.0	<2.0	< 1.0		<1.0	1
					<1.0	and the subscription of the local division o		<1.0	And the second data and the se	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0		< 1.0		<1.0	+
	6.00E+02 (2)	) < 1.0	and the second second			< 1.0			<1.0			and the second second second	the same data and the same set of the			and the second second second		<1.0	and the second se			-
1,2-Dichloroethane (EDC)	5.00E+00 (2)	< 1.0	)	<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
1,3-Dichlorobenzene		< 1.0			<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	+
In the second	7.005.00 (4)		al and a second second			and successful and successful in successful			and the second division of the second divisio	and the second second second second		< 5.0				and the second se	and include the second	and the second design of the s			the same of a local strength of the same strength o	1
1,3-Dichloropropane	7.30E+02 (1)	) < 1.0		and the second second second second second	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	CONTRACTOR OF STREET, STRE	< 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	0	<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
1-Methylnaphthalene	2.30E+00 (1)	< 4.0	0	<4.0	<4.0	< 4.0		<4.0	8.1	< 40	< 40	<20	< 4.0	<4.0	<4.0	< 4.0	<4.0	<4.0	< 4.0		<4.0	1
2,2-Dichloropropane		< 2.0			<2.0	< 2.0		<2.0	<2.0	< 20	< 20	< 10	< 2.0	<2.0	<2.0	< 2.0	<2.0	<2.0	< 2.0		<2.0	-
	7.06E+03 (5)	< 10			<10.0	< 10		<10.0	<10.0	< 100	< 100	< 50	< 10	<10.0	<10.0	< 10	<10.0	<10.0	< 10		<10.0	
2-Butanone									and the second division of the second divisio	and the second se		successful all shares in success	and the second sec		the second second second second		and the second s	and the second sec				-
2-Chlorotoluene	7.30E+02 (1)	) < 1.0	0		<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
2-Hexanone		< 10	)	<10.0	<10.0	< 10		<10.0	<10.0	< 100	< 100	< 50	< 10	<1.0	<10.0	< 10	<10.0	<10.0	< 10		<1.0	
2-Methylnaphthalene	1.50E+02 (1	) < 4.0	)	<4.0	<4.0	< 4.0		<4.0	<4.0	< 40	< 40	<20	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
	2.002103 (1			instances and a second s						< 10	< 10	<5	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0			-
4-Isopropyltoluene		< 1.0	and the particular survey of	and the second design of the s	<1.0	< 1.0		<1.0	<1.0	and the second sec		and the second se	and in case of the local division of the loc	and the second s			and the rest of the state of the state of the		and the second state of the second		<1.0	-
4-Methyl-2-pentanone		< 10	)	<10.0	<1.0	< 10		<10.0	<1.0	< 100	< 100	< 50	< 10	<10.0	<1.0	< 10	<10.0	<1.0	< 10		<10.0	
Acetone	2.18E+04 (5	) < 10	)	<10.0	<10.0	< 10		<10.0	<10.0	< 100	< 100	< 50	< 10	<10.0	<10.0	< 10	<10.0	<10.0	< 10		<10.0	
Benzene	5.00E+00 (2	) < 1.0	0	18	<1.0	< 1.0		<1.0	<1.0	26	26	<10	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
										< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0				-
Bromodichloromethane	1.17E+00 (5	) < 1.0		Concernation of the owner	<1.0	< 1.0		<1.0	<1.0	And and the Annual Property of the Annual Pro		summer while the plane where the same	and the second state of th	and the second second second	in the second second second			and the second s	< 1.0		<1.0	10
Bromoform	8.50E+00 (1	) < 1.0	0	<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Bromomethane	8.66E+00 (5	) < 3.0	0	<1.0	<1.0	< 3.0		<1.0	<1.0	< 30	< 30	< 15	< 3.0	<1.0	<1.0	< 3.0	<1.0	<1.0	< 3.0		<1.0	
Carbon disulfide	1.04E+03 (5	) < 10	)	<10.0	<10.0	< 10		<10.0	<10.0	< 100	< 100	< 50	< 10	<10.0	<10.0	< 10	<10.0	<10.0	< 10		<10.0	
	5.00E+00 (2	) < 1.0	and the second second	<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
		4			<1.0	and the second se		<1.0	<1.0	< 10	< 10	< 5.0	< 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					and the second division of the second divisio		internet of the later of the	and the second s	and the same in the same is a same	and a second data in the second data	and the second se	a new second sec	and the second se		A PROPERTY AND ADDRESS OF TAXABLE PARTY.	-
Chloroethane		< 2.0	0	<2.0	<2.0	< 2.0		<2.0	<2.0	< 20	< 20	< 10	< 2.0	<2.0	<2.0	< 2.0	<2.0	<2.0	< 2.0		<2.0	
Chloroform	1.00E+02 (3	) < 1.0	0	<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Chloromethane	1.78E+01 (5	) < 3.0	0	<1.0	<1.0	< 3.0		<1.0	<1.0	< 30	< 30	< 15	< 3.0	<1.0	<1.0	< 3.0	<1.0	<1.0	< 3.0		<1.0	
		) < 1.0			<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	-
cis-1,2-DCE	7.00E+01 (2	/		and the second se								< 5.0			<1.0							-
cis-1,3-Dichloropropene		< 1.0	and the second division of the second divisio	and the second se	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	and the second se	< 1.0	<1.0		< 1.0	<1.0	<1.0	< 1.0		<1.0	-
Dibromochloromethane	1.47E+00 (5	) < 1.0	0	<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Dibromomethane	3.70E+02 (1	) < 1.0	0	<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
	3.95E+02 (5	) < 1.0			<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Ethylbenzene					<1.0	< 1.0		<1.0	<1.0	46	46	<5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
						the second s								<1.0				<1.0	and the second se			
Hexachlorobutadiene	8.60E-01 (1	) < 1.0		a la	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0		<1.0	< 1.0	<1.0	and the second sec	< 1.0		<1.0	-
Isopropylbenzene				Concession in the local division of the loca	<1.0	< 1.0		<1.0	<1.0	93	93	<5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Methyl tert-butyl ether (MTBE)	1.25E+02 (5		0	<1.0	<1.0	1.0		1.2	1.7	< 10	< 10	9.5	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Methylene Chloride					<3.0	< 3.0		<3.0	<3.0	< 30	< 30	< 15	< 3.0	<3.0	<3.0	< 3.0	<3.0	<3.0	< 3.0		<3.0	1
1	1.43E+00 (5				<2.0	< 2.0		<2.0	<2.0	110	110	<10	< 2.0	<2.0	<2.0	< 2.0	<2.0	<2.0	< 2.0		<2.0	-
Naphthalene														and the second sec	and the second se				and the second se			-
n-Butylbenzene		< 1.		and a second	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
n-Propylbenzene		< 1.	0	<1.0	<1.0	< 1.0		<1.0	<1.0	110	110	<5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
sec-Butylbenzene		< 1.	0	<1.0	<1.0	< 1.0		<1.0	<1.0	15	14	<10	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
		And some of the second second second			and the second state of th				<1.0	< 10		< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
tert-Butylbenzene		< 1.			<1.0	< 1.0		<1.0			< 10					the second s			the second s		the second s	
Tetrachloroethene (PCE)	5.00E+00 (2		0	<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 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.		a construction is an other barrier and	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
		/						<1.0	<1.0	< 10	< 10	< 5.0	< 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.			<1.0	< 1.0		A REAL PROPERTY AND ADDRESS OF ADDRESS								A PROPERTY AND A PROPERTY AND A					APPROXIMATE AND A STREET, STRE	-
Trichloroethene (TCE)		) < 1.			<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	-
Trichlorofluoromethane	1.29E+03 (5	) < 1.	0	<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
						< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Vinyl chloride	1.00E+00 (3	) < 1.	0	51.0	<1.0	S 1.0					- 10	- 0.0					-1.0	-1.0				

		-		W-1	4 00	A		/-13		1. 11	MW-26	A	Aug 44	MW-27	A		MW-32		1		N-33	
	in the work	Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	) Au
mi Volatile Organic Compoun					-						0.00			1.2.13					1000		1.	-
1,2,4-Trichlorobenzene	7.00E+01 (2)	)			<10				<10			<10			<10			<10				<
1,2-Dichlorobenzene	6.00E+02 (2)	)			<10				<10			<10			<10			<10				<
1,3-Dichlorobenzene					<10				<10			<10			<10			<10				
1,4-Dichlorobenzene	7.50E+01 (2)	)			<10				<10			<10			<10			<10				
1-Methylnaphthalene	2.30E+00 (1)	)			<10				<10			<10			<10			<10				
2,4,5-Trichlorophenol	3.65E+03 (5)	1			<10				<10			<10			<10			<10				-
and the second					<10				<10			<10			<10			<10				
2,4,6-Trichlorophenol	3.65E+01 (5)	4										<10										+
2,4-Dichlorophenol	1.10E+02 (5)				<10				<10						<10			<10				+
2,4-Dimethylphenol	7.30E+02 (5)	)			<10				<10			<10			<10			<10				-
2,4-Dinitrophenol	7.30E+01 (5)	) (			<20				<20			<20			<20			<20				-
2,4-Dinitrotoluene	2.17E+00 (5)	)			<10				<10			<10			<10			<10				
2,6-Dinitrotoluene	3.70E+01 (1)	)			<10				<10			<10			<10			<10				
2-Chloronaphthalene	2.90E+03 (1)	)			<10				<10			<10			<10			<10				
2-Chlorophenol	1.83E+02 (5)	/			<10				<10			<10			<10			<10				-
and the second se					<10				<10			<10			<10			<10				-
2-Methylnaphthalene	1.50E+02 (1)	)			and the second second second							<10			<10			<10				+
2-Methylphenol	1.80E+03 (1)				<10				<10									and the second state of th				
2-Nitroaniline	1.10E+02 (1)	)			<10				<10			<10			<10			<10				
2-Nitrophenol					<10				<10			<10			<10			<10				_
3,3'-Dichlorobenzidine	1.50E-01 (1)	)			<10				<10			<10			<10			<10				
3+4-Methylphenol	1.80E+02 (1)	)			<10				<10			<10			<10			<10				
3-Nitroaniline					<10				<10			<10			<10			<10				
4,6-Dinitro-2-methylphenol					<20				<20			<20			<20			<20				-
4-Bromophenyl phenyl ether					<10				<10			<10			<10			<10				1
					<10				<10			<10			<10			<10				+
4-Chloro-3-methylphenol																						+
4-Chloroaniline	3.40E-01 (1)				<10				<10			<10			<10			<10				-
4-Chlorophenyl phenyl ether	- 1.				<10				<10			<10			<10			<10				-
4-Nitroaniline	3.40E+00 (1)	)			<10				<10			<10			<10			<10				
4-Nitrophenol					<10				<10			<10			<10			<10				
Acenaphthene	2.19E+03 (5)	)			<10				<10			<10			<10			<10				
Acenaphthylene					<10				<10			<10			<10			<10				
Aniline	1.20E+01 (1)	) ((			<10				<10			<10			<10			<10				-
and the second state of the se	and the second se	4			<10				<10			<10			<10			<10				-
Anthracene	1.10E+04 (5)	/																				-
Azobenzene	1.20E-01 (1)	/			<10				<10			<10			<10			<10				-
Benz(a)anthracene	9.21E-01 (5)	)			<10				<10			<10			<10			<10				-
Benzo(a)pyrene	2.00E-01 (2)	)			<10				<10			<10			<10			<10				
Benzo(b)fluoranthene	9.21E-01 (5)	)			<10				<10			<10			<10			<10				
Benzo(g,h,i)perylene					<10				<10			<10			<10			<10				
Benzo(k)fluoranthene	9.21E+00 (5)	) ((			<10				<10			<10			<10			<10				
Benzoic acid	1.50E+05 (1)	)			<20				<20			<20			<20			<20				
Benzyl alcohol	1.80E+04 (1)	1			<10				<10			<10			<10			<10				+-
		4							<10			<10			<10			<10				-
Bis(2-chloroethoxy)methane	1.10E+02 (1)				<10													the sector is a sector is a sector				-
Bis(2-chloroethyl)ether	1.19E-01 (5)	)			<10				<10			<10			<10			<10				-
Bis(2-chloroisopropyl)ether	9.60E+00 (5)	)			<10				<10			<10			<10			<10				-
Bis(2-ethylhexyl)phthalate	6.00E+00 (2)	)			<10				<10			<10			<10			<10				1
Butyl benzyl phthalate	3.50E+01 (1)	)			<10				<10			<10			<10			<10				
Carbazole	-				<10				<10			<10			<10			<10				
	9.21E+01 (5				<10				<10			<10			<10			<10				1
Dibenz(a,h)anthracene					<10				<10			<10			<10			<10				+
	5.21E-02 (5	4							<10	-		<10			<10			<10				+
Dibenzofuran					<10																	-
Diethyl phthalate					<10				<10			<10			<10			<10				-
Dimethyl phthalate	and the second distance of the second second	and the state of the second se			<10				<10			<10			<10			<10				-
Di-n-butyl phthalate	3.65E+03 (5	)			<10				<10			<10			<10			<10				
Di-n-octyl phthalate					<10				<10			<10			<10			<10				
Fluoranthene	1.46E+03 (5				<10				<10			<10			<10			<10				
Fluorene	1.46E+03 (5				<10				<10			<10			<10			<10				-
Hexachlorobenzene	1.00E+00 (2				<10				<10			<10			<10			<10				-
									<10	-		<10			<10			<10				+
Hexachlorobutadiene	8.60E-01 (1				<10																	
Hexachlorocyclopentadiene					<10				<10			<10			<10			<10				-
Hexachloroethane					<10				<10			<10			<10			<10				-
Indeno(1,2,3-cd)pyrene					<10				<10			<10			<10			<10				
Isophorone	7.07E+02 (5	5)			<10				<10			<10			<10			<10				
Naphthalene					<10				<10			<10			<10			<10				1
Nitrobenzene					<10				<10			<10			<10			<10				1
									<10			<10			<10			<10				+
N-Nitrosodimethylamine					<10																	
N-Nitrosodi-n-propylamine	9.60E-03 (1	4			<10				<10			<10			<10			<10				-
N-Nitrosodiphenylamine					<10				<10			<10			<10			<10				-
Pentachlorophenol	1.00E+00 (2	2)			<40				<40			<40			<40			<40				
					<10				<10			<10			<10			<10				
Phenanthrene.									<10			<10			<10			<10				1
Phenanthrene	5.00E+00 (3	3)			S III				-10													
Phenanthrene Phenol Pyrene					<10 <10				<10			<10			<10			<10				1

					W-1				N-13			MW-26		-	MW-27			MW-32			M	N-33	
State and the second second		1.1	Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Aug
eneral Chemistry (mg/l):		N. Kar			12.2.42					S.A. S.S.S.		2000		15-11-1	as all the			-					
Fluoride	1.6	(3)	0.54		0.56	0.53	0.15		0.11	0.16	< 0.50	0.34	0.32	0.4	0.39	0.38	0.22	0.2	0.21	0.3		0.36	0
Chloride	250	(3)	11		15	16	230		230	200	300	320	400	380	240	180	690	900	840	530		400	6
Nitrite	1	(2)	<0.10		<0.10	<0.10	<2.0		<2.0	<2.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0		<2.0	<
Bromide		-	0.10		0.12	0.30	2.70		2.80	2.60	4.30	4.40	5.20	3.10	1.80	1.30	4.60	4.80	7.90	2.40		1.90	5
Nitrate	10	(3)	0.99		1.40	0.69	5.80		5.40	5.80	<0.50	1.90	<0.10	<0.1	<0.1	<0.10	48	34	37	0.29		28	
Phosphorus	-	-	<0.50		<0.50	<0.50	<0.50		<0.50	< 0.50	<2.5	<0.50	<0.50	<0.50	<0.50	< 0.5	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	<(
Sulfate	600	(6)	110		150	70	1100		1100	1000	<2.5	0.99	<0.50	1500	1000	960	1600	1700	1500	2100		1300	1
Carbon Dioxide		-	270		280	250	880		900	840	1100	1100	1100	380	290	280	170	160	150	200		130	1
Alkalinity	-	-	290		280	270	940		900	890	1200	1100	1100	410	290	290	180	160	170	210		130	-
Bicarbonate	-	-	290		280	270	940		900	890	1200	1100	1100	410	290	290	180	160	170	210		130	1
otal Metals (mg/l):			200	100.000	200	210	010		000	000	1200	1100	1100	1 110	200	200	100	100	170	210	10000	150	
Arsenic	0.01	(2)	< 0.02		< 0.02	< 0.02	< 0.02		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.0002	< 0.02	< 0.02	< 0.02		< 0.02	<(
Barium	1	(2)	0.038		0.099	0.18	0.027		0.027	0.023	2.3	2.3	2.4	0.088	0.084	0.02	0.031	0.02	0.033	0.023		<0.02	
Cadmium	0.005	(2)	< 0.002		< 0.002	< 0.002	<0.002		< 0.002	< 0.023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	And a local data in the local		<0.02	
Chromium	0.005		and the state of t		< 0.002	< 0.002	<0.002		<0.002	< 0.002	< 0.002	< 0.002	< 0.002	<0.002	< 0.002	<0.002				< 0.002			
	the local design of the local data with the	(3)	< 0.006		< 0.005	< 0.005	< 0.005				< 0.005	< 0.005	0.008	< 0.005	< 0.006	a second of the local distance of the local	<0.006	<0.006	< 0.006	< 0.006		< 0.006	
Lead	0.015	(2)	<0.005			Concession of the Owner water which the			<0.005	0.005	and the second division of the second divisio	and the other states and the same				0.007	< 0.005	< 0.005	0.0074	< 0.005		< 0.005	
Selenium	0.05	(2)	< 0.05		< 0.05	< 0.05	< 0.05		< 0.05	<0.25	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05	<
Silver	0.05	(3)	< 0.005		< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	
Mercury	0.002	(3)	< 0.0002		<0.0002	< 0.0002	< 0.001		0.0002	< 0.0002	<0.0002	< 0.0002	<0.0002	<0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002		< 0.0002	2 <0.
issolved Metals (mg/l):		Last												1		14							
Arsenic	0.1	(3)	< 0.001		< 0.02	< 0.02	0.0028		< 0.02	< 0.02	0.009	< 0.02	< 0.02	0.0025	< 0.02	< 0.02	0.0044	< 0.02	< 0.02	0.0025		< 0.02	
Barium	1	(3)	0.026		0.025	< 0.02	0.024		0.024	0.022	2.3	2.1	2.2	0.046	0.03	0.03	0.019	0.022	0.022	0.02		< 0.02	<(
Cadmium	0.01	(3)	< 0.002		< 0.002	< 0.002	< 0.002		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002		< 0.002	
Calcium	-	-	77		77	63	300		270	240	130	120	120	380	260	230	350	360	330	410		260	2
Chromium	0.05	(3)	<0.006		< 0.006	<0.006	< 0.006		< 0.006	< 0.006	<0.006	< 0.006	<0.006	< 0.006	<0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006		< 0.006	
Copper	1	(3)	< 0.006		< 0.006	< 0.006	< 0.006		< 0.006	< 0.006	< 0.006	< 0.006	<0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006		< 0.006	<0
Iron	1	(3)	0.023		0.039	0.041	< 0.02		< 0.02	< 0.02	6	6	7.2	0.13	0.2	0.4	< 0.02	< 0.02	< 0.02	< 0.02		< 0.02	<0
Lead	0.05	(3)	< 0.005		< 0.005	< 0.005	0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005		< 0.005	<0
Magnesium	-	-	19		20	16	88		94	76	45	41	41	54	39	33	50	57	52	55		39	:
Manganese	0.2	(3)	0.039		0.027	0.031	1.4		1.4	1.3	2.7	2.8	2.9	3	2.6	2.1	< 0.002	< 0.002	< 0.002	0.083		< 0.002	<0
Mercury	-	-																					
Potassium	-	-	2.4		2.3	2.6	4.4	· · · · ·	4.3	4	3.9	3.7	3.7	2.6	2.7	2.7	4.4	4.4	4.8	1.9		4.5	5
Selenium	0.05	(3)	0.0014		< 0.05	< 0.05	0.012		< 0.05	< 0.05	0.014	< 0.05	< 0.05	0.0095	< 0.05	< 0.05	0.031	<0.05	< 0.05	0.024		< 0.05	<0
Silver	0.05	(3)	< 0.005		<0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	<0.005	<0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	<0
Sodium	-	-	78		77	85	600		600	540	500	470	460	530	390	350	790	910	780	780		600	5
Uranium	0.03	(3)	0.0029		0.0022	0.002	0.01		0.0078	0.008	< 0.001	< 0.001	< 0.001	0.0015	0.0021	0.0014	0.013	0.0083	0.01	0.017		0.0064	
Zinc	10	(3)	0.057		< 0.05	< 0.05	0.068		< 0.05	< 0.05	0.072	< 0.05	< 0.05	0.053	< 0.05	<0.05	0.099	<0.05	<0.05	0.052		< 0.05	<0
rganics (mg/l):		11-11						No. Contraction									0.000	0.00	0.00	0.002	1.00	-0.00	-
Benzene	0.005	(2)	< 0.001	< 0.001	< 0.001	0.018	< 0.001	< 0.001	< 0.001	< 0.001	0.026	0.026	0.1	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0
Toluene	0.75	(3)	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001		< 0.001	< 0.01	< 0.01	< 0.01	< 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	0.046	0.046	0.086	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0
Xylene	0.62	(2)	< 0.0015		< 0.0015	a successive of the second	and the second state of th		< 0.002	Cash in the second second second	and the second sec	< 0.040	< 0.000		< 0.0015		< 0.0015	< 0.0015	< 0.0015	< 0.0015		< 0.001	
MTBE	0.125	(5)	< 0.0013	< 0.002		< 0.0015	0.001	and the second se	<0.002	< 0.0013	< 0.001	< 0.001	0.93	< 0.0013	< 0.0015	< 0.0013	< 0.0015	< 0.0015	< 0.0015	and the second second second second	and the second se		
		(5)	-0.001	~0.001	~0.001	~0.001	0.001	-0.001	-0.001	-0.001	-0.001	~0.001	0.95	~0.001	~0.001	~0.001	-0.001	~0.001	40.001	< 0.001	< 0.001	< 0.001	<0
otal Petroleum Hydrocarbons (		143	<0.00	<0.00	<0.00	<0.00	<0.00	1	<0.00	0.24	10	-0.0	0.4	0.45	<0.00	0.47	<0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-
Diesel Range Organics	0.2	(4)	<0.20	<0.20	<0.20	<0.20	<0.20		<0.20	0.34	1.3	<0.2	2.4	0.45	<0.20	0.47	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<(
Gasoline Range Organics	-	-	< 0.05	< 0.05	< 0.05	0.067	< 0.05		< 0.05	< 0.05	4.0	< 0.05	4.3	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05	<0
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

No screening level or analytical result available
 \* - Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet holdtime
 Analyte inadvertantly not included in analysis.

ug/l= micrograms per liter mg/l= milligrams per liter

			1123		W-1				V-13	1000		MW-26		-	MW-27		2	MW-32	1			V-33	
	and the second second		Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Au
latile Organic Compounds (up	g/L)	12.00	L. N.		See Stand				221023												SIN AND	Section 1	1.20
1,1,1,2-Tetrachloroethane	5.24E+00 (	(5)	< 1.0		<2.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<2.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<2.0	<
1,1,1-Trichloroethane	6.00E+01 (	(3)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	<
1,1,2,2-Tetrachloroethane	1	3)	< 2.0		<2.0	<2.0	< 2.0		<2.0	<2.0	< 20	< 20	< 10	< 2.0	<2.0	<2.0	< 2.0	<2.0	<2.0	< 2.0		<1.0	<
1,1,2-Trichloroethane		2)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<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	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	+
1,1-Dichloroethane		3)	< 1.0									< 10	< 5.0										-
1,1-Dichloroethene	5.00E+00 (	3)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10			< 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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
1,2,3-Trichloropropane	9.60E-02 (	(5)	< 2.0		<2.0	<2.0	< 2.0		<2.0	<2.0	< 20	< 20	<10	< 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	< 10	< 10	< 5.0	< 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	830	830	< 5.0	< 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	<1.0	< 2.0		<2.0	<1.0	< 20	< 20	< 10	< 2.0	<2.0	<1.0	< 2.0	<2.0	<1.0	< 2.0		<2.0	1
1,2-Dibromoethane (EDB)		2)			<1.0	<2.0	< 1.0		<2.0	<2.0	< 10	< 10	< 5.0	< 1.0	<1.0	<2.0	< 1.0	<1.0	<2.0	< 1.0		<1.0	
	5.00E-02 (	2)	< 1.0			******			and the second second second	and the second se	Concession of the local division of the	< 10	< 5.0	< 1.0		and and party state in some	and the second second second second	and the second state of th		and the second se			-
1,2-Dichlorobenzene	6.00E+02 (	2)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10				<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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
1,4-Dichlorobenzene		2)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
					<4.0	<4.0	< 4.0		<4.0	8.1	< 40	< 40	<20	< 4.0	<4.0	<4.0	< 4.0	<4.0	<4.0	< 4.0		<4.0	-
1-Methylnaphthalene	2.30E+00 (	9	< 4.0		and the second sec	and the second se		1								Concession of the local division of the	and the second s					and the second second second	-
2,2-Dichloropropane	-	-	< 2.0		<2.0	<2.0	< 2.0		<2.0	<2.0	< 20	< 20	< 10	< 2.0	<2.0	<2.0	< 2.0	<2.0	<2.0	< 2.0		<2.0	
2-Butanone		(5)	< 10		<10.0	<10.0	< 10		<10.0	<10.0	< 100	< 100	< 50	< 10	<10.0	<10.0	< 10	<10.0	<10.0	< 10		<10.0	-
2-Chlorotoluene	7.30E+02 (	(1)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
2-Hexanone		-	< 10		<10.0	<10.0	< 10		<10.0	<10.0	< 100	< 100	< 50	< 10	<1.0	<10.0	< 10	<10.0	<10.0	< 10		<1.0	-
2-Methylnaphthalene	1.50E+02 (	(1)	< 4.0		<4.0	<4.0	< 4.0		<4.0	<4.0	< 40	< 40	<20	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
4-Isopropyltoluene	2.002.00 (		< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	<5	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	-
			< 10		<10.0	<1.0	< 10		<10.0	<1.0	< 100	< 100	< 50	< 10	<10.0	<1.0	< 10	<10.0	<1.0	< 10		<10.0	-
4-Methyl-2-pentanone	-	-			-											and the second se				and the second second		where the party of the party of the party of	_
Acetone		(5)	< 10		<10.0	<10.0	< 10		<10.0	<10.0	< 100	< 100	< 50	< 10	<10.0	<10.0	< 10	<10.0	<10.0	< 10		<10.0	
Benzene		(2)	< 1.0		18	<1.0	< 1.0		<1.0	<1.0	26	26	<10	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Bromodichloromethane	1.17E+00 (	(5)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Bromomethane	8.66E+00 (	(5)	< 3.0		<1.0	<1.0	< 3.0		<1.0	<1.0	< 30	< 30	< 15	< 3.0	<1.0	<1.0	< 3.0	<1.0	<1.0	< 3.0		<1.0	
Carbon disulfide	1.04E+03 (	(5)	< 10		<10.0	<10.0	< 10		<10.0	<10.0	< 100	< 100	< 50	< 10	<10.0	<10.0	< 10	<10.0	<10.0	< 10		<10.0	<
Carbon Tetrachloride		(2)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Chlorobenzene	1.00E+02 (	(2)	< 1.0																			and the second se	
Chloroethane		-	< 2.0		<2.0	<2.0	< 2.0		<2.0	<2.0	< 20	< 20	< 10	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Chloromethane	1.78E+01 (	(5)	< 3.0		<1.0	<1.0	< 3.0		<1.0	<1.0	< 30	< 30	< 15	< 3.0	<1.0	<1.0	< 3.0	<1.0	<1.0	< 3.0		<1.0	
cis-1,2-DCE	7.00E+01 (	(2)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Dibromochloromethane	1.47E+00 (	(5)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
Dibromomethane	3.70E+02 (	(1)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	-
Dichlorodifluoromethane		(5)			<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
		2	< 1.0		and the second se	and the second sec								< 1.0	and a state of the state of the state of the	The second second second second second	< 1.0	<1.0	<1.0	< 1.0			-
Ethylbenzene		(2)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	46	46	<5.0		<1.0	<1.0						<1.0	-
Hexachlorobutadiene			< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Isopropylbenzene		(5)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	93	93	<5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	-
Methyl tert-butyl ether (MTBE)	1.25E+02 (	(5)	< 1.0		<1.0	<1.0	1.0		1.2	1.7	< 10	< 10	9.5	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Methylene Chloride			< 3.0		<3.0	<3.0	< 3.0		<3.0	<3.0	< 30	< 30	< 15	< 3.0	<3.0	<3.0	< 3.0	<3.0	<3.0	< 3.0		<3.0	
Naphthalene	and the second division of the second divisio		< 2.0		<2.0	<2.0	< 2.0		<2.0	<2.0	110	110	<10	< 2.0	<2.0	<2.0	< 2.0	<2.0	<2.0	< 2.0		<2.0	
n-Butylbenzene	-	-	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	$\vdash$
n-Propylbenzene			< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	110	110	<5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
sec-Butylbenzene			the second second second second second						<1.0	<1.0	15	14	<10	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	+
	1.005.00	-	< 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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 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	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
trans-1,2-DCE	and the second se	(2)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
trans-1,3-Dichloropropene		(1)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	
Trichloroethene (TCE)	and the second data and the second data in the seco	(2)	< 1.0		<1.0	<1.0			<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	+
		(2)					< 1.0												<1.0				
Trichlorofluoromethane		(5)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	and the second se	< 1.0		<1.0	-
Vinyl chloride	a new loss manufactory of the second s	(3)	< 1.0		<1.0	<1.0	< 1.0		<1.0	<1.0	< 10	< 10	< 5.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0		<1.0	1
	6.20E+02	(2)	< 1.5		<1.5	<1.5	< 1.5		<1.5	<1.5	< 15	< 15	< 7.5	< 1.5	<1.5	<1.5	< 1.5	<1.5	<1.5	< 1.5		<1.5	

		-		W-1				V-13			MW-26	A	A	MW-27		-	MW-32		-		V-33	
		Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	) Au
ni Volatile Organic Compour				10000		1					1.1					111					Alertic	-
1,2,4-Trichlorobenzene	7.00E+01 (2)				<10				<10			<10			<10			<10				
1,2-Dichlorobenzene	6.00E+02 (2)				<10				<10			<10			<10			<10				
1,3-Dichlorobenzene					<10				<10			<10			<10			<10				
1,4-Dichlorobenzene	7.50E+01 (2)				<10				<10			<10			<10			<10				
1-Methylnaphthalene	2.30E+00 (1)				<10				<10			<10			<10			<10				1
2,4,5-Trichlorophenol	3.65E+03 (5)				<10				<10			<10			<10			<10				-
2,4,6-Trichlorophenol	3.65E+01 (5)				<10				<10			<10			<10			<10				+
2,4-Dichlorophenol		-			<10				<10			<10			<10			<10				+
	1.10E+02 (5)											<10										+
2,4-Dimethylphenol	7.30E+02 (5)				<10				<10						<10			<10				-
2,4-Dinitrophenol	7.30E+01 (5)				<20				<20			<20			<20			<20				-
2,4-Dinitrotoluene	2.17E+00 (5)				<10				<10			<10			<10			<10				
2,6-Dinitrotoluene	3.70E+01 (1)				<10				<10			<10			<10			<10				
2-Chloronaphthalene	2.90E+03 (1)				<10				<10			<10			<10			<10				1
2-Chlorophenol	1.83E+02 (5)				<10				<10			<10			<10			<10				
2-Methylnaphthalene	1.50E+02 (1)				<10				<10			<10			<10			<10				
2-Methylphenol	1.80E+03 (1)				<10				<10			<10			<10			<10				-
2-Nitroaniline	1.10E+02 (1)				<10				<10			<10			<10			<10				-
	1.10E+02 (1)	-																				+
2-Nitrophenol	4 505 01 10				<10				<10			<10			<10			<10				+
3,3'-Dichlorobenzidine	1.50E-01 (1)				<10				<10			<10			<10			<10				-
3+4-Methylphenol	1.80E+02 (1)				<10				<10			<10			<10			<10				
3-Nitroaniline					<10				<10			<10			<10			<10				
4,6-Dinitro-2-methylphenol					<20				<20			<20			<20			<20				
4-Bromophenyl phenyl ether					<10				<10			<10			<10			<10				T
4-Chloro-3-methylphenol					<10				<10			<10			<10			<10				-
4-Chloroaniline	3.40E-01 (1)				<10				<10			<10			<10			<10				+
	0.402-01 (1)				<10				<10			<10			<10			<10				-
4-Chlorophenyl phenyl ether					the second se							the second second second			and the second second second second			and the second second second				-
4-Nitroaniline	3.40E+00 (1)				<10				<10			<10			<10			<10				-
4-Nitrophenol					<10				<10			<10			<10			<10				
Acenaphthene	2.19E+03 (5)				<10				<10			<10			<10			<10				
Acenaphthylene					<10				<10			<10			<10			<10				
Aniline	1.20E+01 (1)				<10				<10			<10			<10			<10				
Anthracene	1.10E+04 (5)				<10				<10			<10			<10			<10				1
Azobenzene	1.20E-01 (1)				<10				<10			<10			<10			<10				-
Benz(a)anthracene					<10				<10			<10			<10			<10				-
	9.21E-01 (5)											and the state of t										-
Benzo(a)pyrene	2.00E-01 (2)				<10				<10			<10			<10			<10				-
Benzo(b)fluoranthene	9.21E-01 (5)				<10				<10			<10			<10			<10				-
Benzo(g,h,i)perylene					<10				<10			<10			<10			<10				
Benzo(k)fluoranthene	9.21E+00 (5)	(			<10				<10			<10			<10			<10				
Benzoic acid	1.50E+05 (1)				<20				<20			<20			<20			<20				
Benzyl alcohol	1.80E+04 (1)				<10				<10			<10			<10			<10				
Bis(2-chloroethoxy)methane	1.10E+02 (1)				<10				<10			<10			<10			<10				
Bis(2-chloroethyl)ether	1.19E-01 (5)				<10				<10			<10			<10			<10				1
Bis(2-chloroisopropyl)ether					<10				<10			<10			<10			<10				-
			-						<10					-	<10	the second s		<10				-
Bis(2-ethylhexyl)phthalate	6.00E+00 (2)				<10							<10										-
Butyl benzyl phthalate	3.50E+01 (1)				<10				<10			<10			<10			<10				-
Carbazole					<10				<10			<10			<10			<10				1
	9.21E+01 (5)	)			<10				<10			<10			<10			<10				
Dibenz(a,h)anthracene		)			<10				<10			<10			<10			<10				
Dibenzofuran					<10				<10			<10			<10			<10				T
Diethyl phthalate	2.92E+04 (5)				<10				<10			<10			<10			<10				1
Dimethyl phthalate					<10				<10			<10			<10			<10				+
Di-n-butyl phthalate					<10				<10			<10			<10			<10				+
									<10													+
Di-n-octyl phthalate					<10							<10			<10			<10				+
Fluoranthene	1.46E+03 (5)				<10				<10			<10			<10			<10				-
Fluorene	1.46E+03 (5)	)			<10				<10			<10			<10			<10				1
Hexachlorobenzene	1.00E+00 (2)	)			<10				<10			<10			<10			<10				
Hexachlorobutadiene	8.60E-01 (1)	)			<10				<10			<10			<10			<10				
Hexachlorocyclopentadiene	5.00E+01 (2)	)			<10				<10			<10			<10			<10				
Hexachloroethane	3.65E+01 (5)				<10				<10			<10			<10			<10				1
Indeno(1,2,3-cd)pyrene		4			<10				<10			<10			<10			<10				1
Isophorone	7.07E+02 (5)				<10				<10			<10			<10			<10				+
					the second s							And the second second second			and the second se							+-
Naphthalene	1.43E+00 (5)	-			<10				<10			<10			<10			<10				-
Nitrobenzene	1.49E+01 (5)				<10				<10			<10			<10			<10				-
N-Nitrosodimethylamine	1.32E-02 (5)	)			<10				<10			<10			<10			<10				
N-Nitrosodi-n-propylamine	9.60E-03 (1)	)			<10				<10			<10			<10			<10				
N-Nitrosodiphenylamine	1.37E+02 (5)	)			<10				<10			<10			<10			<10				T
Pentachlorophenol	1.00E+00 (2)				<40				<40			<40			<40			<40				1
Phenanthrene	1.10E+03 (5)	-			<10				<10			<10			<10			<10				+-
r ne la nu le le					<10				<10	1		<10			<10			<10				+
and the second					510				-10			10			-10			-10				
Phenol Pyrene	5.00E+00 (3) 1.10E+03 (5)				<10				<10			<10			<10			<10				1

					W-1			-	N-13	_	-	MW-26			MW-27			MW-32				N-33	-
			Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Aug-10	Aug-09	Aug-11	Apr-11	Aug-10	Aug
eneral Chemistry (mg/l):	1.1.1.1.1.1						en la	-		120.00	a la martina	1997								-			
Fluoride	1.6	(3)	0.54		0.56	0.53	0.15		0.11	0.16	<0.50	0.34	0.32	0.4	0.39	0.38	0.22	0.2	0.21	0.3		0.36	0.
Chloride	250	(3)	11		15	16	230		230	200	300	320	400	380	240	180	690	900	840	530		400	6
Nitrite	1	(2)	<0.10		<0.10	<0.10	<2.0		<2.0	<2.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0		<2.0	<
Bromide	-	-	0.10		0.12	0.30	2.70		2.80	2.60	4.30	4.40	5.20	3.10	1.80	1.30	4.60	4.80	7.90	2.40		1.90	5.
Nitrate	10	(3)	0.99		1.40	0.69	5.80		5.40	5.80	< 0.50	1.90	<0.10	< 0.1	<0.1	<0.10	48	34	37	0.29		28	1
Phosphorus	-	-	< 0.50		<0.50	< 0.50	< 0.50		< 0.50	<0.50	<2.5	< 0.50	< 0.50	< 0.50	<0.50	< 0.5	<0.50	< 0.50	< 0.50	< 0.50		< 0.50	<0
Sulfate	600	(6)	110		150	70	1100		1100	1000	<2.5	0.99	<0.50	1500	1000	960	1600	1700	1500	2100		1300	10
Carbon Dioxide	-	-	270		280	250	880		900	840	1100	1100	1100	380	290	280	170	160	150	200		130	1
Alkalinity	-	-	290		280	270	940		900	890	1200	1100	1100	410	290	290	180	160	170	210		130	1
Bicarbonate	1.1.	-	290		280	270	940		900	890	1200	1100	1100	410	290	290	180	160	170	210		130	1
otal Metals (mg/l):	-	1.24	14-13-25	A Second	a desta a		1.2		11111		Seller	295238	Section Section	1000	124116-12						1246		
Arsenic	0.01	(2)	< 0.02		< 0.02	< 0.02	< 0.02		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.0002	< 0.02	< 0.02	< 0.02		< 0.02	<(
Barium	1	(3)	0.038		0.099	0.18	0.027		0.027	0.023	2.3	2.3	2.4	0.088	0.084	0.03	0.031	0.06	0.033	0.023		< 0.02	
Cadmium	0.005	(2)	< 0.002		< 0.002	< 0.002	< 0.002		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002		< 0.002	
Chromium	0.05	(3)	< 0.006		<0.006	<0.006	<0.006		<0.006	< 0.006	<0.006	<0.006	<0.006	<0.006	<0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006		< 0.006	-
Lead	0.015	(2)	< 0.005		< 0.005	< 0.005	<0.005		< 0.005		< 0.005	< 0.005	0.008	< 0.005	< 0.005	0.007	< 0.005	< 0.005	0.0074	< 0.005		< 0.005	
Selenium	0.05	(2)	< 0.05		< 0.05	< 0.05	< 0.05		< 0.05	<0.25	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.05	< 0.05		< 0.05	<0
Silver	0.05	(3)	< 0.005		< 0.005	< 0.005	< 0.005		< 0.005	and the second se	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	
Mercury	0.002	(3)	< 0.0002		< 0.0002	and the second designed and the second designed as the second second designed as the second	< 0.001		0.0002		and the second sec	< 0.0002		and the second se	< 0.0002					<0.0002		< 0.0002	
issolved Metals (mg/l):	0.002	(0)	-0.0002		-0.0002	-0.0002	-0.001		0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002		~0.0002	0.
Arsenic	0.1	(3)	< 0.001		< 0.02	< 0.02	0.0028		< 0.02	<0.02	0.009	< 0.02	< 0.02	0.0025	< 0.02	< 0.02	0.0044	< 0.02	< 0.02	0.0025		< 0.02	<(
Barium	1	(3)	0.026		0.025	<0.02	0.0028		0.024	0.022	2.3	2.1	2.2	0.046	0.02	0.02	0.0044	0.022	0.022	0.0025		<0.02	<0
Cadmium	0.01	(3)	< 0.020		< 0.025	< 0.02	< 0.024		< 0.024		< 0.002	< 0.002	< 0.002	< 0.040	< 0.002	< 0.002	< 0.002	< 0.022	<0.022	< 0.02		< 0.02	and the second s
Calcium	-	(3)	77		77	63	300		270	240	130	120	120	380	260	230	350	360	330	410		260	
Chromium	0.05	- (2)	< 0.006		< 0.006	< 0.006	< 0.006		<0.006	<0.006	< 0.006	< 0.006	<0.006	< 0.006	<0.006	< 0.006				and the second sec			2
	0.05	(3)				< 0.006						< 0.006	< 0.006	< 0.006	< 0.006		<0.006	<0.006	<0.006	< 0.006		< 0.006	
Copper	1	(3)	< 0.006		< 0.006		< 0.006		< 0.006		<0.006	6		and the state of t		< 0.006	< 0.006	<0.006	<0.006	< 0.006		< 0.006	
Iron		(3)	0.023		0.039	0.041	< 0.02		< 0.02	<0.02	6		7.2	0.13	0.2	0.4	< 0.02	< 0.02	< 0.02	< 0.02		< 0.02	<0
Lead	0.05	(3)	< 0.005		< 0.005	< 0.005	0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	
Magnesium	-	-	19		20	16	88		94	76	45	41	41	54	39	33	50	57	52	55		39	3
Manganese	0.2	(3)	0.039		0.027	0.031	1.4		1.4	1.3	2.7	2.8	2.9	3	2.6	2.1	< 0.002	< 0.002	< 0.002	0.083		< 0.002	-
Mercury		-																					-
Potassium	-	-	2.4		2.3	2.6	4.4		4.3	4	3.9	3.7	3.7	2.6	2.7	2.7	4.4	4.4	4.8	1.9		4.5	5
Selenium	0.05	(3)	0.0014		< 0.05	< 0.05	0.012		< 0.05	< 0.05	0.014	< 0.05	< 0.05	0.0095	< 0.05	< 0.05	0.031	< 0.05	< 0.05	0.024		< 0.05	<0
Silver	0.05	(3)	< 0.005		< 0.005	< 0.005	< 0.005		< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	-
Sodium	-	-	78		77	85	600		600	540	500	470	460	530	390	350	790	910	780	780		600	5
Uranium	0.03	(3)	0.0029		0.0022	0.002	0.01		0.0078	0.008	< 0.001	< 0.001	< 0.001	0.0015	0.0021	0.0014	0.013	0.0083	0.01	0.017		0.0064	
Zinc	10	(3)	0.057		< 0.05	< 0.05	0.068		< 0.05	< 0.05	0.072	< 0.05	< 0.05	0.053	< 0.05	< 0.05	0.099	< 0.05	< 0.05	0.052		< 0.05	<0
Organics (mg/l):					1.4.1.1	1000		-					State and the			1. Carlos	and the second					a filmit og	
Benzene	0.005	(2)	< 0.001	< 0.001	< 0.001	0.018	< 0.001	< 0.001	< 0.001	a second and a second	0.026	0.026	0.1	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.
Toluene	0.75	(3)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.
Ethylbenzene	0.7	(2)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.046	0.046	0.086	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.
Xylene	0.62	(3)	< 0.0015	<.002	< 0.0015	< 0.0015	< 0.0015	< 0.002	< < 0.002	< 0.0015	< 0.015	< 0.015	< 0.015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	<0.0015	< 0.0015	< 0.002	< 0.002	<0.0
MTBE	0.125	(5)	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.93	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.
otal Petroleum Hydrocarbons (r	ng/l):			a change	101242						In diana	5 S. 2 (7)	and the second				1.36 20 2	REALER	all a start	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	125172.20	e nicy it	
Diesel Range Organics	0.2	(4)	<0.20	<0.20	<0.20	<0.20	<0.20		<0.20	0.34	1.3	<0.2	2.4	0.45	<0.20	0.47	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0
Gasoline Range Organics	-	-	< 0.05	<0.05	< 0.05	0.067	<0.05		<0.05	< 0.05	4.0	< 0.05	4.3	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05	<0
		and the owner of the owner, where the ow		<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

No screening level or analytical result available
 \* - Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet holdtime
 = Analyte inadvertantly not included in analysis.

mg/l= milligrams per liter

Table 5
Downgradient Wells Analytical Summary

				M	W-11				MW-12					W-34				MW-35				-	MW-37					MW-38		
		Aug	g-11 A		Aug-09	Aug-08	Aug-11	Apr-11		Aug-09	Aug-08	Aug-11			Aug-08	Aug-11	Apr-11	Aug-10	Aug-09	Aug-08	Aug-11	Apr-11	Aug-10	Aug-09	Aug-08	Aug-11	Apr-11	Aug-10	Aug-09	Aug-
Volatile Organic Compounds (ug	g/L)		Service .				139104	1		10.610			1499.20																	
1,1,1,2-Tetrachloroethane	5.24E+00 (5	-/		< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.(
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	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	1.00E+01 (3		10	< 2.0	< 2.0	< 2.0	< 2.0		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	< 20		< 2.0	< 2.0	<4.0	< 20		< 20	< 2.0	< 2.0	< 2.0		<10	< 2.0	< 2.0
1,1,2-Trichloroethane	5.00E+00 (2	1		< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10 < 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 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	< 10		< 1.0	< 1.0	<2.0	< 10 < 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 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	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
1,1-Dichloropropene 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	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
1,2,3-Trichloropropane	9.60E-02 (		10	< 2.0	< 2.0	< 2.0	< 2.0		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<1.0	<1.0	< 20		< 2.0	< 2.0	<4.0	< 20		< 20	< 2.0	< 2.0	< 2.0		<10	< 2.0	< 2.0
1,2,4-Trichlorobenzene	7.00E+01 (			< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	1.50E+01 (		43	630	670	860	<1.0		<1.0	<1.0	<1.0	65	44	180	210	37		180	54	100	< 10		< 10	<1.0	<1.0	<1.0		<5.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	2.00E-01 (	2) <	10	< 2.0	< 2.0	< 2.0	< 2.0		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	< 20		< 2.0	< 2.0	<4.0	< 20		< 20	< 2.0	< 2.0	< 2.0		<10	< 2.0	< 2.0
1,2-Dibromoethane (EDB)	5.00E-02 (	2) <	5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.(
1,2-Dichlorobenzene	6.00E+02 (2	2) <	5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.(
1,2-Dichloroethane (EDC)	5.00E+00 (2	2) <	5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
1,2-Dichloropropane			5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.(
1,3,5-Trimethylbenzene	1.20E+01 (			< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
1,3-Dichlorobenzene	-	and the second second	5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0 <2.0	< 10 < 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
1,3-Dichloropropane 1,4-Dichlorobenzene	7.30E+02 ( 7.50E+01 (	-/		< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
1,4-Dichlorobenzene 1-Methylnaphthalene	2.30E+00 (		20	17	20	18	< 4.0		< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	4.6	4.7	< 40		< 4.0	< 4.0	<8.0	< 40		< 40	< 4.0	< 4.0	< 4.0		<20	< 4.0	< 4.0
2,2-Dichloropropane	2.002.00 (		10	< 2.0	< 2.0	< 2.0	< 2.0		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	< 20		< 2.0	< 2.0	<4.0	< 20		< 20	< 2.0	< 2.0	< 2.0		<10	< 2.0	< 2.0
2-Butanone	7.06E+03 (		50	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	<10.0	<10.0	< 100		< 10	< 10	<20.0	< 100		< 100	< 10	< 10	< 10		<50	< 10	< 10
2-Chlorotoluene	7.30E+02 (		5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.(
2-Hexanone	-		50	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	<1.0	<1.0	< 100		< 10	< 10	<20.0	< 100		< 100	< 10	< 10	< 10		<50	< 10	< 10
2-Methylnaphthalene	1.50E+02 (	1) 0.0	028	36	37	28	< 4.0		< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	<4.0	<4.0	< 40		< 4.0	< 4.0	<8.0	< 40		< 40	< 4.0	< 4.0	< 4.0		<20	< 4.0	< 4.(
4-Chlorotoluene	2.60E+03 (	1) <	5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.(
4-Isopropyltoluene		- 0.0	0054	8.3	5.9	5.2	<1.0		<1.0	<1.0	<1.0	2.9	1.7	4.5	5.2	< 10		3.8	1.7	<2.0	< 10		< 10	<1.0	<1.0	<1.0		<5.0	<1.0	<1.0
4-Methyl-2-pentanone		_	:50	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	<10.0	<10.0	< 100		< 10	< 10	<20.0	< 100		< 100	< 10	< 10	< 10		<50	< 10	< 10
Acetone	2.18E+04 (		:50	< 1.0	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	<10.0	<10.0	< 100		< 10	< 10	<20.0	< 100		< 100	< 10	< 10	< 10		<50	< 10	< 10
Benzene	5.00E+00 (	-/	56	1.4	99	3.8	<1.0		<1.0	<1.0	<1.0	<b>20</b> < 1.0	< 1.0	<b>32</b> <1.0	3.3	< 10		<1.0	<1.0	<2.0	< 10		< 10	<1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
Bromobenzene	2.00E+01 ( 1.17E+00 (		5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
Bromodichloromethane Bromoform	8.50E+00 (		5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
Bromomethane	8.66E+00 (		5.0	< 1.0	< 3.0	< 3.0	< 3.0		< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	<1.0	<1.0	< 30		< 3.0	< 3.0	<2.0	< 30		< 30	< 3.0	< 3.0	< 3.0		<5.0	< 3.0	< 3.0
Carbon disulfide	1.04E+03 (		50	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	<10.0	<10.0	< 100		< 10	< 10	<20.0	< 100		< 100	< 10	< 10	< 10		<50	< 10	< 10
Carbon Tetrachloride	5.00E+00 (	2) <	5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.(
Chlorobenzene	1.00E+02 (	2) <	5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.(
Chloroethane	-	- <	:10	< 2.0	< 2.0	< 2.0	< 2.0		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	<2.0	< 20		< 2.0	< 2.0	<4.0	< 20		< 20	< 2.0	< 2.0	< 2.0		<10	< 2.0	< 2.0
Chloroform	1.00E+02 (	(3) <	5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
Chloromethane	1.78E+01 (		5.0	< 1.0	< 3.0	< 3.0	<1.0		<1.0	< 3.0	< 3.0	< 3.0	< 2.0	<1.0	<1.0	< 30		< 3.0	< 3.0	<2.0	< 30		< 30	< 3.0	< 3.0	< 3.0		<5.0	< 3.0	< 3.0
cis-1,2-DCE	7.00E+01 (	-/	5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10 < 10		< 10 < 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	-		5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
Dibromochloromethane	1.47E+00 (	-/	5.0 5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
Dibromomethane	and and a second s		5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
Ethylbenzene			5.0	3.8	4.0	2.2	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
Hexachlorobutadiene	Contraction of the local division of the loc		5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.0
Isopropylbenzene	the second s		074	71	77	61	<1.0		<1.0	<1.0	<1.0	20	19	23	25	< 10		12	6.8	<2.0	< 10		< 10	<1.0	<1.0	<1.0		<5.0	<1.0	<1.0
Methyl tert-butyl ether (MTBE)	1.25E+02 (	(5) 0.	012	11	14	19	<1.0		<1.0	<1.0	<1.0	3.1	2.1	4.1	2.6	< 10		1.6	2.5	<2.0	< 10		< 10	<1.0	<1.0	1.6		<5.0	<1.0	2.2
Methylene Chloride	5.00E+00 (	(2) <	:15	< 3.0	< 3.0	< 3.0	< 3.0		< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	<3.0	<3.0	< 30		< 3.0	< 3.0	<6.0	< 30		< 30	< 3.0	< 3.0	< 3.0		<15	< 3.0	< 3.0
Naphthalene	1.43E+00 (		097	110	100	97	<2.0		<2.0	<2.0	<2.0	6.2	5	9.8	9.4	< 20		4.8	3	<4.0	< 20		< 20	<2.0	<2.0	<2.0		<50	<2.0	<2.0
n-Butylbenzene	-		5.0	3.3	25	3.1	<1.0		<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	< 10		1.4	1.2	<2.0	< 10 < 10		< 10	<1.0	<1.0	<1.0		<5.0	<1.0	<1.0
n-Propylbenzene	-	and the owner where the party of the party o	075	73	76	60	<1.0		<1.0	<1.0	<1.0	15	6.5	17 8.5	20 9.7	< 10 < 10		7.4	4.3	<2.0 2.6	< 10		< 10 < 10	<1.0 <1.0	<1.0	<1.0		<5.0 <5.0	<1.0	<1.0
sec-Butylbenzene	and the second division of the second divisio	and the second division of the second divisio	012	13	13	12	<1.0		<1.0	<1.0	< 1.0	7.2		<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0		< 1.0
Styrene tert-Butylbenzene	1.00E+02 (		5.0	< 1.0	2.6	2.7	<1.0		<1.0	<1.0	<1.0	2.3	2.1	2.4	2.4	< 10		2.5	2.1	<2.0	< 10		< 10	<1.0	<1.0	<1.0		<5.0	<1.0	<1.0
Tetrachloroethene (PCE)	5.00E+00	and the owner where the party of the party o	5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0		< 1.
Toluene			5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0		< 1.
trans-1,2-DCE	and the same of the same state	harden	5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0	< 1.0	< 1.
trans-1,3-Dichloropropene			5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0		< 1.0
Trichloroethene (TCE)		<u></u>	5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0		< 1.(
Trichlorofluoromethane	1.29E+03	(5) <	5.0	< 1.0	< 1.0	< 1.0	< 1.0	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10		< 10	< 1.0	< 1.0	< 1.0		<5.0		< 1.0
Vinyl chloride	1.00E+00	(3) <	5.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0	< 10		< 1.0	< 1.0	<2.0	< 10 < 15		< 10	< 1.0 < 1.5	< 1.0 < 1.5	< 1.0		<5.0 <7.5	and the second se	< 1.0
Xylenes, Total			7.5		< 2.0	< 1.5	< 1.5		< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	<1.5	1.7	< 15		< 1.5	< 1.5	<3.0			< 15			< 1.5			< 1.5	< 1.5

 Table 5

 Downgradient Wells Analytical Summary

				M	W-11				MW-12				M	W-34				MW-35					MW-37					MW-38		
		Au	ug-11		Aug-09	Aug-08	Aug-11	Apr-11			Aug-08	Aug-11		Aug-09	Aug-08	Aug-11	Apr-11			Aug-08	Aug-11	Apr-11		Aug-09	Aug-08	Aug-11	Apr-11	Aug-10		Aug-08
Semi Volatile Organic Compour	nds (ug/l):		-9			ring co	1109 11		· · · · ·																Tring ou					
1,2,4-Trichlorobenzene	7.00E+01 (2	2) <	< 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
1,3-Dichlorobenzene	-		< 10		< 10	< 10	< 10			< 10	< 10			<10	<10 <10				<10	<10				<10	< 10	<10			<10	< 10
1,4-Dichlorobenzene 1-Methylnaphthalene			< 10 < 10		< 10 < 10	< 10	< 10			< 10 < 10	< 10 < 10			<10 <10	<10				<10 <10	<10 <10				<10 <10	< 10 < 10	<10 <10			<10 <10	< 10 < 10
2,4,5-Trichlorophenol			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
2,4,6-Trichlorophenol		and a second sec	< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
2,4-Dichlorophenol	1.10E+02 (	5) <	< 20		< 20	< 20	< 20			< 20	< 20			<20	<20				<20	<20				<20	< 20	<20			<20	< 20
2,4-Dimethylphenol			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
2,4-Dinitrophenol			< 20		< 20	< 20	< 20			< 20	< 20			<10	<10				<20	<20				<20	< 20	<20			<20	< 20
2,4-Dinitrotoluene 2.6-Dinitrotoluene			< 10 < 10		< 10	< 10 < 10	< 10 < 10			< 10 < 10	< 10 < 10			<10 <10	<10 <10				<10 <10	<10 <10				<10 <10	< 10	<10 <10			<10 <10	< 10
2-Chloronaphthalene		und and and and and and and and and and a	< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
2-Chlorophenol			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
2-Methylnaphthalene			< 10		19	10	< 10			< 10	< 10			<10	<10				<10	<10	'			<10	< 10	<10			<10	< 10
2-Methylphenol	1.80E+03 (	(1) <	< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
2-Nitroaniline			< 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
3,3'-Dichlorobenzidine 3+4-Methylphenol			< 10 < 10		< 10 < 10	< 10 < 10	< 10 < 10			< 10 < 10	< 10 < 10			<10 <10	<10 <10				<10 <10	<10 <10				<10 <10	< 10	<10 <10			<10 <10	< 10 < 10
3-Nitroaniline	1.002+02 (		< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
4,6-Dinitro-2-methylphenol	-	the second s	< 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
4-Chloro-3-methylphenol	10.00 - 1- 10 T		< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
4-Chloroaniline	3.40E-01 (		< 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
4-Nitroaniline 4-Nitrophenol	3.40E+00 (		< 20 < 10		< 20 < 10	< 20	< 20 < 10			< 20 < 10	< 20 < 10			<10	<10 <10				<10 <10	<10				<10 <10	< 20	<10 <10			<10 <10	< 20 < 10
Acenaphthene	2.19E+03 (	_	< 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
Aniline	1.20E+01 (	(1) <	< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Anthracene			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Azobenzene			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Benz(a)anthracene Benzo(a)pyrene	9.21E-01 ( 2.00E-01 (		< 10 < 10		< 10	< 10 < 10	< 10 < 10			< 10 < 10	< 10 < 10			<10 <10	<10 <10				<10 <10	<10 <10				<10 <10	< 10 < 10	<10 <10			<10 <10	< 10 < 10
Benzo(b)fluoranthene			< 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
Benzo(k)fluoranthene		(5) <	< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<20	<20				<20	< 10	<20			<20	< 10
Benzoic acid			< 20		< 20	< 20	< 20			< 20	< 20			<20	<20				<10	<10				<10	< 20	<10			<10	< 20
Benzyl alcohol			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Bis(2-chloroethoxy)methane Bis(2-chloroethyl)ether			< 10 < 10		< 10	< 10	< 10			< 10 < 10	< 10 < 10			<10 <10	<10 <10				<10 <10	<10 <10				<10 <10	< 10 < 10	<10 <10			<10 <10	< 10 < 10
Bis(2-chloroisopropyl)ether			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Bis(2-ethylhexyl)phthalate	1		< 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
Carbazole	the second s		< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Chrysene			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Dibenz(a,h)anthracene Dibenzofuran	and the second sec	1	< 10 < 10		< 10	< 10 < 10	< 10			< 10 < 10	< 10 < 10			<10 <10	<10 <10				<10 <10	<10 <10				<10 <10	< 10 < 10	<10 <10			<10 <10	< 10 < 10
Diethyl phthalate	and the second sec	_	< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Dimethyl phthalate			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Di-n-butyl phthalate			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Di-n-octyl phthalate	and the second se	_	< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Fluoranthene			< 10 < 10		< 10	< 10	< 10			< 10 < 10	< 10			<10 <10	<10 <10				<10 <10	<10 <10				<10 <10	< 10	<10			<10 <10	< 10
Hexachlorobenzene			< 10		< 10	< 10	< 10			< 10	< 10 < 10			<10	<10				<10	<10				<10	< 10 < 10	<10 <10			<10	< 10 < 10
Hexachlorobutadiene			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Hexachlorocyclopentadiene	and the second se		< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Hexachloroethane			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Indeno(1,2,3-cd)pyrene		<u>`</u>	< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
	7.07E+02 (		< 10		< 10 32	< 10 51	< 10 < 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Naphthalene Nitrobenzene		. /	< 10 < 10		< 10	< 10	< 10			< 10 < 10	< 10 < 10			<10 <10	<10 <10				<10 <10	<10 <10				<10 <10	< 10 < 10	<10 <10			<10 <10	< 10 < 10
Nitrosodimethylamine			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
N-Nitrosodi-n-propylamine			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
N-Nitrosodiphenylamine	1.37E+02 (	1.1.1	< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Pentachlorophenol		1	< 40,		< 40	< 40	< 40			< 40	< 40			<40	<40				<40	<40				<40	< 40	<40			<40	< 40
Phenanthrene			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
Phenol Pyrene			< 10 < 10		< 10	< 10	< 10 < 10			< 10 < 10	< 10 < 10			<10 <10	<10 <10				<10 <10	<10 <10				<10 <10	< 10 < 10	<10 <10			<10 <10	< 10 < 10
Pyrelie			< 10		< 10	< 10	< 10			< 10	< 10			<10	<10				<10	<10				<10	< 10	<10			<10	< 10
- yndine		/	10				1.0	-			10																			

Table 5 **Downgradient Wells Analytical Summary** 

		l			W-11				MW-12					N-34	_			MW-35		14.30		A BUR	MW-37	-				MW-38		
			Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Apr-11	Aug-10	Aug-09	Aug-08	Aug-11	Aug-10	Aug-09	Aug-08	Aug-11	Apr-11	Aug-10	Aug-09	Aug-08	Aug-11	Apr-11	Aug-10	Aug-09	Aug-08	Aug-11	Apr-11	Aug-10	Aug-09	9 Au
eral Chemistry (mg/l):		-																		Mar In	146 199				No.		1			
Fluoride	1.6	(3)	0.59	< 0.50	0.38	0.57	0.49		0.55	0.44	0.5	0.84	0.65	0.61	0.83	0.61		0.54	0.64	0.76	0.71		0.73	0.77	0.79	0.72		0.77	0.84	
Chloride	250	(3)	340	300	330	110	4		6	15	8	240	200	180	110	180		170	98	110	310		320	280	230	86		79	64	
Nitrite	1	(2)	< 0.50	< 0.50	<0.20	<1.0	<0.10		<0.10	<0.10	< 0.10	< 0.50	<2.0	<2.0	<0.10	< 0.50		1	*<1.0	<0.1	<2.0		<2.0	*<1.0	< 0.10	<0.10		<0.10	*<1.0	
Bromide	-	-	4.30	3.90	4.00	1.40	<0.10		< 0.10	0.25	< 0.10	2.80	2.10	2.20	1.30	2.10		1.90	1.10	1.30	3.50		3.40	2.50	2.90	0.73		0.91	0.70	(
Nitrite	10	(3)	< 0.5	< 0.5	< 0.10	< 0.10	<0.10		0.22	< 0.10	<0.10	< 0.50	1.20	< 0.10	<0.10	<0.50		< 0.50	*<1.0	< 0.10	7.30		0.40	*<1.0	< 0.10	< 0.10		0.12	*<1.0	
Phosphorus	-	-	<2.5	<2.5	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50	<2.5	< 0.50	< 0.50	< 0.50	<2.5		<2.5	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	
Sulfate	600	(6)	5.10	5.30	4	1.10	63		69	600	130	22	320	18	9.90	3.50		3.1	10.0	3.6	29.0	-	16	37	34	49		33	68	
Carbon Dioxide	-	-	960	970	1100	1100	190		210	300	270	840	760	850	740	760		760	670	830	770		800	740	760	530		590	530	1
Alkalinity	-	-	1000	970	980	1100	220		210	320	280	910	760	880	750	820		760	710	870	860		800	810	820	590		590	580	1
Bicarbonate	-	-	1000	970	980	1100	220		210	320	280	910	760	880	750	820		760	710	870	860		800	810	820	590		590	580	
al Metals (mg/l):	0.04	(0)	-0.00	0.000	-0.00	-0.00	1 -0.00		0.004	-0.00	-0.00	<0.00	-0.00	-0.00	<0.00	<0.00		0.075	-0.00	-0.00	-0.00			-0.00	0.00	1 .0.00		-0.00	0.00	4
Arsenic	0.01	(2)	< 0.02	0.033	< 0.02	< 0.02	< 0.02		0.021	< 0.02	< 0.02	< 0.02		< 0.02	< 0.02	< 0.02		0.075	<0.02	< 0.02	< 0.02		< 0.02	< 0.02	< 0.02	< 0.02		< 0.02	< 0.02	
Barium	1	(3)	0.98	1.1	0.92	0.7	0.064		0.21	0.17	0.06	0.76	0.38	0.71	0.57	0.92		0.99	0.54	0.65	0.44		0.9	0.7	0.43	0.27		0.42	0.18	
Cadmium	0.005	(2)	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002		< 0.002	and the state of t	and the second data was not set of the second data was not second data w	< 0.002	and the second se	< 0.002	< 0.002	< 0.002		< 0.002	< 0.002	and the second se	< 0.002		< 0.002	< 0.002		< 0.002		< 0.002		
Chromium	0.05	(3)	< 0.006	< 0.006	0.009	0.009	0.38		2.1	0.69	0.011 <0.005	< 0.006	<0.006	<0.006	<0.006	<0.006		<0.0062	< 0.006	< 0.006	0.0073		< 0.006	< 0.006				< 0.006		
Lead	0.015	(2)	<b>0.016</b> < 0.05	0.016	0.011		0.018		<b>0.044</b>	<b>0.081</b> <0.050		<0.005	<0.005	< 0.050	< 0.25	<0.008		< 0.05	0.011	< 0.005	< 0.005		< 0.005	0.0065	< 0.005	0.0054		< 0.005		
Selenium	0.05	(2)	< 0.005	<0.05	< 0.005	<0.25	<0.05		< 0.005		and a surface of the	< 0.005		< 0.005	< 0.25	< 0.005		< 0.005	<0.05	<0.25	<0.05		<0.05	<0.25	<0.25	< 0.05		< 0.05	< 0.25	
Mercury	0.002	(3)	< 0.005		< 0.0002	< 0.0002	<0.0002		and the second second second	and the second division of the second division of	< 0.0002	and the second se		<0.0002	< 0.0002					< 0.005	< 0.005		and the local design of the set	the second se	-	<0.005		< 0.005		
solved Metals (mg/l):	0.002	1(3)	~0.0002	0.0002	<0.0002	<0.0002	1<0.0002		0.0002	-0.0002	-0.0002	<0.0002	-0.0002	<0.000Z	~0.0002	-0.0002		~0.0002	~0.0002	<0.0002	<0.0002		0.0006	<0.0002	<0.0002	2 < 0.0002		0.0004	< 0.0002	2140
Arsenic	0.1	(3)	0.0061	< 0.02	< 0.02	< 0.02	< 0.001		< 0.02	< 0.02	< 0.02	0.0041	<0.02	< 0.02	< 0.02	0.0063		<0.10	<0.2	< 0.02	0.0042		< 0.02	< 0.02	< 0.02	0.0023		< 0.02	<0.10	) <
Barium	1	(3)	0.85	1.1	0.87	0.02	0.033		0.043	0.066	0.02	0.0041	0.52	0.65	0.57	0.84		0.75	0.39	0.65	0.0042		0.45	0.43	0.43	0.0023		0.25	<0.10	
Cadmium	0.01	(3)	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002		< 0.002	and the second s		< 0.002	and the second design of the s	< 0.002	< 0.002	< 0.002		< 0.002	< 0.002	< 0.002	< 0.002		< 0.002	< 0.002		<0.002		< 0.002	< 0.002	
Calcium	0.01	(3)	140	130	120	~0.002	50		50	100	-0.002	120	78	99	-0.002	110		95	73	-0.002	110		99	82	-0.002	90		88	91	2 -1
Chromium	0.05	(3)	< 0.006	< 0.006	< 0.006	0.009	0.0064		< 0.006	the second se	0.011	< 0.006		<0.006	< 0.006	< 0.006		<0.006	< 0.006	< 0.006	< 0.006		< 0.006	< 0.006	< 0.006	< 0.006		< 0.006	< 0.006	6 <(
Copper	1	(3)	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006		< 0.006		< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006		< 0.006	< 0.006	< 0.006	< 0.006		< 0.006	< 0.006	< 0.006	< 0.006		< 0.000		and the second second
Iron	1	(3)	12	14	12	12	0.095		0.061	0.26	0.021	4	3.1	3.6	4.1	4.1		3.9	3.1	2.6	2.6		1.9	1.1	0.95	3		2.1	2.5	
Lead	0.05	(3)	< 0.005	0.0054	0.007	0.007	< 0.005		< 0.005		< 0.005	< 0.005		< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005		< 0.005		
Magnesium	-	-	31	28	27		8.9		8.9	21		23	15	19		19		17	13		21		20	18		15		14	16	
Manganese	0.2	(3)	2.2	2.1	2.3	1.9	0.031		0.15	0.34	0.065	4.4	3.2	3.6	3.1	2.5		2.7	1.6	1.4	1.1		1.3	1.4	1.2	2.3		2.3	1.6	
Mercury	-	-																												
Potassium	-	-	2.0	1.9	1.6		<1.0		<1.0	<1.0		1.5	1.2	1.3		2.8		2.6	2.3		3.6		3.3	2.9		2.6		2.4	3.3	-
Selenium	0.05	(3)	0.014	< 0.05	< 0.05	<0.25	0.0019		< 0.05	< 0.05	<0.25	0.0088	< 0.05	< 0.05	<0.25	0.0069		< 0.05	< 0.05	<0.25	0.011		< 0.05	< 0.05	<0.25	0.0036		< 0.05	< 0.05	<
Silver	0.05	(3)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	and the second s	wines we have not
Sodium	-	-	460	450	420		62		66	260		390	320	350		340		330	270		440		410	370		210		210	210	
Uranium	0.03	(3)	< 0.001	< 0.001	< 0.001	< 0.001	0.0016		0.0012	0.008	0.003	< 0.001	<0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	0.0018		< 0.001	< 0.001	< 0.001	0.0026		and the second se	0.003	0
Zinc	10	(3)	0.072	< 0.05	< 0.05	< 0.05	0.082		< 0.05	< 0.05	0.095	0.045	<0.05	<0.05	< 0.05	0.03		< 0.05	< 0.05	< 0.05	0.087		<0.05	< 0.05	0.15	0.068		< 0.05	< 0.05	interest in the local division in the local
ganics (mg/l):			- State			State of the	1200	A THE REAL		1		A SHARE AND						18 19 18 18 18 18 18 18 18 18 18 18 18 18 18	Sand Sant				S. Carlos	and the second	Sector 1	The last	The second	50. A. S. A.S.	Web are	
Benzene	0.005	(2)	0.056	0.00144	0.099	0.0038	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.02	<.001	0.032	0.0033	< 0.001	< 0.001	< 0.001	< 0.001	<.002	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	<(
Toluene	0.75	(3)	< 0.005	<.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	< 0.01	< 0.001	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	<(
Ethylbenzene	0.7	(2)	< 0.005	0.0038	0.004	0.0022	< 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	< 0.002	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	<(
Xylene	0.62	(3)	< 0.0075	< 0.002	< 0.002	<.0015	< 0.0015	< 0.002	< 0.0015	< 0.0015	< 0.0015	< 0.0015	<.0015	< 0.0015	0.0017	< 0.0015	< 0.002	< 0.0015	< 0.0015	< 0.003	< 0.015	< 0.002	< 0.015	< 0.015	<0.0015	< 0.0015	< 0.002	<0.0075	<0.0015	5 <0
MTBE	0.125	(5)	0.012	0.011	0.014	0.019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0031	0.0021	0.0041	0.0026	< 0.001	0.0024	0.0016	0.0025	<.002	< 0.01	< 0.001	<0.01	< 0.01	< 0.01	< 0.0016	0.0014	<.0052	<.001	<
tal Petroleum Hydrocarbons (	mg/l):									RESERVED.											6-4-5-F				See Shield		function of			
Diesel Range Organics	0.2	(4)	0.83	2.0	12	9.6	<0.20	<0.20	<0.20	<1.0	0.3	1.2	1.0	9.5	3.9	0.89		0.52	2.9	0.74	0.35	<0.20	2.1	0.33	0.47	0.21	<0.20	<1.0	0.33	(
Gasoline Range Organics	-	-	1.7	2.2	1.9	3.4	< 0.05	< 0.050	< 0.05	< 0.005	< 0.05	0.87	0.7	0.74	1.4	0.97		0.58	0.84	0.53	< 0.05	< 0.05	<0.05	0.79	0.075	< 0.05	0.079	< 0.05	0.075	<
		-	<2.5	<2.5	<5.0	<5.0	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<5.0	<5.0	<2.5		<2.5	<5.0	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<25	<5.0	<2.5	<

		MW	/-50	MW	/-51	MW	-52	MW	/-53	MW			V-55	MW		MW			W-58		/-59		/-60	MW			W-62
	1.1.1	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-1
Volatile Organic Compounds (	ug/L)	nugin	riag io	rug II	riag io					1.1.1.1.1.1					Standy?	52.55		3.15		and state						A State	gine y and
	5.24E+00 (5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.0
	6.00E+01 (3)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 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			< 40	< 40						< 40	< 2.0	< 10	< 2.0	< 2.0			< 2.0	< 2.0
	5.00E+00 (2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 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			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.0
	X /	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 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			< 20	< 20						< 20	< 1.0	< 5.0	< 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			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.0
1,2,3-Trichlorobenzene		< 1.0	< 1.0				< 2.0	< 2.0	< 2.0			< 40	< 40						< 40	< 2.0	< 10	< 2.0	< 2.0			< 2.0	< 2.
1,2,3-Trichloropropane	9.60E-02 (5)	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0			< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
1,2,4-Trichlorobenzene	7.00E+01 (2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0					1100						<20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
1,2,4-Trimethylbenzene	1.50E+01 (1)	< 1.0	1.1	< 1.0	36	< 1.0	< 1.0	< 1.0	< 1.0			420	< 40						< 40	< 2.0	< 10	< 2.0	< 2.0			< 2.0	< 2.
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			< 40	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
1,2-Dibromoethane (EDB)	5.00E-02 (2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20										< 1.0	< 1.0			< 1.0	< 1.
1,2-Dichlorobenzene	6.00E+02 (2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0					< 1.0	< 1.
1,2-Dichloroethane (EDC)	5.00E+00 (2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	13	< 5.0	< 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			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
1,3,5-Trimethylbenzene	1.20E+01 (1)	< 1.0	2.9	< 1.0	14	< 1.0	< 1.0	< 1.0	< 1.0			110	350						<20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
1.3-Dichlorobenzene		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
1,3-Dichloropropane	7.30E+02 (1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
1,4-Dichlorobenzene	7.50E+01 (2)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
1-Methylnaphthalene	2.30E+00 (1)	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0			120	140						<20	37	26	< 4.0	< 4.0			< 4.0	< 4.
	2.002.00 (1)	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0			< 40	< 40						< 40	< 2.0	< 10	< 2.0	< 2.0			< 2.0	< 2.
2,2-Dichloropropane	7065102 (5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 200	< 200						< 200	< 10	< 50	< 10	< 10			< 10	< 1
2-Butanone	7.06E+03 (5)								< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
2-Chlorotoluene	7.30E+02 (1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0				< 200	< 200						< 200	< 10	< 50	< 10	< 10			< 10	< 1
2-Hexanone		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10										240	< 4.0	<20	< 4.0	< 4.0			< 4.0	< 4.
2-Methylnaphthalene	1.50E+02 (1)	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0			190	240							< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
4-Chlorotoluene	2.60E+03 (1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20								
4-Isopropyltoluene		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			20	30						<20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
4-Methyl-2-pentanone		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 200	< 200						< 200	< 10	< 50	< 10	< 10			< 10	<1
Acetone	2.18E+04 (5)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 200	< 200						< 200	< 10	< 50	< 10	< 10			< 10	< 1
Benzene	5.00E+00 (2)	< 1.0	90	2.0	390	< 1.0	< 1.0	< 1.0	< 1.0			7800	11000						4500	38	42	< 1.0	< 1.0			< 1.0	< 1.
Bromobenzene	2.00E+01 (1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
Bromodichloromethane	1.17E+00 (5)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
	8.50E+00 (1)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
Bromoform			< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0			< 60	< 60						< 60	< 3.0	< 15	< 3.0	< 3.0			< 3.0	< 3
Bromomethane	8.66E+00 (5	< 3.0				< 10	< 10	< 10	< 10			< 200	< 200						< 200	< 10	< 50	< 10	< 10			< 10	< 1
Carbon disulfide	1.04E+03 (5	< 10	< 10	< 10	< 10							< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
Carbon Tetrachloride	5.00E+00 (2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0										< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
Chlorobenzene	1.00E+02 (2	) < 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20									< 2.0	< 2.0			< 2.0	< 2.
Chloroethane		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0			< 40	< 40						< 40	< 2.0	< 10	-		-			and the second second
Chloroform	1.00E+02 (3	) < 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
Chloromethane	1.78E+01 (5	) < 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0			< 60	< 60						< 60	< 3.0	< 15	< 3.0	< 3.0			< 3.0	< 3.
cis-1,2-DCE	7.00E+01 (2	) < 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
cis-1,3-Dichloropropene		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
Dibromochloromethane	1.47E+00 (5	) < 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
Dibromomethane	3.70E+02 (1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
Dichlorodifluoromethane	3.95E+02 (5	/	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
		) < 1.0	4.1	< 1.0	22	< 1.0	< 1.0	< 1.0	< 1.0			2000	2600						140	260	100	< 1.0	< 1.0			< 1.0	< 1.
Ethylbenzene	7.00E+02 (2	/		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
Hexachlorobutadiene	8.60E-01 (1	) < 1.0	< 1.0				< 1.0	< 1.0	< 1.0			160	180						110	32	15	< 1.0	< 1.0			< 1.0	< 1
Isopropylbenzene	6.79E+02 (5	) < 1.0	< 1.0	< 1.0	3.4	< 1.0							7000						15000	330	< 5.0	< 1.0	< 1.0			< 1.0	<1
Methyl tert-butyl ether (MTBE)	1.25E+02 (5	) < 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			7800							< 60	< 3.0	< 15	< 3.0	< 3.0			< 3.0	< 3
Methylene Chloride	5.00E+00 (2	) < 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0			< 60	< 60							69	51			-		< 2.0	
Naphthalene	1.43E+00 (5	) < 2.0	4.6	< 2.0	9	< 2.0	< 2.0	< 2.0	< 2.0			520	660						120			< 2.0	< 2.0				
n-Butylbenzene		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			30	62						<20	11	8.3	< 1.0	< 1.0			< 1.0	
n-Propylbenzene		< 1.0	< 1.0	< 1.0	2.4	< 1.0	< 1.0	< 1.0	< 1.0			390	490						110	32	12	< 1.0	< 1.0			< 1.0	
sec-Butylbenzene		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			27	29						<20	9.4	6.4	< 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			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1
tert-Butylbenzene		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1
Tetrachloroethene (PCE)	5.00E+00 (2	) < 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1
		) < 1.0	2.4	< 1.0	8.9	< 1.0	< 1.0	< 1.0	< 1.0			< 20	29						<20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	
Toluene		/				-	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	
trans-1,2-DCE		) < 1.0	< 1.0	< 1.0	< 1.0	< 1.0						< 20							< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	
trans-1,3-Dichloropropene		) < 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			-	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	
Trichloroethene (TCE)	5.00E+00 (2	() < 1.0	< 1.0	< 1.0	and the second se	< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20											-			
Trichlessefluesemethana	1.29E+03 (5	) < 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0			< 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	
Trichlorofluoromethane						1 10	1 4 0	1 110	- 4 0	1		1 < 20	< 20						< 20	< 1.0	< 5.0	< 1.0	< 1.0			< 1.0	< 1.
Vinyl chloride	1.00E+00 (3	3) < 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			< 20 620	~ 20			-			<30	< 1.5	< 7.5	< 1.5	< 1.5			< 1.5	

			14/ 50	1 841	A/ E4	A1A	/-52	MW	1-53	MW	-54	MV	V-55	MW	-56	MW	-57	M	N-58	MM	V-59	MV	V-60	MV	/-61	MV	N-62
		Aug 1	1 Aug-10	Aug-11	N-51	Aug-11	Aug-10												Aug-10								
Semi Volatile Organic Compou	inds (ug/l):	TAug-1	T Aug-10	TAugen	Aug-10	TAUG 11	rug io	rug i i	10.9.10			rug													292.04		
	7.00E+01 (2)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
.,,	6.00E+02 (2)	< 10		< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
1,3-Dichlorobenzene	0.002.02 (2)	< 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
	2.30E+00 (1)	< 10		< 10	< 10	< 10	< 10	< 10	< 10			73	<10						<10	13	< 10	< 10	< 10			< 10	< 10
	3.65E+03 (5)	< 10		< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
-1.1-	3.65E+01 (5)	< 10		< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
2,4,0-Thenlorophenol	1.10E+02 (5)	< 20		< 20	< 20	< 20	< 20	< 20	< 20			< 20	< 20						< 20	< 20	< 20	< 20	< 20			< 20	< 20
	7.30E+02 (5)	< 10	and the second se	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
2,4-Dimethylphenol	- And	< 20		< 20	< 20	< 20	< 20	< 20	< 20			< 20	< 20						< 20	< 20	< 20	< 20	< 20			< 20	< 20
2,4-Dinitrophenol	7.30E+01 (5 2.17E+00 (5	< 10		< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
2,4-Dinitrotoluene		-		< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
2,6-Dinitrotoluene	3.70E+01 (1	) < 10	and all a second s	< 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
2-Chlorophenol	1.83E+02 (5	) < 10		< 10	< 10	< 10	< 10	< 10	< 10			110	150						90	< 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	< 10
2-Methylphenol	1.80E+03 (1	) < 10	and the second se	and the second sec	< 10	< 10	< 10	< 10	< 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	< 10	< 10			< 10	< 10
2-Nitrophenol		< 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
3+4-Methylphenol	1.80E+02 (1	) < 10		< 10	< 10	< 10	< 10	< 10				< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
3-Nitroaniline		< 10		< 10	< 10	< 10	< 10	< 10	< 10										< 20	< 20	< 20	< 20	< 20			< 20	< 20
4,6-Dinitro-2-methylphenol		< 20		< 20	< 20	< 20	< 20	< 20	< 20			< 20	< 20						< 10	< 10	< 10	< 10	< 10			< 10	< 10
4-Bromophenyl phenyl ether		< 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
4-Chloroaniline	3.40E-01 (1	) < 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						the second s							< 20	< 20
4-Nitroaniline	3.40E+00 (1	) < 20	) < 20	< 20	< 20	< 20	< 20	< 20	< 20			< 20	< 20						< 20	< 20	< 20	< 20	< 20			< 10	< 10
4-Nitrophenol		< 10	) < 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10				
Acenaphthene	2.19E+03 (5	) < 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
Aniline	1.20E+01 (1	) < 10	) < 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Anthracene	1.10E+04 (5	) < 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
Benz(a)anthracene	9.21E-01 (5	) < 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
Benzo(b)fluoranthene	9.21E-01 (5	) < 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
Benzo(k)fluoranthene	9.21E+00 (5	) < 10		< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Benzoic acid	1.50E+05 (1	) < 20		< 20	< 20	< 20	< 20	< 20	< 20			< 20	< 20						< 20	< 20	< 20	< 20	< 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
	1.10E+02 (1	) < 10	taken or east in some the second s	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Bis(2-chloroethoxy)methane Bis(2-chloroethyl)ether	1.19E-01 (5	) < 10		< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
the same in the same state of the same state o	9.60E+00 (5	5) < 10		< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Bis(2-chloroisopropyl)ether		2) < 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
Butyl benzyl phthalate	3.50E+01 (1	) < 10		the second data and the second data		< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Carbazole		< 10	and the second s	and the second se		< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
	9.21E+01 (5	5) < 10			And a local division of the local division o		< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Dibenz(a,h)anthracene	9.21E-02 (5	5) < 10				< 10			CONTRACTOR OF THE OWNER O			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Dibenzofuran		< 10		the second se	and the second se	< 10	< 10	< 10	< 10 < 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Diethyl phthalate	2.92E+04 (5	5) < 10				< 10	< 10	-				< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Dimethyl phthalate	3.65E+05 (5	5) < 10				< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Di-n-butyl phthalate	3.65E+03 (5		summer and the summer is in succession of the su	and the second second second	state and a second second second second second	< 10	< 10	< 10	< 10			< 10	midd war a branch as a stand of the set						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Di-n-octyl phthalate		< 1				< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Fluoranthene	1.46E+03 (5		And a local division of the local division o		and the second se	< 10	< 10	< 10	< 10				< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Fluorene	1.46E+03 (5					< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Hexachlorobenzene	1.00E+00 (2	2) < 1		and the second se		< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Hexachlorobutadiene	8.60E-01 (1	1) < 1			territory in the local division of the local	< 10	< 10	< 10	< 10			< 10	< 10							< 10	< 10	< 10	< 10			< 10	< 10
Hexachlorocyclopentadiene	5.00E+01 (2	2) < 1			and the second se	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
Hexachloroethane	and the second se	5) < 1	and the second s		and a second sec	< 10	< 10	< 10	< 10			< 10	< 10						< 10	and the second se	< 10		< 10			< 10	< 10
Indeno(1,2,3-cd)pyrene	2.90E-02 (*	1) < 1				< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10		< 10					< 10
Isophorone	.7.07E+02 (5	5) < 1				< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10	-		< 10	
Naphthalene	1.43E+00 (	5) < 1	0 < 10	second result in succession in the later	and the second se	< 10	< 10	< 10	< 10			200	290						76	22	12	< 10	< 10			< 10	< 10
Nitrobenzene	1.49E+01 (	5) < 1	0 < 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
N-Nitrosodimethylamine	1.32E-02 (	5) < 1	0 < 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 1
N-Nitrosodi-n-propylamine	9.60E-03 (	1) < 1	0 < 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 1
N-Nitrosodiphenylamine	1.37E+02 (	5) < 1	0 < 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 1
Pentachlorophenol	1.00E+00 (2	2) < 2	0 < 20	< 20	< 20	< 20	< 20	< 20	< 20			< 20	< 20						< 20	< 20	< 20	< 20	< 20			< 20	< 2
Fentachiolophenol		5) < 1				< 10	< 10	< 10	< 10			< 10	< 10						< 10	< 10	< 10	< 10	< 10			< 10	< 10
	1.10E+03 (										1		1.0		1				1 11	< 10	< 10	< 10	1 - 10			< 10	- 10
Pentachiolophenol Phenanthrene Phenol	1.10E+03 (3 5.00E+00 (3	3) < 1		< 10	< 10	< 10	< 10	< 10	< 10			< 10	16						11	and the second se			< 10				< 10
Phenanthrene			0 < 10			< 10 < 10	< 10 < 10	< 10	< 10			< 10 < 10	<b>16</b> < 10						< 10 < 10	< 10 < 10 < 10	< 10 < 10 < 10	< 10 < 10 < 10	< 10 < 10 < 10			< 10 < 10 < 10	< 10

-		MW-50			V-51		-52		V-53		V-54		V-55		1-56		N-57		W-58		V-59		V-60		V-61		N-62
10000	Aug-			Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug
	Trug	1170	ug to I	Aug	Aug 10	ridg II	riag ro	ring	1.09.10		1	Triag T.	1100	1		1	11103 10	rag ii	ring in	Trug II	Thug to	They	ridg 10	rug	Triag to	Tragin	1143
.6 (	(2) 0.20		04	0.59	0.52	0.69	0.76	0.22	0.29			<0.10	0.35						0.31	0.33	0.34	0.26	<0.10			0.14	<0
	(3) 0.39		0.4		and the second se				840				470									210				15	1
	(3) 8		12	12	14	690	600	920				420							270	140	120		110			a second second second second	
1 (	(2) <0.1		0.10	<0.10	< 0.10	<2.0	<2.0	<2.0	<2.0			<0.10	*6.1						*5.5	<0.10	*1.3	<0.10	<2.0			<0.10	<(
-	- <0.1	) <	<0.10	<0.10	<0.10	1.70	1.70	1.80	1.80			4.20	4.40						5.00	0.31	1.40	4.40	2.30			<1.0	<0
0 (	(3) 0.21	1 0	0.14	0.70	0.14	15	3	11	8.10			<0.10	*6.1						*5.5	0.26	*1.3	26	31			< 0.50	0.
	- <0.5	0 <	0.50	< 0.50	< 0.50	<0.50	< 0.50	<0.50	< 0.50			< 0.50	< 0.50						< 0.50	< 0.50	< 0.50	< 0.50	< 0.50			<0.50	<0>
00 (	(6) 38.0	) 6	56.00	67	61	1200	1700	1000	990			< 0.50	1						2	320	210	1000	730			3700	51
10.00	- 200		210	210	250	250	190	330	350			1000	1000						1100	940	860	730	590			530	5
	and the second se			240		270	190	370	350			1100	1000						1100	940	860	780	590			550	5
	the second design of the secon				and the second se														the second				and the second design of the s			and the owner of the owner owne	5
	- 200	_	210	240	200	210	100	010	000		1.	1100	1000		1.4.5 T. 1.5		1000	10000	1100	1 0 10	000	100	000			1 000	-
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	where the party of the local division of the local division of the local division of the local division of the	and the second second		and the second se	and the second se	and the second descent in second descent in the second descent desc	and the same that the standard street													and the second se			and the second se			-	0.
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015	(2) < 0.00	15 <	0.005	0.0086	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			0.023	0.3						0.034	< 0.005	< 0.005	0.0063	0.0051			< 0.005	<0
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05	(3) <0.0	15 <	0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005						< 0.005	< 0.005	<0.005	< 0.005	< 0.005			< 0.005	<0
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1			0.035	< 0.02	0.2	0.12	0.7	0.036	0.13			9.8	12						8.9	4.9	2.7	< 0.02	< 0.02			0.97	0
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-	- 40		42	51	48	600	560	750	700			500	400						390	370	340	560	320			1400	14
03	(3) < 0.0	1 <	0.001	0.0023	0.0018	0.0094	0.0072	0.015	0.0108			< 0.001	< 0.001						< 0.001	0.0023	0.0023	0.012	0.0086			0.0077	0.0
				and a second	and the second se		< 0.05	0.17	< 0.05			0.18	< 0.05						< 0.05	0.046	< 0.05	0.085	< 0.05			0.075	<0
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125	(5) <0.00	)1 <	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			7.8	7						15	0.33	< 0.005	< 0.001	< 0.001			< 0.001	<0.
g/l):	ET LE RESTO			547.5467	2.2	Contraction of																					
.2	(4) <0.2	0 <	<0.20	< 0.20	<0.2	<0.20	< 0.20	< 0.20	< 0.20			5.5	13						6.6	0.84	0.61	< 0.20	<0.20			<0.20	<0
-			and the state of t	< 0.05	1.8	<0.05	<0.05	< 0.05	< 0.05			40.0	59						29	1.6	1.3	< 0.05	0.43			< 0.05	<0
	- <2.		<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	
100.000	Notes	_	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0			-2.0	-2.0					-	-2.0	1	2.0	-2.0	-2.0			-2.0	-
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0.50</math> <math>&lt; 0.00</math> <math>&lt; 1000</math> <math>&lt; 330</math>         -       230       210       240       250       270       <math>190</math> <math>370</math>         -       230       210       240       250       <math>270</math> <math>190</math> <math>370</math>         -       230       20.02       <math>&lt; 0.02</math> <math>&lt; 0.02</math> <math>&lt; 0.002</math> <math>&lt; 0</math></td><td><math display="block">\begin{array}{c c c c c c c c c c c c c c c c c c c </math></td><td><math display="block"> \begin{array}{c c c c c c c c c c c c c c c c c c c </math></td><td><math display="block"> \begin{array}{c c c c c c c c c c c c c c c c c c c </math></td><td><math display="block">\begin{array}{c c c c c c c c c c c c c c c c c c c </math></td><td><math display="block"> \begin{array}{c c c c c c c c c c c c c c c c c c c </math></td><td><math display="block"> \begin{array}{ c c c c c c c c c c c c c c c c c c c</math></td><td><math display="block"> \begin{array}{ c c c c c c c c c c c c c c c c c c c</math></td><td><math display="block"> \begin{array}{ c c c c c c c c c c c c c c c c c c c</math></td><td><math display="block"> \begin{array}{ c c c c c c c c c c c c c c c c c c c</math></td><td>a         c0,50         <thc0,50< th="">         c0,50         c0,5</thc0,50<></td><td>i         c0.50         c0.</td><td>-         230         210         240         250         270         190         370         350         -         -         1100         1000         -         -         -         -         1100         940           1         (2)         0.02         20.02         20.02         0.0</td><td>-         -</td><td>-         -</td><td>0         0         0         0         0         0         -</td><td>0         0</td><td>n         n</td><td>0.90         <th< td=""></th<></td></t<>	- $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.50$ $< 0.00$ $< 1000$ $< 330$ -       230       210       240       250       270 $190$ $370$ -       230       210       240       250       270 $190$ $370$ -       230       210       240       250       270 $190$ $370$ -       230       210       240       250       270 $190$ $370$ -       230       210       240       250 $270$ $190$ $370$ -       230       20.02 $< 0.02$ $< 0.02$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0.002$ $< 0$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	a         c0,50         c0,50 <thc0,50< th="">         c0,50         c0,5</thc0,50<>	i         c0.50         c0.	-         230         210         240         250         270         190         370         350         -         -         1100         1000         -         -         -         -         1100         940           1         (2)         0.02         20.02         20.02         0.0	-         -	-         -	0         0         0         0         0         0         -	0         0	n         n	0.90         0.90 <th< td=""></th<>

		1		V-63		/-64		/-65		V-66	MW-67		
	and the second	1	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-11	Aug-1
<b>Olatile Organic Compounds</b>	(ug/L)		Star Loger of	Sec. and P									
1,1,1,2-Tetrachloroethane	5.24E+00	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
1,1,1-Trichloroethane	6.00E+01	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
1,1,2,2-Tetrachloroethane	1.00E+01	(3)	< 2.0	< 2.0	< 2.0	< 2.0	< 40	< 40			< 2.0	< 2.0	
1,1,2-Trichloroethane	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
1,1-Dichloroethane	2.50E+01	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
1,1-Dichloroethene	5.00E+00	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
1,1-Dichloropropene		1		< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
	-	-	< 1.0	and so a second second second second	and the second has been as a second sec	and an excitation of the second s	CONTRACTOR OF A	And a state of the			and the second sec	< 1.0	
1,2,3-Trichlorobenzene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0		
1,2,3-Trichloropropane	9.60E-02	(5)	< 2.0	< 2.0	< 2.0	< 2.0	< 40	< 40			< 2.0	< 2.0	
1,2,4-Trichlorobenzene	7.00E+01	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
1,2,4-Trimethylbenzene	1.50E+01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	1900	2000			< 1.0	< 1.0	
1,2-Dibromo-3-chloropropane	2.00E-01	(2)	< 2.0	< 2.0	< 2.0	< 2.0	< 40	< 40			< 2.0	< 2.0	
1,2-Dibromoethane (EDB)	5.00E-02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
1,2-Dichlorobenzene	6.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
1,2-Dichloroethane (EDC)	5.00E+00	(2)	1.2	3.5	< 1.0	< 1.0	260	120			< 1.0	< 1.0	
1,2-Dichloropropane	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
1,3,5-Trimethylbenzene	1.20E+01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	280	260			< 1.0	< 1.0	
	1.20E+01		and the second state of th									and and the second s	
1,3-Dichlorobenzene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
1,3-Dichloropropane	7.30E+02	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
1,4-Dichlorobenzene	7.50E+01	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
1-Methylnaphthalene	2.30E+00	(1)	< 4.0	< 4.0	< 4.0	< 4.0	160	<200			< 4.0	< 4.0	
2,2-Dichloropropane	-	-	< 2.0	< 2.0	< 2.0	< 2.0	< 40	< 40			< 2.0	< 2.0	
2-Butanone	7.06E+03	(5)	< 10	< 10	< 10	< 10	< 200	< 200			< 10	< 10	
2-Chlorotoluene	7.30E+02	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
2-Hexanone	1.002.02	( )	< 10	< 10	< 10	< 10	< 200	< 200			< 10	< 10	
	1.50E+02	(1)	< 4.0		< 4.0	< 4.0	300	<200				< 4.0	
2-Methylnaphthalene	and the second se			< 4.0				and the second second second second			< 4.0		
4-Chlorotoluene	2.60E+03	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
4-Isopropyltoluene		-	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
4-Methyl-2-pentanone	-	-	< 10	< 10	< 10	< 10	< 200	< 200			< 10	< 10	
Acetone	2.18E+04	(5)	< 10	< 10	< 10	< 10	1400	2800			< 10	< 10	
Benzene	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	6300	3600			< 1.0	< 1.0	
Bromobenzene	2.00E+01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
Bromodichloromethane	1.17E+00	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
Bromoform	8.50E+00	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
and the second			All the second sec	and the second s		< 3.0		and the second se				the second s	
Bromomethane	8.66E+00	(5)	< 3.0	< 3.0	< 3.0	and the second se	< 60	< 60			< 3.0	< 3.0	
Carbon disulfide	1.04E+03	(5)	< 10	< 10	< 10	< 10	< 200	< 200			< 10	< 10	
Carbon Tetrachloride	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
Chlorobenzene	1.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
Chloroethane	-	-	< 2.0	< 2.0	< 2.0	< 2.0	< 40	< 40			< 2.0	< 2.0	
Chloroform	1.00E+02	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
Chloromethane	1.78E+01	(5)	< 3.0	< 3.0	< 3.0	< 3.0	< 60	< 60			< 3.0	< 3.0	
cis-1,2-DCE	7.00E+01	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
and the second	7.00E+01	-	and so that the second s	and the state of t		< 1.0	< 20	< 20			along the second se	< 1.0	
cis-1,3-Dichloropropene	-	-	< 1.0	< 1.0	< 1.0	and the second se					< 1.0	and the second second second second	
Dibromochloromethane	1.47E+00	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
Dibromomethane	3.70E+02	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
Dichlorodifluoromethane	3.95E+02	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
Ethylbenzene	7.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	2100	2100			< 1.0	< 1.0	
Hexachlorobutadiene	8.60E-01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
Isopropylbenzene	6.79E+02		< 1.0	< 1.0	< 1.0	< 1.0	85	82			< 1.0	< 1.0	
Methyl tert-butyl ether (MTBE)	1.25E+02	(5)	11	110	< 1.0	< 1.0	1600	960			< 1.0	< 1.0	
	and the second sec				free and the same state of the same is a								
Methylene Chloride	5.00E+00	(2)	< 3.0	< 3.0	< 3.0	< 3.0	< 60	< 60			< 3.0	< 3.0	
Naphthalene	1.43E+00	(5)	< 2.0	< 2.0	< 2.0	< 2.0	620	550			< 2.0	< 2.0	
n-Butylbenzene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
n-Propylbenzene	-	-	< 1.0	< 1.0	< 1.0	< 1.0	260	250			< 1.0	< 1.0	
sec-Butylbenzene		-	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
Styrene	1.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
tert-Butylbenzene		-	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
Tetrachloroethene (PCE)	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
1 L						< 1.0	Construction of the second s	and the second play is a start of the second play					
Toluene	7.50E+02	(3)	< 1.0	< 1.0	< 1.0	and the second of the second sec	< 20	< 20			< 1.0	< 1.0	
trans-1,2-DCE	1.00E+02	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
trans-1,3-Dichloropropene	4.30E-01	(1)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
Trichloroethene (TCE)	5.00E+00	(2)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
Trichlorofluoromethane	1.29E+03	(5)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
Vinyl chloride	1.00E+00	(3)	< 1.0	< 1.0	< 1.0	< 1.0	< 20	< 20			< 1.0	< 1.0	
	the second s	(3)	< 1.5	< 1.5	< 1.5	< 1.5	4400	9900		and the second se	< 1.5	< 1.5	



				/-63		V-64	Aug-11	/-65		/-66	MW-67	MW-68	
	1. (	161	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-11	Aug
mi Volatile Organic Compo				10	10	10	10	. 10			1.0		-
1,2,4-Trichlorobenzene		(2)		< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
1,2-Dichlorobenzene	6.00E+02	(2)		< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
1,3-Dichlorobenzene	-	-	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
1,4-Dichlorobenzene	7.50E+01	(2)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
1-Methylnaphthalene	2.30E+00	(1)	< 10	< 10	< 10	< 10	91	<10			< 10	< 10	-
2,4,5-Trichlorophenol	3.65E+03	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
2,4,6-Trichlorophenol	3.65E+01	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
2,4-Dichlorophenol	1.10E+02	(5)	< 20	< 20	< 20	< 20	< 20	< 20			< 20	< 20	
2,4-Dimethylphenol	7.30E+02	(5)	< 10	< 10	< 10	< 10	32	54			< 10	< 10	
2,4-Dinitrophenol	7.30E+01	(5)	< 20	< 20	< 20	< 20	< 20	< 20			< 20	< 20	-
2,4-Dinitrotoluene	2.17E+00	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	
2,6-Dinitrotoluene	3.70E+01	(1)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	
2-Chloronaphthalene	and the state of t	(1)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	
2-Chlorophenol	and the second se	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	
2-Methylnaphthalene	and the second se	(1)	< 10	< 10	< 10	< 10	140	97			< 10	< 10	-
2-Methylphenol		(1)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	
2-Nitroaniline	and the second se	(1)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
2-Nitrophenol	1.102.02		< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	
	1 505 01	- (1)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	
3,3'-Dichlorobenzidine	1.50E-01	(1)			< 10	< 10	< 10	< 10			< 10	< 10	-
3+4-Methylphenol		(1)	< 10	< 10									-
3-Nitroaniline	-	-	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
4,6-Dinitro-2-methylphenol	-	-	< 20	< 20	< 20	< 20	< 20	< 20			< 20	< 20	-
4-Bromophenyl phenyl ether		-	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	
4-Chloro-3-methylphenol	-	-	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
4-Chloroaniline	3.40E-01	(1)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
4-Chlorophenyl phenyl ether	-	-	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
4-Nitroaniline	3.40E+00	(1)	< 20	< 20	< 20	< 20	< 20	< 20			< 20	< 20	-
4-Nitrophenol		-	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Acenaphthene	2.19E+03	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Acenaphthylene	2.102.00	-	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	
Aniline	1.20E+01	(1)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	
Anthracene	1.10E+04		< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
And the second	and the state of t	(5)	and the second sec	and the second data and the se		< 10	and the second sec	and the second sec			< 10	and the second s	-
Azobenzene	1.20E-01	(1)	< 10	< 10	< 10		< 10	< 10				< 10	-
Benz(a)anthracene	9.21E-01	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	
Benzo(a)pyrene	2.00E-01	(2)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Benzo(b)fluoranthene	9.21E-01	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Benzo(g,h,i)perylene	-	-	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Benzo(k)fluoranthene	9.21E+00	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Benzoic acid	1.50E+05	(1)	< 20	< 20	< 20	< 20	< 20	< 20			< 20	< 20	-
Benzyl alcohol	1.80E+04	(1)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Bis(2-chloroethoxy)methane	1.10E+02	(1)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Bis(2-chloroethyl)ether	1.19E-01	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Bis(2-chloroisopropyl)ether	9.60E+00	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Bis(2-ethylhexyl)phthalate	6.00E+00	(2)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Butyl benzyl phthalate	3.50E+01	(1)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Carbazole	3.50L+01				and the second second	< 10	< 10	< 10			< 10	< 10	-
Carbazole Chrysene	9.21E+01	- (5)	< 10 < 10	< 10 < 10	< 10 < 10	< 10	< 10	< 10			< 10	< 10	-
		-	the second s	and the second se	and the second se			and the second se					-
Dibenz(a,h)anthracene	9.21E-02	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Dibenzofuran	-	-	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Diethyl phthalate	2.92E+04	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Dimethyl phthalate	3.65E+05	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Di-n-butyl phthalate	3.65E+03	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Di-n-octyl phthalate	-	-	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Fluoranthene	1.46E+03	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Fluorene		(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Hexachlorobenzene	1.00E+00	(2)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Hexachlorobutadiene	8.60E-01	(1)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Hexachlorocyclopentadiene	5.00E+01	(2)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	
Hexachloroethane	3.65E+01	(2)	< 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	-
Isophorone	7.07E+02	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Naphthalene	1.43E+00	(5)	< 10	< 10	< 10	< 10	330	260			< 10	< 10	-
Nitrobenzene	1.49E+01	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
N-Nitrosodimethylamine	1.32E-02	(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
N-Nitrosodi-n-propylamine	9.60E-03	(1)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
N-Nitrosodiphenylamine	1.37E+02		< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
Pentachlorophenol		(2)	< 20	< 20	< 20	< 20	< 20	< 20			< 20	< 20	-
Phenanthrene		(5)	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	-
			< 10	< 10	< 10	< 10	13	<10			< 10	< 10	-
Phenol		(3)											
Pyrene	1.10E+03	(5)	< 10 < 10	< 10 < 10	< 10 < 10	< 10	< 10	< 10			< 10	< 10	
Pyridine	3.70E+01					< 10	< 10	< 10			< 10	< 10	


#### Table 6 RCRA Wells Analytical Summary

				/-63		V-64		/-65		V-66	MW-67	MW-68	MW-6
			Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-10	Aug-11	Aug-11	Aug-1
General Chemistry (mg/l):													
Fluoride	1.6	(3)	0.2	0.16	0.27	0.18	0.26	< 0.50			0.82	0.41	
Chloride	250	(3)	180	290	830	840	180	220			22	72	
Nitrite	1	(2)	<2.0	<2.0	<2.0	*52	<1.0	*<1.0			<0.10	<0.10	
Bromide	1	-	2.90	4.60	3.80	2.90	4.00	3.70			0.16	0.25	
Nitrate	10	(3)	67	110	60	*52	<1.0	*<1.0			4.30	6.70	
Phosphorus		-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5			< 0.50	< 0.50	
Sulfate	600	(6)	1400	2200	1600	1600	460	620			190	470	
Carbon Dioxide		-	540	580	310	340	1100	1100			360	190	
Alkalinity			560	580	330	340	1200	1100			390	210	
Bicarbonate		-	560	580	330	340	1200	1100			390	210	
Total Metals (mg/l):	2410111			000		0.10	1200		12000				2227
Arsenic	0.01	(2)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.03			< 0.02	< 0.02	
Barium	1	(3)	0.05	0.029	0.26	0.6	0.062	0.076			0.051	0.065	
Cadmium	0.005	(2)	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002			< 0.002	< 0.002	
Chromium	0.005	(2)	< 0.002	< 0.002	0.0094	0.029	< 0.002	< 0.002			< 0.002	< 0.002	
Lead	0.015	(2)	< 0.005	< 0.005	< 0.005	0.025	< 0.005	< 0.005			< 0.005	< 0.005	
Selenium	0.015	(2)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05			< 0.05	< 0.005	
Silver	0.05	(2)	and the second second second second	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	
Mercury	0.002					< 0.0002		< 0.0002			< 0.0002		
Dissolved Metals (mg/l):	0.002	(3)	<0.0002	<0.0002	<0.0002	~0.0002	~0.0002	~0.0002			<0.0002	-0.0002	
	0.1	(2)	0.0034	< 0.02	0.0046	< 0.02	0.024	< 0.02			<0.0010	<0.0010	-
Arsenic		(3)									< 0.0010		
Barium	1	(3)	0.013	< 0.02	0.012	< 0.02	0.069	0.069			0.034	0.026	
Cadmium	0.01	(3)	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002			< 0.002	< 0.002	
Calcium	-	-	350	430	450	430	170	180			120	100	
Chromium	0.05	(3)	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006			< 0.006	< 0.006	
Copper	1	(3)	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006			< 0.006	< 0.006	
Iron	1	(3)	< 0.02	< 0.02	< 0.02	0.03	4.1	6.2			< 0.02	< 0.02	
Lead	0.05	(3)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	
Magnesium		-	91	150	72	67	52	56			27	25	
Manganese	0.2	(3)	1.7	3.7	< 0.002	0.013	3.2	3.5			0.45	0.21	
Mercury	-	-											
Potassium		-	4.4	5	5	4.9	3.6	3.8			3.4	3.1	
Selenium	0.05	(3)	0.031	< 0.05	0.041	< 0.05	0.016	< 0.05			0.0035	0.0048	
Silver	0.05	(3)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	
Sodium	-	-	570	660	750	780	530	490			100	130	
Uranium	0.03	(3)	0.041	0.056	0.017	0.0143	0.0077	0.0067			0.0083	0.0052	
Zinc	10	(3)	0.15	< 0.05	0.062	< 0.05	0.026	< 0.05			0.074	0.27	
Organics (mg/l):					14 2 4 2		1.19.19					S. Star	
Benzene	0.005	(2)	< 0.001	< 0.001	< 0.001	< 0.001	6.3	3.6			< 0.001	< 0.001	
Toluene	0.75	(3)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.02	< 0.02			< 0.001	< 0.001	
Ethylbenzene	0.7	(2)	< 0.001	< 0.001	< 0.001	< 0.001	2.1	2.1			< 0.001	< 0.001	
Xylene	0.62	(3)		< 0.0015		< 0.0015	4.4	9.9			< 0.0015		
MTBE	0.125	(5)	and the second se	0.11	< 0.001	< 0.001	1.6	0.96			< 0.001	< 0.001	
Total Petroleum Hydrocarbons		11-1		140.415									
Diesel Range Organics	0.2	(4)	<0.20	< 0.20	<0.20	<0.20	9.8	9.8			0.26	< 0.20	
Gasoline Range Organics	-	-	< 0.05	0.13	< 0.05	< 0.05	40.0	40			< 0.05	< 0.05	
Motor Oil Range Organics	-	-	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5			<2.5	<2.5	



Table 7 Collection and Observation Wells Analytical Summary

		CW	0+60			CW 2	25+95			OW	0+60			OW	1+50			OW	3+85	1.1	1.1.2	OW	5+50			OW 6	+70
	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10 Ap
atile Organic Compounds (mg/l)	Server March		Contractory and					0.000	No.		and the second						1000										
Benzene 0.005 (2	) <0.001	0.019	0.25	0.036	3.6	6.7	14	22			< 0.005	< 0.005				0.029			0.007	0.018			< 0.005				
Toluene 0.750 (3	) <0.001	< 0.001	< 0.001	< 0.001	0.16	0.16	5.7	9			< 0.020	< 0.005				0.014			< 0.005	< 0.01			< 0.01				
Ethylbenzene 0.700 (2	0.003	0.0016	0.0039	0.0069	0.58	0.8	1.8	2			< 0.020	< 0.005				0.31			0.16	0.32			< 0.01				
Xylene 0.620 (3	) <0.002	< 0.003	< 0.003	0.003	0.33	0.32	4.2	7.4			< 0.060	< 0.015				5.7			0.23	0.47			< 0.030				
MTBE 0.012 (5	) <0.001	< 0.001	< 0.001	< 0.001	< 0.002	< 0.005	< 0.096	< 0.001			< 0.020	< 0.005				< 0.01			< 0.005	< 0.01			< 0.01				
al Petroleum Hydrocarbons (mg/l):			State of the	The Carlot and Carlot	10/14					March Contraction		1922	1.5		New York	A AND AND A	A			and the second second	CONTRACTOR OF	Del States P	Ser States	S. S. Marine Marine		The Mark	A STATE AND AND A
Diesel Range Organics 0.2 (4	0.77	2.8	1.2	2.8	0.31	0.31	0.6	2.5			160	38				1100			120	860			150				
Gasoline Range Organics											3.5	2.3				43			7.4	7.4			1.9				
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				

				OW	8+10			WO	11+15	and the		OW	14+10	2.4 B		OW	16+60			OW	19+50		1. A. A.	WO	22+00	10.00	14. 34	OW 23	3+10	-
and interimental and			Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	0 Apr-
latile Organic Compounds (mg	/I)			(CALL)	Section and	Margaret .	Section 2	10331712		Statistics)	The second		AND THE R		a na star			No. Contraction	A STATE OF	Contrasta.				a second	and the second	The State of	1000			
Benzene	0.005	(2)					0.22			0.15					0.082	0.079	0.27	0.49			< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	2.5	0.08
Toluene	0.750	(3)					< 0.01			< 0.01					< 0.01	< 0.010	< 0.01	< 0.005			< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	5 < 0.0
Ethylbenzene	0.700	(2)					< 0.01			0.23					0.045	0.044	0.15	0.43			< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.028	< 0.00
Xylene	0.620	(3)					< 0.03			< 0.03					0.058	< 0.003	0.066	0.14			< 0.003	< 0.003	< 0.002	< 0.003	< 0.003	< 0.003	< 0.002	< 0.003	< 0.015	5 <0.0
MTBE	0.012	(5)					0.69			1.3					0.81	1.1	0.84	1.5			0.055	0.057	0.17	0.061	0.34	< 0.001	0.0032	0.0015	< 0.005	5 <0.0
tal Petroleum Hydrocarbons (m	ig/l):		Same and					8. 9. SSS	States and	March 19				123 3 1 1 1	No. of Street,		1.	12/10/12/2				Section 2		Share a	THE REAL PROPERTY.					1000
Diesel Range Organics	0.2	(4)					33			1500					20	65	11	280			2.2	1.2	0.36	<0.20	0.41	0.28	< 0.20	0.63	1.8	2.5
Gasoline Range Organics	-	-					2.8			2.5					4.8	7.8	5.8	12			0.065	0.076	0.25	0.11	0.37	< 0.05	0.25	0.31	5.7	0.4
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.

				OW	23+90			OW	25+70	
			Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10
Volatile Organic Compounds (mg	/1)	1.2.2			STRATE ST	and have been			TAL STOP	
Benzene	0.005	(2)	< 0.001	0.003	3.1	0.76	0.11	4.4	6.6	15
Toluene	0.750	(3)	< 0.001	< 0.001	< 0.001	0.009	< 0.020	<0.1	0.12	0.11
Ethylbenzene	0.700	(2)	< 0.001	< 0.001	0.071	0.0082	< 0.020	0.3	0.71	0.75
Xylene	0.620	(3)	< 0.002	< 0.003	< 0.003	0.011	< 0.040	< 0.3	< 0.060	1.4
MTBE	0.012	(5)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.020	<0.1	< 0.020	< 0.02
Total Petroleum Hydrocarbons (n	ng/l):				C. States		a series		The second second	Aler Ma
Diesel Range Organics	0.2	(4)	<0.20	< 0.20	1.0	0.31	< 0.20	0.4	0.83	1.2
Gasoline Range Organics	-	-	0.34	0.11	7.4	2.3	0.85	12	20	50
Motor Oil Range Organics		-	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5

(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
- = No screening level or analytical result available
\* = Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet holdtime
mg/l= milligrams per liter

## Table 8 **Outfalls Analytical Summary**

				Outf	all #2			Outf	all #3	22.2
and the second second second			Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10
Volatile Organic Compounds (ug					The state of the state					
Benzene	0.005	(2)	< 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
Ethylbenzene	0.7	(2)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylene	0.62	(3)	< 0.003	< 0.002	< 0.003	< 0.003	< 0.003	< 0.002	< 0.003	<0.003
MTBE	0.125	(5)	< 0.0015	< 0.001	< 0.0015	< 0.0015	< 0.0015	<.001	< 0.0015	< 0.001
General Chemistry (mg/l):			States and the second						NOR CONTRACTOR	
Fluoride	1.6	(3)	< 0.50	0.57	0.57	0.58	0.22	0.42	0.42	0.26
Chloride	250	(3)	3.80	11.00	11.00	11.0	3.10	21.00	21.00	7.7
Nitrite	1	(2)	<0.10	<0.10	<0.10	< 0.10	<0.10	<0.10	<0.10	<0.10
Bromide		-	< 0.10	0.21	0.21	<0.10	< 0.10	0.15	0.15	<0.10
Nitrate	10	(3)	< 0.50	1.40	1.40	1.40	< 0.10	3.20	3.20	0.57
Phosphorus	-	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulfate	600	(6)	46.00	76.00	76.00	110.00	51.00	170.00	170.00	110.00
Carbon Dioxide	-	-	93	350	350	240	86	300	300	110
Alkalinity	-	-	100 ,	390	390	270	96	330	330	120
Bicarbonate			100	390	390	270	96	330	330	120
Total Metals (mg/l):	100000000000000000000000000000000000000		National States							
Arsenic	0.01	(2)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Barium	1	(3)	0.012	0.085	0.085	0.058	0.069	0.058	0.058	0.064
Cadmium	0.005	(2)	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Chromium	0.05	(3)	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	<0.006
Lead	0.015	(2)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	0.05	(2)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Silver	0.05	(3)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Mercury	0.002	(3)	<0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	<0.000
Dissolved Metals (mg/l):	0.002	(5)	-0.0002	40.0002	40.0002	40.0002	-0.0002	-0.0002	40.0002	-0.000
Arsenic	0.1	(3)	< 0.02	< 0.001	< 0.02	< 0.02	< 0.02	<.001	< 0.02	< 0.02
Barium	1	(3)	0.064	0.085	0.085	0.056	0.066	0.059	0.059	0.063
Cadmium	0.01	(3)	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Calcium	0.01	(3)	36	100	100	86	37	110	110	59
Chromium	0.05	(3)	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006
	1	(3)	< 0.006	< 0.030	< 0.006	< 0.006	< 0.006	< 0.030	< 0.006	<0.000
Copper			< 0.000	< 0.030						
Iron	1	(3)	<0.02		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Lead	0.05	(3)	6.8	<0.005 22	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Magnesium	-	- (2)	and the second se		22	18	6.8	23	23	11
Manganese	0.2	(3)	0.014	0.0032	0.0032	<.002	0.0025	< 0.002	<0.002	< 0.002
Mercury		-								
Potassium	-	-	1.5	1.9	1.9	1.7	1.7	2.1	2.1	1.8
Selenium	0.05	(3)	< 0.05	0.0031	0.0031	< 0.05	< 0.05	0.0054	0.0054	< 0.05
Silver	0.05	(3)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005
Sodium	-	-	17	62	62	55	17	82	82	30
Uranium	0.03	(3)	0.001	0.0049	0.0049		< 0.001	0.0045	0.0045	
Zinc	10	(3)	0.18	< 0.05	< 0.05	< 0.05	0.075	<.010	< 0.05	< 0.05

(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/I 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

-- No screening level or analytical result available

mg/l = milligrams per liter

ug/l= micrograms per liter

--- = analyte inadvertantly not included in analysis.

#### Table 9 Seeps Analytical Summary

			Au		p #1	Apr 40	Aug 44		p #2	4- 40	Aug 44		ep #3	Ana 40	Aug 44	000	p #6		1	See	0#9	
			Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	A
Volatile Organic Compound	ds (mg/l):				and a set						3.0.2											
Benzene	0.005	(2)	< 0.001	< 0.005	< 0.001	< 0.001		< 0.005		< 0.001		< 0.005	< 0.001	< 0.001		< 0.005	< 0.001	< 0.001		< 0.005		<
Toluene	0.750	(3)	< 0.001	<0.005	< 0.001	< 0.001		< 0.005		< 0.001		< 0.005	< 0.001	< 0.001		< 0.005	< 0.001	< 0.001		<0.005		<
Ethylbenzene	0.700	(2)	< 0.001		< 0.001	< 0.001		< 0.005		< 0.001		< 0.005	< 0.001	< 0.001		< 0.005	< 0.001	< 0.001		< 0.005		<
Xylene	0.620	(3)	< 0.002		< 0.002	< 0.003		< 0.01		< 0.003		< 0.01	< 0.002	< 0.003		< 0.01	< 0.002	< 0.003		< 0.00		<
MTBE	0.125	(5)	and the state of the state of the state	and the state of t	< 0.001	0.073		< 0.005		0.0077		0.013	< 0.001	0.011		0.007	< 0.002	0.006		0.039		+
			-0.001	0.002	\$0.001	0.015		~0.000		0.0077		0.015	-0.001	0.011		0.007	~0.001	0.006		0.039		-
emi Volatile Organic Compo			1000						1966 - 191 (P)			14 E 37 I 14					State B	No.		1. 1. 1. 1. 1. 1. 1.	1.5.7.2	
1,2,4-Trichlorobenzene	7.00E+01	(2)				< 10				< 10				< 11				< 10				
1,2-Dichlorobenzene	6.00E+02	(2)				< 10				< 10				< 11				< 10				
1,3-Dichlorobenzene	-	-				< 10				< 10				< 11				< 10				T
1,4-Dichlorobenzene	7.50E+01	(2)				< 10				< 10				< 11				< 10				-
1-Methylnaphthalene	2.30E+00	and and an other				< 10				< 10				< 11				< 10				+
2,4,5-Trichlorophenol	3.65E+03	and and an a feature of the				< 10				< 10				< 11				< 10				+
2,4,6-Trichlorophenol	3.65E+01	and an and an and				< 10				< 10				< 11				< 10				-
the second s	and the second se													< 21							_	+
2,4-Dichlorophenol	1.10E+02					< 10				< 10								< 10				+
2,4-Dimethylphenol	7.30E+02	and the second				< 10				< 10				< 11				< 10				-
2,4-Dinitrophenol	7.30E+01					< 20				< 20				< 21				< 20				1
2,4-Dinitrotoluene	2.17E+00	(5)				< 10				< 10				< 11				< 10				
2,6-Dinitrotoluene	3.70E+01	(1)				< 10				< 10				< 11				< 10				T
2-Chloronaphthalene	2.90E+03	(1)				< 10				< 10				< 11				< 10				T
2-Chlorophenol	1.83E+02					< 10				< 10				< 11				< 10				T
2-Methylnaphthalene	1.50E+02					< 10				< 10				< 11				< 10				+
2-Methylphenol	1.80E+02					< 10				< 10				< 11				< 10				+
and the second se	1.10E+02																	and the second se				+
2-Nitroaniline	1.10E+02	(1)				< 10				< 10				< 11				< 10				+
2-Nitrophenol		-				< 10				< 10				< 11				< 10				+
3,3'-Dichlorobenzidine	1.50E-01	(1)				< 10				< 10				< 11				< 10				-
3+4-Methylphenol	1.80E+02	(1)				< 10				< 10				< 11				< 10				
3-Nitroaniline	-	-				< 10				< 10				< 11				< 10				T
4,6-Dinitro-2-methylphenol	-	-				< 20				< 20				< 21				< 20				
4-Bromophenyl phenyl ether	-	-				< 10				< 10				< 11				< 10				T
4-Chloro-3-methylphenol	-					< 10				< 10				< 11				< 10				+
4-Chloroaniline	3.40E-01	(1)				< 10				< 10				< 11				< 10				+
an in a second second and a second start in the second second second second second second second second second	3.40L-01	(1)																	in the second second	- management		+-
4-Chlorophenyl phenyl ether	-	-				< 10				< 10				< 11				< 10				-
4-Nitroaniline	3.40E+00	(1)				< 10				< 10				< 11				< 10				-
4-Nitrophenol	-	-				< 10				< 10				< 11				< 10				
Acenaphthene	2.19E+03	(5)				< 10				< 10				< 11				< 10				1
Acenaphthylene	-	-				< 10				< 10				< 11				< 10				T
Aniline	1.20E+01	(1)				< 10				< 10				< 11				< 10				T
Anthracene	1.10E+04	(5)				< 10				< 10				< 11				< 10				1
Azobenzene	1.20E-01	(1)				< 10				< 10				< 11				< 10				+
Benz(a)anthracene	9.21E-01	(5)				< 10				< 10				< 11				< 10				-
the second s	and an other sectors in an other sectors and	- Andrewski				and the state of t																+-
Benzo(a)pyrene	2.00E-01	(2)				< 10				< 10				< 11				< 10				+
Benzo(b)fluoranthene	9.21E-01	(5)				< 10				< 10				< 11				< 10				-
Benzo(g,h,i)perylene		-				< 10				< 10				< 11				< 10				1
Benzo(k)fluoranthene	9.21E+00	(5)				< 10				< 10				< 11				< 10				
Benzoic acid	1.50E+05	(1)				< 20				< 20				< 21				< 20				
Benzyl alcohol	1.80E+04	(1)				< 10				< 10				< 11				< 10				T
Bis(2-chloroethoxy)methane	1.10E+02	-				< 10				< 10				< 11				< 10				T
Bis(2-chloroethyl)ether	1.19E-01	(5)				< 10				< 10				< 11				< 10				+
Bis(2-chloroisopropyl)ether	9.60E+00					< 10				< 10				< 11				< 10				+
		-					-							< 11								+
Bis(2-ethylhexyl)phthalate	6.00E+00					< 10				< 10								< 10				+
Butyl benzyl phthalate	3.50E+01	(1)				< 10				< 10				< 11				< 10				-
Carbazole	-	-				< 10				< 10				< 11				< 10				1
Chrysene	9.21E+01					< 10				< 10				< 11				< 10				
Dibenz(a,h)anthracene	9.21E-02	(5)				< 10				< 10				< 11				< 10				
Dibenzofuran		-				< 10				< 10				< 11				< 10				T
Diethyl phthalate	2.92E+04	(5)				< 10				< 10				< 11				< 10				T
Dimethyl phthalate	3.65E+05					< 10				< 10				< 11				< 10				+
Di-n-butyl phthalate	3.65E+03					< 10				< 10				and the second second second second	*****							+
		1.1												< 11				< 10				1
Di-n-octyl phthalate	-	-				< 10	(			< 10				< 11				< 10				-
Fluoranthene	1.46E+03					< 10				< 10				< 11				< 10				
Fluorene	1.46E+03	(5)				< 10				< 10				< 11				< 10				1
Hexachlorobenzene	1.00E+00	(2)				< 10				< 10				< 11				< 10				1
Hexachlorobutadiene	8.60E-01					< 10				< 10				< 11				< 10				1
Hexachlorocyclopentadiene	5.00E+01					< 10				< 10				< 11				< 10				-
Hexachloroethane	3.65E+01									< 10				and the local division of the				< 10				+
	3.00ETUT	(0)				< 10				> 1U				< 11				5 10				

#### Table 9 Seeps Analytical Summary

				See	ep #1			See	p #2		_	See	ep #3			See	p #6	THE ST		See	p #9	
			Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10	Aug-11	Apr-11	Aug-10	Apr-10
Indeno(1,2,3-cd)pyrene	2.90E-02	(1)				< 10				< 10				< 11				< 10				< 10
Isophorone	7.07E+02	(5)				< 10				< 10				< 11				< 10				< 10
Naphthalene	1.43E+00	(5)				< 10				< 10				< 11				< 10				< 10
Nitrobenzene	1.49E+01	(5)				< 10				< 10				< 11				< 10				< 10
N-Nitrosodimethylamine	1.32E-02	(5)				< 10				< 10				< 11				< 10				< 10
N-Nitrosodi-n-propylamine	9.60E-03	(1)				< 10				< 10				< 11				< 10				< 10
N-Nitrosodiphenylamine	1.37E+02	(5)				< 10				< 10				< 11				< 10				< 10
Pentachlorophenol	1.00E+00	(2)				< 20				< 20				< 21				< 20				< 20
Phenanthrene	1.10E+03	(5)				< 10				< 10				< 11				< 10				< 10
Phenol	5.00E+00	(3)				< 10				< 10				< 11				< 10				< 10
Pyrene	1.10E+03	(5)				< 10				< 10				< 11				< 10				< 10
Pyridine	3.70E+01	(1)				< 10				< 10				< 11				< 10				< 10
General Chemistry (mg/l):	States and	12.24	State Concess	1.4.5.4	1415					120 1001	S I STATE	Sec. 1			Section 1					and the Sole		
Fluoride	1.6	(3)	0.43	0.49	0.32	0.19		1.4		0.83		0.39	0.7	0.21		< 0.50	< 0.50	0.17		0.36		0.37
Chloride	250	(3)	380	230	380	220		890		640		280	6000	370		2800	5800	3100		660		710
Nitrite	1.0	(2)	<2.0	<0.10	<0.10	<0.10		<2.0		0.69		<2.0	< 0.50	<0.10		<2.0	<2.0*	<1.0*		<2.0		<0.10
Bromide	-	-	2.70	1.70	2.3	1.5		9.40		7.5		2.00	9.9	2.1		1.4	2.9	1.00		1.40		0.99
Nitrate	10	(3)	<2.0	<2.0	<2.0	<2.0		2.60		<2.0		<0.10	<2.0	<2.0		<0.10	*	*		<0.10		<2.0
Phosphorus	-	-	<0.50	<0.50	<0.50	<0.50		<0.50		<10.0		<0.50	<0.50	<0.50		<0.50	<2.5	<0.50		<0.50		<0.50
Sulfate	600	(6)	1900	1700	1800	1600		7300		5000		50	1800	2500		1400	2000	1300		2100		2000
Carbon Dioxide	-	-	250	400	260	360		150		110		360	240	330		320	140	350		360		350
Alkalinity	-	-	280	440	260	360		170		120		400	240	330		350	140	350		390		350
Bicarbonate	-	-	280	440	260	360		170		120		400	240	330		350	140	350		390		350

EPA - Regional Screening Levels (April 2009) - EPA Screening Levels. Tap Water
 EPA - Regional Screening Levels (April 2009) - MCL
 NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for
 NMED TPH Screening Guidelines Oct. 2006 - "unknown oil" - see report Sections 5
 NMED TAP Water Screening Levels - 2009 Background Document for
 No screening level or analytical result available
 mg/I = milligrams per liter
 ug/I= micrograms per liter

Table 10 San Juan River Terrace: San Juan River Analytical Summary

					North o	of MW-46					North	of MW-45					Upstream	of Refinery	1200	1	0.00		Downstream	m of Refine	v	
			Aug-11	Apr-11	Aug-10	Apr-10	Aug-09	Apr-09	Aug-11	Apr-11	Aug-10	Apr-10	Aug-09	Apr-09	Aug-11	Apr-11	Aug-10	Apr-10	Aug-09	Apr-09	Aug-11	Apr-11	Aug-10	Apr-10	Aug-09	Apr-09
/olatile Organic Compounds (mg/l)	State State	Star Sel		2		and the second second	1.2.2.2.4.9		THE REAL PROPERTY.	ALC: NO.	8. S. A. L. S. C. S.	Contraction of the			CALCER OF				, rug co		i nug ii		1.1.9	1.401.10	rugee	
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	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
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	< 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	< 0.001	<0.00*
Xylene	0.620	(3)	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.002	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.002	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.002	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	<0.00
MTBE	0.012	(5)	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0025	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0025	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0025	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.002
Total Petroleum Hydrocarbons (mg/l)	:		New York State		I NO REAL PLAN	A CONTRACTOR	C. HEROLE		A Strange	12.04.23.49		Service Service	State State		FOR SHE			A State State	A CONTRACTOR OF STREET		Real Property in		1.2.2			
Diesel Range Organics	0.2	(4)	<0.2	<0.2	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<1.0	<1.0	<1.0	<1.0
Gasoline Range Organics	-	-	<2.5	<2.5	<5.0	<5.0	<5.0	<5.0	<2.5	<2.5	<5.0	<5.0	<5.0	<5.0	<2.5	<2.5	<5.0	<5.0	<5.0	<5.0	<2.5	<2.5	<5.0	<5.0	<5.0	<5.0
Motor Oil Range Organics		-	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.05
General Chemistry (mg/l):				and the second	No Contactory	A REAL STREET	A LOW A LOW		Section of the	120-25-25		Name and		Station Contraction		The state of the	Contraction of the		-	A States						
Fluoride	1.6	(3)	0.16	0.19	0.16	0.14	0.22	0.15	0.17	0.19	0.17	0.16	0.1	0.14	0.17	0.19	0.18	0.15	0.23	0.15	0.17	0.2	0.16	0.16	0.22	0.18
Chloride	250	(3)	2.60	3.00	3.10	3.70	3.2	3.10	2.80	2.90	3.00	3.60	3.10	3.10	2.60	2.90	3.20	3.60	3.50	3.30	2.60	3.30	3.10	3.80	2.80	3.10
Nitrite	1.0	(2)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	< 0.10	< 0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	< 0.10	<0.10	<0.10
Bromide	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	< 0.10	< 0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite	10	(3)	<0.10	0.14	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	< 0.10	< 0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Phosphorus		-	< 0.50	< 0.50	<0.50	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<0.50	< 0.50	< 0.50	<0.50	< 0.50	< 0.50	<0.50	< 0.50
Sulfate	600	(3)	49	66	61	72	49	72	51	65	60	72	50	72	47	66	60	74	62	73	50	87	65	77	44	75
Carbon Dioxide	-	-		87	86	84	82	78		84	88	84	83	78		87	85	84	83	76		90	86	87	280	78
Alkalinity	-	-		87	86	84	82	87		88	84	84	83	87		87	85	84	83	85		90	86	87	84	87
Total Dissolved Solids	1000	(3)		198	204	221	180	250		186	211	220	193	240		200	203	220	184	250	17 mar	234	206	231	196	280
Electric Conductivity		-		330	320	340	310	330		330	320	340	280	340		320	310	340	270	340		380	320	350	280	350
Total Metals (mg/l):	1000														and the second second							000	020	000	200	000
Arsenic	0.01	(2)	<0.020	< 0.020	< 0.020	<0.020	< 0.020	<0.020	< 0.020	< 0.020	< 0.020	<0.020	<0.020	< 0.020	< 0.020	< 0.020	<0.020	< 0.020	< 0.020	< 0.020	<0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Barium	1.0	(3)	0.17	0.076	0.068	0.065	0.07	0.07	0.12	0.076	0.069	0.065	0.07	0.07	0.11	0.071	0.068	0.065	0.07	0.07	0.1	0.073	0.020	0.65	0.020	0.02
Cadmium	0.005	(2)	<0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	<0.002	<0.002	< 0.002	< 0.002	< 0.002	< 0.002
Chromium	0.05	(3)	< 0.006	<0.002	<0.002	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	<0.002	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	<0.002	<0.002
Lead	0.015	(2)	<0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00
Selenium	0.010	(2)	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.005	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.005	< 0.005	< 0.000	< 0.000	< 0.000	< 0.050
Silver	0.05	(2)	<0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Mercury	0.002	(3)	< 0.0002	< 0.0002	< 0.0002	<0.0002	<0.0002	< 0.0002	<0.0002	< 0.0002	<0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	<0.0002	<0.0002	<0.0002	< 0.0002	<0.000
Dissolved Metals (mg/l):	0.002	(5)	40.0002	40.0002	40.0002	40.0002	-0.0002	40.0002	40.0002	-0.0002	40.0002	-0.0002	40.0002	40.0002	40.0002	40.0002	-0.0002	40.0002	-0.0002	~0.0002	~0.0002	~0.0002	<0.0002	<0.0002	<0.0002	<0.000
Arsenic	0.1	(3)	< 0.001	< 0.001	< 0.020	< 0.020	<0.020	< 0.020	< 0.001	< 0.001	< 0.020	< 0.020	< 0.020	< 0.020	< 0.001	< 0.001	<0.020	<0.020	< 0.020	<0.020	< 0.001	< 0.001	< 0.020	< 0.020	<0.020	<0.000
Barium	1	and the second se	0.06	0.58	0.068	0.020	0.020	0.020	0.06	0.058	0.069	0.065	0.041	0.068	0.059	0.058	0.068	0.065	0.020	0.020	0.061	0.001	0.020	0.65		< 0.020
Cadmium	0.01	(3)	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.004	< 0.002	< 0.002	< 0.003	< 0.003	<0.002	< 0.002	< 0.002	< 0.002	<0.002	<0.003	< 0.002	< 0.002	< 0.002	<0.002	< 0.007	<0.002	0.063	0.064
Cadmum	0.01	(3)	32	33	36	35	30	36	33	33	35	35	22	35	32	33	34	34	28	35	34	39	36		<0.002	<0.002
	0.05		<0.006	<0.006	<0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	<0.006	<0.006	< 0.006	< 0.006	<0.006	<0.006	< 0.006	<0.006	<0.006	<0.006		36	31	38
Chromium	1.0	(3)	< 0.006	< 0.006	<0.006	<0.006	< 0.006	<0.006	< 0.006	<0.006	< 0.006	<0.006	<0.006	< 0.006	<0.006	< 0.006	<0.006	< 0.006	< 0.006	< 0.006	< 0.006		<0.006	<0.006	<0.006	<0.006
Copper	1.0	(3)	<0.00	<0.00	0.036	0.027	< 0.00	0.000	<0.000	< 0.00	0.036	0.026	<0.00	0.032	<0.000	< 0.00	< 0.00	0.022	<0.000		and the second se	<0.006	<0.006	<0.006	<0.006	<0.006
Iron		(3)	statement of the second s	<0.02	< 0.005	< 0.005	< 0.002	< 0.005	< 0.002	< 0.02	< 0.005	< 0.005	< 0.02	< 0.005	< 0.002	< 0.02	<0.02	<0.022	and the state of t	0.021	<0.02	<0.02	<0.02	<0.02	<0.02	0.04
Lead	0.05	(3)	<0.005	and the second se	6	6.5	5.6	6.1	5.8	6.1	6	6.5	4.1	6.1	5.9	6	6	6.7	<0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.00
Magnesium	-	- (0)	and the second se	6.1	-												0.007			6.2	0	6.7	6.1	6.6	5.7	6.4
Manganese	0.2	(3)	0.0087	0.015	0.011	0.025	0.0035	0.017	0.0079	0.015	0.0099	0.025	0.004	0.18	0.011	0.019		0.033	0.003	0.023	0.013	0.044	0.016	0.054	0.006	0.046
Mercury	•	-						4.7																		
Potassium	-	-	1.6	1.6	1.8	1.8	1.7	1.7	1.6	1.8	1.8	1.8	1.1	1.6	1.6	1.7	1.8	1.8	1.6	1.7	1.7	1.8	1.8	1.8	1.6	1.8
Selenium	0.05	(3)	< 0.001	< 0.001	< 0.050	< 0.050	< 0.050	< 0.050	< 0.001	< 0.001	< 0.050	< 0.050	< 0.050	< 0.050	< 0.001	< 0.001	< 0.050	< 0.050	< 0.050	< 0.050	< 0.001	< 0.001	< 0.050	< 0.050	< 0.050	< 0.05
Silver	0.05	(3)	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0050	<0.0050	< 0.0050	<0.0050	< 0.0050	<0.0050	< 0.0050	<0.0050	< 0.0050	<0.0050	< 0.0050	< 0.0050	< 0.0050	<0.0050	< 0.005
Sodium	-	-	16	21	19	25	16	23	16	21	19	25	11	22	16	22	19	29	14	25	17	26	20	26	16	24
Uranium	0.03	(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	< 0.001	< 0.001
Zinc	10.0	(3)	0.068	< 0.01	< 0.05	< 0.05	< 0.05	0.066	0.035	< 0.01	< 0.05	< 0.05	< 0.05	0.052	0.045	< 0.01	< 0.05	< 0.05	< 0.05	0.12	0.06	< 0.01	< 0.05	< 0.05	< 0.05	0.082

(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

- = No screening level or analytical result available

\* = Laboratory analyzed for combined Nitrate (As N) + Nitrite (As N) to meet holdtime

NS<sup>1</sup> = Not Enough Water to Sample- No Sample

mg/l = milligrams per liter

-- = Analyte inadvertently not included in analysis.

## Figures



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## Legend



Note: All identified wells were sampled in April 2011



April 2012

Figure 10





## Legend



Note: All identified wells were sampled in August 2011



Wells Sampled August 2011 Bloomfield Refinery

April 2012

Figure 11

# Appendix A

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## **Field Methods**

## **Appendix A**

## **Groundwater Elevation**

All facility monitoring wells, recovery wells, observation and collection wells were measured for groundwater elevation in March, April, and August. Refinery personnel followed the guidelines of the *Facility-Wide Groundwater Monitoring Plan December 2007 (Revised May 2008)* to collect groundwater levels and SPH thickness measurements In March and April. Water elevation measurements were collected in all wells while the recovery wells were in operation and again after the pumps were removed and water levels had stabilized (5 or more days later). 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. In August, prior to groundwater sampling activities, groundwater levels and SPH thickness measurements were collected at all wells after the pumps had been removed and water levels had stabilized.

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

Prior to purging, a YSI 550A Dissolved Oxygen Probe is used to determine dissolved oxygen (DO) levels. Water quality parameters are measured using an Ultrameter 6P by the Myron L Company. Electrical conductance, oxidationreduction potential (ORP), Total Dissolved Solids (TDS), pH, and temperature are monitored during purging.

## Well Purging Technique

After determining water levels and measuring DO, initial well volumes are calculated. Total purge volume is determined by monitoring electrical conductance, pH, temperature, ORP, and TDS 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.

1

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

Typically 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.

On occasion, the submersible pump is used for purging wells that have a large volume of water. All purged water is poured/pumped into a 55-gallon drum designated for sampling events.

#### Well Sampling and Sample Handling Procedure

Equipment and supplies needed for collecting representative groundwater samples include:

- Interface Meter
- YSI 550A Dissolved Oxygen Probe
- Ultrameter 6P
- Distilled Water
- Disposable Latex Gloves
- Disposable Bailers
- Submersible pump and Generator (if needed)
- 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.

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## Purge and Decontamination Water Disposal

The Ultrameter 6P, YSI 550A Dissolved Oxygen Probe, 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 refinery wastewater system.

The submersible pump is decontaminated by placing it in a 55-gallon barrel filled with plant water and some Alconox. The pump is activated and will pump down the barrel twice. External areas are washed down and rinsed, also. All wash and rinse water is on containment and runs to the refinery wastewater system. Any glassware used is taken to the refinery laboratory and washed with Alconox and water and rinsed with reverse osmosis water. Laboratory wastewater runs through the refinery system.

### **Instrument Calibration**

Calibration of the YSI 550A Dissolved Oxygen Instrument occurs at the beginning of each day of sampling. The probe is powered on and allowed to stabilize, which usually takes 15 minutes. Enter the calibration menu. The LCD will prompt you to enter the local altitude in hundreds of feet. When the proper altitude appears on the LCD, press the **ENTER** key.

The LCD will then prompt you to enter the salinity of the water you are about to analyze. After entering the correct salinity, the instrument will return to normal operation.

The Ultrameter 6P instrument calibration occurs at the beginning of each day of sampling. For Conductivity and TDS calibration, the cell is rinsed three times with a 3000 umhos/cm NaCl Standard. The cell cup is refilled with the standard. Either the **COND** or the **TDS** button is pressed and then the **CAL** button is pushed. Press the up or down arrow until the display agrees with the standard. The **CAL** button is pressed to accept the value.

The Ultrameter 6P has an electronic ORP calibration which is automatically calibrated with the 7 pH. The pH sensor well is rinsed three times with 7.0 buffer solution and then refilled again with that buffer. The **pH** button is pressed then the **CAL** button. The up or down arrow is adjusted until the display agrees with the buffer value. The **CAL** button is pushed to accept that value. Repeat the calibration steps using an acid buffer solution and then again with a base buffer solution.

### **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

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Date	10146	(VIGUIA	Sample request in	Type and #	Туре			BTEX	BTEX	Hat	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,CI,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)BIEX MIRE ON BY	8270 (Semi-VOA)	2			Alr Bubbles (Y or N)
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If necessary, samples submitted to Hall Environmental may be subcontracted to other acceptited laboratoriss. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
Client: Western) Refining	X Standard D Rush	HALL ENVIRONMENTAL ANALYSIS LABORATORY
Mailing Address: 50 CR 4990 Bloom Cie la. NM 87413	North Barnier Wall- 2011 Project #.	4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax, 505-345-4107
Phone #: 535-632-4/8 5		Analysis Request
email or Fax#: 535-632-39// QA/QC Package: Standard XLevel 4 (Full Validation	Project Manager:	+ TPH (Gas only) + TPH (Gas only) 15B (Gas/ <b>4</b> = ) 18.1) 04.1) 04.1) 04.1) 04.1) 04.1) 04.10 05.NO2,PO4,SO4) 05 15'8
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Date Time Matrix Sample Request IE	Container Type and # Type	BTEX + MTBE + TMB's (8021) BTEX + MTBE + TPH (Gas only TPH Method 8015B (Gas/1944) TPH (Method 504.1) EDB (Method 504.1) 8310 (PNA or PAH) 8310 (PNA or PAH) RCRA 8 Metals Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) 8081 Pesticides / 8082 PCB's 8260B (VOA) <b>BTEX MTRF</b> 8270 (Semi-VOA) <b>DRO - BOI 5'B</b>
4-13-11 10:15 H20 CW- 0+60	5-VOA HCI -1	
	1-500ml amber	
4-13-112:00 CW-25+95	H-VOA HCI -7	
	1500ml ander	
4-13-11 10:15 -OW-CW0+60:		
t i i i i	1-500ml amba	
4-13-11 2:30 Field BlANK		

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	8	Date: Time: Relinquished by:					10:00 MW-44 Dup						8-17-11 10:00 Had MW-44	Date Time Matrix Sample Request ID	NELAP     D     Other	Standard X Level 4 (Full Validation)	QA/QC Package:	Fax#:	505-632-	Blomfield NM Bloght	Mailing Address the constant	Western Refining	ain-of-Custody Record
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Received by: Received by: Recei		_	1-250 H2904	1-500	1-250 HNO3	1-500 #NO2	2	1-Liter amber	5-10A HC1 -7-4	Container Preservative		Samples Bob A Tziny			Project Manager		BCRA investigation wells	Project Name: 8-22-11	Standard C Rush	Turn-Around Time:
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Relin	B-24-11 3:00 (Color Jule Con )				Calo TIMIC STONI	The Ophant &							824-11 7: 20 H20 MW-64 5-	Matrix Sample Request ID	C Other	Standard KLevel 4 (Full Validation)		1165-237-301	4-622-24	87413	Mailing Address: 50 CR 4990 R	
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Date Time	S/25/11 11:00				-				53	03	ben	ber	-2	Preservative	Terry				·	1. water	investigation wells	11-20-02
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Malling Address: 50 CR 4990	- RCRA	Westigal	tion lated	5		4901 H	lawkina	NE -	Alb	uque	rque	, NM	871	109	•		
Bloomfield, NM 87	41.3 Project #:	•				<u>Tel.</u> 5	05-345				_	45-4	107	(julian)			
Phone #: 505-632-4							A	4	maly		Requ	lest			- 61		
email or Fax#: ,535-632-3	Project Man	ager.	.`		£	<u>Š</u>				õ	ø			ľ		ł	
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If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted date will be clearly notated on the analytical report.

Chain-of-Custody Record	Turn-Around Time:	HALL ENVIRONMENTAL
Client Western Refining	Standard D Rush	- ANALYSIS LABORATORY
	Project Name: 8-23-1	www.hallenvironmental.com
Mailing Address: 50 C.R. 4990	Project Name: 8-23-1	4901 Hawkins NE - Albuquerque, NM 87109
Bloomfield, NM 874/3	Project #:	Tel. 505-345-3975 Fax 505-345-4107
Phone # 585-6.22-4161 4135		Analysis Request
email or Fax#: 505-632-39//	Project Manager:	21) only) SO <sub>4</sub> ) 3's <b>Awce</b>
QA/QC Package:		s (8021) (Gas only) Po4, So4) Po4, So4)
Standard KLevel 4 (Full Validation)		B's (80) (Gas <b>P</b> ) (Gas <b>P</b> ) (Gas <b>P</b> ) (Gas <b>P</b> )
	Sampler. Bob, + Terry	e + TMB <sup>+</sup> e + TPH 8015B (G 504.1) 8 <b>131</b> 8 <b>1</b> 8 <b>1111111111111</b>
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		BTEX + MTBE + TMB's (8021) BTEX + MTBE + TPH (Gas only) TPH (Method 8015B (Gas, <b>4</b> ) TPH (Method 418.1) EDB (Method 504.1) B310 (PNA or PAH) RCRA 8 Metals <b>TDTA</b> RCRA 8 Metals <b>TDTA</b> Anlons (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO4,SO4) 8081 Pesticides / 8082 PCB's 8260B (VOA) 8270 (Semi-VOA) <b>PPO-BOIS T</b> <b>DPO-BOIS T</b> <b>DPO-BOIS T</b> <b>DPO-DOIS T</b> <b>DPO</b>
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9-34-11 3:00 Ubbert Mallon Date: Thme: Relinquished by:								6-24-1 6:45 Hao NW-63	Date Time Matrix Sample Request ID	EDD (Type)	Accreditation	Standard     Standard     Standard     Standard     Standard	email or Fax#; 505-6 50- 59// GAVQC Pedrage:	32-	Bloomfield, NM 874/3	Mailing Address: 50 (P 4990		Western Refining	Chain-of-Custody Record
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						X	X	×	RCRA 8 Met Anions (F.CI 8081 Pestici 8260B (VOA 8270 (Semi- DPO - 8 WQCC T Cation	,NO des ) VO/	3,NO <sub>2</sub> / 8082	PO₄ PC	B's		Fax 505-345-4107	Albuquerque, NM 87109	<b>p</b>	ALL ENVIRONMENTAL	
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Chart - Crusticity Record     Introduction       Mailing Address So CR, HPA     Poper Name       Biologic Address So CR, HPA     Poper Name       Data Time     Name Name<			21	1	1	ŀ	i	ļ	1	I	1	1	1	90	•	I۳		l-	0	ا م ا		1	<b>,</b>	I	1 ~	ı
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# Appendix C



# Hall Environmental Analysis Laboratory

#### **QUALITY ASSURANCE PLAN**

## Effective Date: July 1st, 2011

### **Revision 9.4**

www.hallenvironmental.com

Control Number: 00000104

Approved By:

Andy Freeman Laboratory Manager

Date

Approved By:

<u>6/29/2011</u>

Carolyn Swanson Date Quality Assurance/Quality Control Officer



4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109 505.345.3975 ■ Fex 505.345.4107 www.hallenvironmental.com
Approved By:

B. Derek Harmon Date Organic Manager/Technical Director

Approved By:

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lan Cameron Date Inorganic Manager/Technical Director

Approved By:

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Michael Williams Date Microbiology Technical Director

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# 3.0 Introduction

## Purpose of Document

The purpose of this Quality Assurance Plan is to formally document the quality assurance policies and procedures of Hall Environmental Analysis Laboratory, Inc. (HEAL), for the benefit of its employees, clients, and accrediting organizations. HEAL continually implements all aspects of this plan as an essential and integral part of laboratory operations in order to ensure that high quality data is produced in an efficient and effective manner.

# Objectives

The objective of HEAL is to achieve and maintain excellence in environmental testing. This is accomplished by developing, incorporating and documenting the procedures and policies specified by each of our accrediting authorities and outlined in this plan. These activities are carried out by a laboratory staff that is analytically competent, well-qualified, and highly trained. An experienced management team, knowledgeable in their area of expertise, monitors them. Finally, a comprehensive quality assurance program governs laboratory practices and ensures that the analytical results are valid, defensible, reproducible, reconstructable and of the highest quality.

HEAL establishes and thoroughly documents its activities to ensure that all data generated and processed will be scientifically valid and of known and documented quality. Routine laboratory activities are detailed in method specific standard operating procedures (SOP). All data reported meets the applicable requirements for the specific method that is referenced, ORELAP, TCEQ, EPA, client specific requirements and/or State Bureaus. In the event that these requirements are ever in contention with each other, it is HEAL's policy to always follow the most prudent requirement available. For specific method requirements refer to HEAL's Standard Operating Procedures (SOP's), EPA methods, Standard Methods 20<sup>th</sup> edition, ASTM methods or state specific methods.

HEAL management ensures that this document is correct in terms of required accuracy and data reproducibility, and that the procedures contain proper quality control measures. HEAL management additionally ensures that all equipment is reliable, well-maintained and appropriately calibrated. The procedures and practices of the laboratory are geared towards not only strictly following our regulatory requirements but also allowing the flexibility to conform to client specific specifications. Meticulous records are maintained for all samples and their respective analyses so that results are well-documented and defensible in a court of law.

The HEAL Quality Assurance/Quality Control Officer (QA/QCO) and upper management are responsible for supervising and administering this quality assurance program, and ensuring each individual is responsible for its proper implementation. All HEAL management remains committed to the encouragement of excellence in analytical testing and will continue to provide the necessary resources and environment conducive to its achievement.

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#### Policies

Understanding that quality cannot be mandated, it is the policy of this laboratory to provide an environment that encourages all staff members to take pride in the quality of their work. In addition to furnishing proper equipment and supplies, HEAL stresses the importance of continued training and professional development. Further, HEAL recognizes the time required for data interpretation. Therefore, no analyst should feel pressure to sacrifice data quality for data quantity. Each staff member must perform with the highest level of integrity and professional competence, always being alert to problems that could compromise the quality of their technical work.

Management and senior personnel supervise analysts closely in all operations. Under no circumstance is the willful act or fraudulent manipulation of analytical data condoned. Such acts must be reported immediately to HEAL management. Reported acts will be assessed on an individual basis and resulting actions could result in dismissal. The laboratory staff is encouraged to speak with lab managers or senior management if they feel that there are any undo commercial, financial, or other pressures, which might adversely affect the quality of their work; or in the event that they suspect that data quality has been compromised in any way. HEAL's Quality Assurance/Quality Control Officer is available if any analyst and/or manager wishes to anonymously report any suspected or known breaches in data integrity.

Understanding the importance of meeting customer requirements in addition to the requirements set forth in statutory and regulatory requirements, HEAL shall periodically seek feedback from customers and evaluate the feedback in order to initiate improvements.

All proprietary rights and client information at HEAL (including national security concerns) are considered confidential. No information will be given out without the express verbal or written permission of the client. All reports generated will be held in the strictest of confidence.

HEAL shall continually improve the effectiveness of its management system through the use of the policies and procedures outlined in this Quality Assurance Plan. Quality control results, internal and external audit findings, management reviews, new and continual training and corrective and preventive actions are continually evaluated to identify possible improvements and to ensure that appropriate communication processes are taking place regarding the effectiveness of the management system. HEAL shall ensure that the integrity of the quality system is maintained when changes to the system are planned and implemented.

This is a controlled document. Each copy is assigned a unique tracking number and when released to a client or accrediting agency the QA/QCO keeps the tracking number on file. This document is reviewed on an annual basis to ensure that it is valid and representative of current practices at HEAL.

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## 4.0 Organization and Responsibility

#### Company

HEAL is accredited in accordance with the 2009 TNI standard (see NELAC accredited analysis list in Appendix B and C), through ORELAP and TCEQ and by the Arizona Department of Health Services. Additionally, HEAL is qualified as defined under the State of New Mexico Water Quality Control Commission regulations and the New Mexico State Drinking Water Bureau. HEAL is a locally owned small business that was established in 1991. HEAL is a full service environmental analysis laboratory with analytical capabilities that include both organic and inorganic methodologies and has performed analyses of soil, water, and air as well as various other matrices for many sites in the region. HEAL's client base includes local, state and federal agencies, private consultants, commercial industries as well as individual homeowners. HEAL has performed as a subcontractor to the state of New Mexico and to the New Mexico Department of Transportation. HEAL has been acclaimed by its customers as producing quality results and as being adaptive to client-specific needs.

The laboratory is divided into an organic section and an inorganic section. Each section has a designated manager/technical director. The technical directors report directly to the laboratory manager, who oversees all operations.

## Certifications

ORELAP -- NELAC Oregon Primary accrediting authority.

TCEQ – NELAC Texas Secondary accrediting authority

The Arizona Department of Health Services

The New Mexico Drinking Water Bureau

The New Mexico Department of Health

See Appendix B-F for copies of current licenses and licensed parameters, or refer to our current list of certifications online at <u>www.hallenvironmental.com</u>.

In the event of a certification being revoked or suspended, HEAL will notify, in writing, those clients that require the affected certification.

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# Personnel

HEAL management ensures the competence of all who operate equipment, perform environmental tests, evaluate results, and sign test reports. Personnel performing specific tasks shall be qualified on the basis of appropriate education, training, experience and /or demonstrated skills.

HEAL ensures that all personnel are aware of the relevance and importance of their activities and how each employee contributes to the achievement of the objectives defined throughout this document.

All personnel shall be responsible for complying with HEAL's quality assurance/quality control requirements that pertain to their technical function. Each technical staff member must have a combination of experience and education to adequately demonstrate specific knowledge of their particular function and a general knowledge of laboratory operations, test methods, quality assurance/quality control procedures, and records management.

All employees' training certificates and diplomas are kept on file with demonstrations of capability for each method they perform. An Organizational Chart can be found at the end of this section and a personnel list is available in Appendix A.

## Laboratory Director

The Laboratory Director is responsible for overall technical direction and business leadership of HEAL. The Laboratory Manager, the Project Manager and Quality Assurance/Quality Control Officer report directly to the Laboratory Director. Someone with a minimum of 7 years of directly related experience and a bachelor's degree in a scientific or engineering discipline should fill this position.

## Laboratory Manager/Lead Technical Director

The Laboratory Manager shall exercise day-to-day supervision of laboratory operations for the appropriate fields of accreditation and reporting of results. The Laboratory Manager shall be experienced in the fields of accreditation for which the laboratory is approved or seeking accreditation. The Laboratory Manager shall certify that personnel with appropriate educational and/or technical background perform all tests for which HEAL is accredited. Such certification shall be documented.

The Laboratory Manager shall monitor standards of performance in quality control and quality assurance and monitor the validity of the analyses performed and data generated at HEAL to assure reliable data.

The Laboratory Manager is responsible for the daily operations of the laboratory. The Laboratory Manager is the lead technical director of the laboratory and, in conjunction with the section technical directors, is responsible for coordinating activities within the

Page 9 of 54 Quality Assurance Plan 9.4 Effective July 1<sup>st</sup>, 2011 laboratory with the overall goal of efficiently producing high quality data within a reasonable time frame.

In events where employee scheduling or current workload is such that new work cannot be incorporated, without missing hold times, the Laboratory Manager has authority to modify employee scheduling, re-schedule projects or, when appropriate, allocate the work to approved subcontracting laboratories.

Additionally, the laboratory manager reviews and approves new analytical procedures and methods, and performs a final review of most analytical results. The Laboratory Manager provides technical support to both customers and HEAL staff.

The Laboratory Manager also observes the performance of supervisors to ensure that good laboratory practices and proper techniques are being taught and utilized, and to assist in overall quality control implementation and strategic planning for the future of the company. Other duties include assisting in establishing laboratory policies that lead to the fulfillment of requirements for various certification programs, assuring that all Quality Assurance and Quality Control documents are reviewed and approved, and assisting in conducting Quality Assurance Audits.

The laboratory manager addresses questions or complaints that cannot be answered by the section managers.

The Laboratory Manager shall have a bachelor's degree in a chemical, environmental, biological sciences, physical sciences or engineering field, and at least five years of experience in the environmental analysis of representative inorganic and organic analytes for which the laboratory seeks or maintains accreditation.

#### Quality Assurance Quality Control Officer

The Quality Assurance/Quality Control Officer (QA/QCO) serves as the focal point for QA/QC and shall be responsible for the oversight and/or review of quality control data. The QA/QCO functions independently from laboratory operations and shall be empowered to halt unsatisfactory work and/or prevent the reporting of results generated from an out-of-control measurement system. The QA/QCO shall objectively evaluate data and perform assessments without any outside/managerial influence. The QA/QCO shall have direct access to the highest level of management at which decisions are made on laboratory policy and/or resources. The QA/QCO shall notify laboratory management of deficiencies in the quality system in periodic, independent reports.

The QA/QCO shall have general knowledge of the analytical test methods for which data review is performed and have documented training and/or experience in QA/QC procedures and in the laboratory's quality system. The QA/QCO will have a minimum of a BS in a scientific or related field and a minimum of three years of related experience.

The QA/QCO shall schedule and conduct internal audits as per the Internal Audit SOP at least annually, monitor and trend Corrective Action Reports as per the Data Validation

Page 10 of 54 Quality Assurance Plan 9.4 Effective July 1<sup>st</sup>, 2011 SOP, periodically review control charts for out of control conditions, and initiate any appropriate corrective actions.

The QA/QCO shall oversee the analysis of proficiency testing in accordance with our standards and monitor any corrective actions issued as a result of this testing.

The QA/QCO reviews all standard operating procedures and statements of work in order to assure their accuracy and compliance to method and regulatory requirements.

The QA/QCO shall be responsible for maintaining and updating this quality manual.

# **Project Manager**

<sup>3</sup>The role of the project manager is to act as a liaison between HEAL and our clients. The Project Manager updates clients on the status of projects in-house, prepares quotations for new work, and is responsible for HEAL's marketing effort.

All new work is assessed by the Project Manager and reviewed with the other managers so as to not exceed the laboratory's capacity. In events where employee scheduling or current workload is such that new work cannot be incorporated without missing hold times, the Project Manager has authority to re-schedule projects.

It is also the duty of the project manager to work with the Laboratory Manager and QA/QCO to insure that before new work is undertaken, the resources required and accreditations requested are available to meet the client's specific needs.

Additionally, the Project Manager can initiate the review of the need for new analytical procedures and methods, and perform a final review of some analytical results. The Project Manager provides technical support to customers. Someone with a minimum of 2 years of directly related experience and a bachelor's degree in a scientific or engineering discipline should fill this position.

## **Technical Directors**

Technical Directors are full-time members of the staff at HEAL who exercise day-to-day supervision of laboratory operations for the appropriate fields of accreditation and reporting of results for their department within HEAL. A Technical Director's duties shall include, but not be limited to, monitoring standards of performance in quality control and quality assurance, monitoring the validity of the analyses performed and the data generated in their sections to ensure reliable data, overseeing training and supervising departmental staff, scheduling incoming work for their sections, and monitoring laboratory personnel to ensure that proper procedures and techniques are being utilized. They supervise and implement new Quality Control procedures as directed by the QA/QCO, update and maintain quality control records including, but not limited to, training forms, IDOCs, ADOCPs, and MDLs, and evaluate laboratory personnel in their Quality Control activities.

Page 11 of 54 Quality Assurance Plan 9.4 Effective July 1<sup>st</sup>, 2011 In addition, technical directors are responsible for upholding the spirit and intent of HEAL's data integrity procedures.

As Technical Directors of their associated section, they review analytical data to acknowledge that data meets all criteria set forth for good Quality Assurance practices. Someone with a minimum of 2 years of experience in the environmental analysis of representative analytes for which HEAL seeks or maintains accreditation and a bachelor's degree in a scientific or related discipline should fill this position.

#### Section Supervisors

Section Supervisors are full time members of staff at HEAL who exercise day-to-day supervision of laboratory operations for the appropriate fields of accreditation and reporting of results for their department within HEAL. Section Supervisors report directly to their technical director. A Section Supervisor's duties shall include, but not be limited to, monitoring standards of performance in quality control and quality assurance, monitoring the validity of the analyses performed and the data generated in their sections to ensure reliable data, overseeing training and supervising departmental staff, scheduling incoming work for their sections, and monitoring laboratory personnel to ensure that proper procedures and techniques are being utilized. They supervise and implement new Quality Control procedures as directed by the QA/QCO, update and maintain guality control records including, but not limited to, training forms, IDOCs, ADOCPs, and MDLs, and evaluate laboratory personnel in their Quality Control activities. In addition, Section Supervisors are responsible for upholding the spirit and intent of HEAL's data integrity procedures. Section Supervisors update their Technical Director on the status and needs of their departments and submit all Quality Control documents to their technical director for their review, approval and signature.

As section supervisors, they review analytical data to acknowledge that data meets all criteria set forth for good Quality Assurance practices. Someone with a minimum of 2 years of experience in the environmental analysis of representative analytes for which HEAL seeks or maintains accreditation and a bachelor's degree, or equivalent experience in a scientific or related discipline should fill this position.

## Health and Safety / Chemical Hygiene Officer

Refer to the most recent version of the Health and Safety and Chemical Hygiene Plans for the roles, responsibilities, and basic requirements of the Health and Safety Officer (H&SO) and the Chemical Hygiene Officer (CHO). These jobs can be executed by the same employee.

## Analyst I, II and III

Analysts are responsible for the analysis of various sample matrices including, but not limited to, solid, aqueous, and air, as well as the generation of high guality data in

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Analysts are responsible for making sure all data generated is entered in the database in the correct manner and the raw data is reviewed, signed and delivered to the appropriate peer for review. An analyst reports daily to the section manager and will inform them as to material needs of the section specifically pertaining to the analyses performed by the analyst. Additional duties may include preparation of samples for analysis, maintenance of lab instruments or equipment, and cleaning and providing technical assistance to lower level laboratory staff.

The senior analyst in the section may be asked to perform supervisory duties as related to operational aspects of the section. The analyst may perform all duties of a lab technician.

The position of Analyst is a full or part time hourly position and is divided into three levels. Analyst I, II, and III. All employees hired into an Analyst position at HEAL must begin as an Analyst I and remain there at a minimum of three months regardless of their education and experience. Analyst I must have a minimum of an AA in a related field or equivalent experience (equivalent experience means years of related experience can be substituted for the education requirement). An Analyst I is responsible for analysis, instrument operation, including calibration and data reduction. Analyst II must have a minimum of an AA in a related field or equivalent experience and must have documented and demonstrated aptitude to perform all functions of an Analyst II. An Analyst II is responsible for the full analysis of their test methods, routine instrument maintenance, purchase of consumables as dictated by their Technical Director, advanced data reduction, and basic data review. Analyst II may also assist Analyst III in method development and, as dictated by their Technical Director, may be responsible for the review and/or revision of their method specific SOPs. Analyst III must have Bachelors degree or equivalent experience and must have documented and demonstrated aptitude to perform all functions of an Analyst III. An Analyst III is responsible for all tasks completed by an Analyst I and II as well as advanced data review, non-routine instrument maintenance, assisting their technical director in basic supervisory duties and method development.

## Laboratory Technician

A laboratory technician is responsible for providing support to analysts in the organics, inorganics and disposal departments. Laboratory Technicians can assist analysts in basic sample preparation, general laboratory maintenance, glassware washing, chemical inventories, sample disposal and sample kit preparation. This position can be filled by someone without the education and experience necessary to obtain a position as an analyst.

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## Sample Control Manager

The sample control manager is responsible for receiving samples and reviewing the sample login information after it has been entered into the computer. The sample control manager also checks the samples against the chain-of-custody for any sample and/or labeling discrepancies prior to distribution.

The sample control manager is responsible for sending out samples to the sub-contractors along with the review and shipping of field sampling bottle kits. The sample control manager acts as a liaison between the laboratory and field sampling crew to ensure that the appropriate analytical test is assigned. If a discrepancy is noted, the sample control manager or sample custodian will contact the customer to resolve any questions or problems. The sample control manager is an integral part of the customer service team.

This position should be filled by someone with a high school diploma and a minimum of 2 years of related experience and can also be filled by a senior manager.

#### Sample Custodians

Sample Custodians work directly under the Sample Control Manager. They are responsible for sample intake into the laboratory and into the LIMS. Sample Custodians take orders from our clients and prepare appropriate bottle kits to meet the clients' needs. Sample Custodians work directly with the clients in properly labeling and identifying samples as well as properly filling out legal COCs. When necessary, Sample Custodians contact clients to resolve any questions or problems associated with their samples. Sample Custodians are responsible for distributing samples throughout the laboratory and are responsible for notifying analysts of special circumstances such as short holding times or improper sample preservation upon receipt.

## Sample Disposal Custodian

The sample disposal custodian is responsible for characterizing and disposing of samples in accordance to the most recent version of the sample disposal SOP. The sample disposal custodian collects waste from the laboratory and transports it to the disposal warehouse for storage and eventual disposal. The sample disposal custodian is responsible for maintaining the disposal warehouse and following the requirements for documentation, integrity, chemical hygiene and health and safety as set forth in the various HEAL administrative SOPs. The sample disposal custodian is responsible for overseeing any laboratory technicians employed at the disposal warehouse.

This position should be filled by someone with a high school diploma and a minimum of 1 year of related experience.

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# **Delegations in the Absence of Key Personnel**

Planned absences shall be preceded by notification to the Laboratory Manager. The appropriate staff members shall be informed of the absence. In the case of unplanned absences, the superior shall either assume the responsibilities and duties or delegate the responsibilities and duties to another appropriately gualified employee.

In the event that the Laboratory Manager is absent for a period of time exceeding fifteen consecutive calendar days, another full-time staff member meeting the basic qualifications and competent to temporarily perform this function will be designated. If this absence exceeds thirty-five consecutive calendar days, HEAL will notify ORELAP in writing of the absence and the pertinent qualifications of the temporary laboratory manager.

#### Laboratory Personnel Qualification and Training

All personnel joining HEAL shall undergo orientation and training. During this period the new personnel shall be introduced to the organization and their responsibilities, as well as the policies and procedures of the company. They shall also undergo on-the-job training and shall work with trained staff. They will be shown required tasks and be observed while performing them.

When utilizing staff undergoing training, appropriate supervision shall be dictated and overseen by the appropriate section technical director. Prior to analyzing client samples, a new employee, or an employee new to a procedure, must meet the following basic requirements. The SOP and Method for the analysis must be read and signed by the employee indicating that they read, understand, and intend to comply with the requirements of the documents. The employee must undergo documented training. Training is conducted by a senior analyst familiar with the procedure and overseen by the section Technical Director. This training is documented by any means deemed appropriate by the trainer and section Technical Director, and kept on file in the employees file located in the QA/QCO's office. The employee must perform a successful Initial Demonstration of Proficiency (IDOC). See Appendix I for the training documents and checklists utilized at HEAL to ensure that all of these requirements are met. Once all of the above requirements are met it is incumbent upon the section Technical Director to determine at which point the employee can begin to perform the test unsupervised. Certification to Complete Work Unsupervised (see Appendix I) is then filled out by the employee and technical director.

IDOCs are required for all new analysts and methods prior to sample analysis. IDOCs are also required any time there is a change in the instrument, analyte list or method. If more than twelve months have passed since an analyst performed an IDOC and they have not performed the method and/or have not met the continuing DOC requirements, the analyst must perform an IDOC prior to resuming the test.

All IDOCs shall be documented through the use of the certification form which can be found in Appendix I. IDOCs are performed by analyzing four Laboratory Control Spikes (LCSs). Using the results of the LCSs the mean recovery is calculated in the appropriate

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reporting units and the standard deviations of the population sample (n-1) (in the same units) as well as the relative percent difference for each parameter of interest. When it is not possible or pertinent to determine mean and standard deviations HEAL assesses performance against establish and documented criteria dictated in the method SOP. The mean and standard deviation are compared to the corresponding acceptance criteria for precision and accuracy in the test method (if applicable) or in laboratory-generated acceptance criteria. In the event that the HEAL SOP or test method fail to establish the pass/fail criteria the default limits of +/- 20% for calculated recovery and <20% relative percent difference based on the standard deviation will be utilized. If all parameters meet the acceptance criteria, the IDOC is successfully completed. If any one of the parameters do not meet the acceptance criteria, the performance is unacceptable for that parameter and the analyst must either locate and correct the source of the problem and repeat the test for all parameters of interest or repeat the test for all parameters that failed to meet criteria. Repeat failure, however, confirms a general problem with the measurement system. If this occurs the source of the problem must be identified and the test repeated for all parameters of interest.

New employees that do not have prior analysis experience will not be allowed to perform analysis until they have demonstrated attention to detail with minimal errors in the assigned tasks. To ensure a sustained level of quality performance among staff members, continuing demonstration of capability shall be performed at least once a year. These are as an Annual Documentation of Continued Proficiency (ADOCP).

At least once per year an ADOCP must be completed. This is achieved by the acceptable performance of a blind sample (typically by using a PT sample, but can be a single blind (to the analyst) sample), by performing another IDOC, or by summarizing the data of four consecutive laboratory control samples with acceptable levels of precision and accuracy (these limits are those currently listed in the LIMS for an LCS using the indicated test method.) ADOCPs are documented using a standard form and are kept on file in each analyst's employee folder.

Each new employee shall be provided with data integrity training as a formal part of their new employee orientation. Each new employee will sign an ethics and data integrity agreement to ensure that they understand that data quality is our main objective. Every HEAL employee recognizes that although turn around time is important, quality is put above any pressure to complete the task expediently. Analysts are not compensated for passing QC parameters nor are incentives given for the quantity of work produced. Data Integrity and Ethics training are performed on an annual basis in order to remind all employees of HEAL's policy on data quality. Employees are required to understand that any infractions of the laboratory data integrity procedures will result in a detailed investigation that could lead to very serious consequences including immediate termination, debarment, or civil/criminal prosecution.

Training for each member of HEAL's technical staff is further established and maintained through documentation that each employee has read, understood, and is using the latest version of this Quality Assurance Manual. Training courses or workshops on specific equipment, analytical techniques, or laboratory procedures are documented through attendance sheets, certificates of attendance, training forms, or guizzes. This training

Page 16 of 54 Quality Assurance Plan 9.4 Effective July 1<sup>st</sup>, 2011 documentation is located in analyst specific employee folders in the QA/QCO Office. On the front of all methods, SOPs, and procedures for HEAL, there is a signoff sheet that is signed by all pertinent employees, indicating that they have read, understand, and agree to perform the most recent version of the document.

The effectiveness of training will be evaluated during routine data review, annual employee reviews, and internal and external audits. Repetitive errors, complaints and audit findings serve as indicators that training has been ineffective. When training is deemed to have been ineffective a brief review of the training process will be completed and a re-training conducted as soon as possible.

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# 5.0 Receipt and Handling of Samples

# Sampling

## Procedures

HEAL does not provide field sampling for any projects. Sample kits are prepared and provided for clients upon request. The sample kits contain the appropriate sampling containers (with a preservative when necessary), labels, blue ice (The use of "blue ice" by anyone except HEAL personnel is discouraged because it generally does not maintain the appropriate temperature of the sample. If blue ice is used, it should be completely frozen at the time of use, the sample should be chilled before packing, and special notice taken at sample receipt to be certain the required temperature has been maintained.), a cooler, chain-of-custody forms, plastic bags, bubble wrap, and any special sampling instructions. Sample kits are reviewed prior to shipment for accuracy and completeness.

#### Containers

Containers which are sent out for sampling are purchased by HEAL from a commercial source. Glass containers are certified "EPA Cleaned" QA level 1. Plastic containers are certified clean when required. These containers are received with a Certificate of Analysis verifying that the containers have been cleaned according to the EPA wash procedure. Containers are used once and discarded. If the samples are collected and stored in inappropriate containers the laboratory may not be able to accurately quantify the amount of the desired components. In this case, re-sampling may be required.

## Preservation

If sampling for analyte(s) requires preservation, the sample custodians fortify the containers prior to shipment to the field, or provide the preservative for the sampler to add in the field. The required preservative is introduced into the vials in uniform amounts and done so rapidly to minimize the risk of contamination. Vials that contain a preservative are labeled appropriately. If the samples are stored with inappropriate preservatives, the laboratory may not be able to accurately quantify the amount of the desired components. In this case re-sampling may be required.

Refer to the current Login SOP and/or the current price book for detailed sample receipt and handling procedures, appropriate preservation and holding time requirements.

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## Sample Custody

## Chain-of-Custody Form

A Chain-of-Custody (COC) form is used to provide a record of sample chronology from the field to receipt at the laboratory. HEAL's COC contains the client's name, address, phone and fax numbers, the project name and number, the project manager's name, and the field sampler's name. It also identifies the date and time of sample collection, sample matrix, field sample ID number, number/volume of sample containers, sample temperature upon receipt, and any sample preservative information.

There is also a space to record the HEAL ID number assigned to samples after they are received. Next to the sample information is a space for the client to indicate the desired analyses to be performed. There is a section for the client to indicate the data package level as well as any accreditation requirements. Finally, there is a section to track the actual custody of the samples. The custody section contains lines for signatures, dates and times when samples are relinquished and received. The COC form also includes a space to record special sample related instructions, sampling anomalies, time constraints, and any sample disposal considerations.

It is paramount that all COCs arrive at HEAL complete and accurate so that the samples can be processed and allocated for testing in a timely and efficient manner. A sample chain-of-custody form can be found in Appendix H or on line at www.hallenvironmental.com.

## **Receiving Samples**

Samples are received by authorized HEAL personnel. Upon arrival, the COC is compared to the respective samples. After the samples and COC have been determined to be complete and accurate, the sampler signs over the COC. The HEAL staff member in turn signs the chain-of-custody, also noting the current date, time, and sample temperature. This relinquishes custody of the samples from the sampler and delegates sample custody to HEAL. The first (white) copy of the COC form is filed in the appropriate sample folder. The second (yellow) copy of the COC form is filed in the COC file in the sample control manger's office. The third (pink) copy of the COC form is given to the person who has relinquished custody of the samples.

## Logging in Samples and Storage

Standard Operating Procedures have been established for the receiving and tracking of all samples (refer to the current HEAL Login SOP). These procedures ensure that samples are received and properly logged into the laboratory and that all associated documentation, including chain of custody forms, is complete and consistent with the samples received. Each sample set is given a unique HEAL tracking ID number.

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Individual sample locations within a defined sample set are given a unique sample ID suffix-number. Labels with the HEAL numbers, and tests requested, are generated and placed on their respective containers. The pH of preserved, non-volatile samples is checked and noted if out of compliance. Due to the nature of the samples, the pHs of volatiles samples are checked after analysis. Samples are reviewed prior to being distributed for analysis.

Samples are distributed for analysis based upon the requested tests. In the event that sample volume is limited and different departments at HEAL are required to share the sample, volatile work takes precedence and will always be analyzed first before the sample is sent to any other department for analysis.

All samples that require thermal preservation shall be acceptably stored at a temperature range just above freezing to 6 °C.

Each project (sample set) is entered into the Laboratory Information Management System (LIMS) with a unique ID that will be identified on every container. The ID tag includes the Lab ID, Client ID, date and time of collection, and the analysis/analyses to be performed. The LIMS continually updates throughout the lab. Therefore, at any time, an analyst or manager may inquire about a project and/or samples status. For more information about the login procedures, refer to the Sample Login SOP.

#### **Disposal of Samples**

Samples are held at HEAL for a minimum of thirty days and then transferred to the HEAL warehouse for disposal. Analytical results are used to characterize their respective sample contamination level(s) so that the proper disposal can be performed. These wastes will be disposed of according to their hazard as well as their type and level of contamination. Refer to the Hall Environmental Analysis Laboratory Chemical Hygiene Plan and current Sample Disposal SOP for details regarding waste disposal.

Waste drums are provided by an outside agency. These drums are removed by the outside agency and disposed of in a proper manner.

The wastes that are determined to be non-hazardous are disposed of as non-hazardous waste in accordance with the Chemical Hygiene Plan and Sample Disposal SOP.

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# 6.0 Analytical Procedures

All analytical methods used at HEAL incorporate necessary and sufficient Quality Assurance and Quality Control practices. A Standard Operating Procedure (SOP) is used for each method to provide the necessary criteria to yield acceptable results. These procedures are reviewed at least annually and revised as necessary and are attached as a pdf file in the Laboratory Information Management System (LIMS) for easy access by each analyst. The sample is often consumed or altered during the analytical process. Therefore, it is important that each step in the analytical process be correctly followed in order to yield valid data.

When unforeseen problems arise, the analyst, technical director, and, when necessary, laboratory manager meet to discuss the factors involved. The analytical requirements are evaluated and a suitable corrective action or resolution is established. The client is notified in the case narrative with the final report or before, if the validity of their result is in question.

## List of Procedures Used

Typically, the procedures used by HEAL are EPA approved methodologies or 20<sup>th</sup> edition Standard Methods. However, proprietary methods for client specific samples are sometimes used. The following tables list EPA and Standard Methods Method numbers with their corresponding analytes and/or instrument classification.

# Methods Utilized at HEAL

Drinking Water(DW) Non-Poteble Water (NPW) Solids (S)

Methodology	Matrix	Title of Method
120.1	DW NPW	"Conductance(Specific Conductance, uohms at 25 ° C)"
180.1	DW NPW	"Turbidity (Nephelometric)"
200.2	DW NPW	"Sample Preparation Procedure For Spectrochemical Determination of Total Recoverable Elements"
200.7	DW NPW	"Determination of Metals and Trace Elements in Water and Wastes by Inductively Coupled Plasma-Atomic Emission Spectrometry"
200.8	DW NPW	"Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma-Mass Spectrometry."
245.1	DW NPW	"Mercury (Manual Cold Vapor Technique)"
·300	DW NPW S	"Determination of Inorganic Anions by Ion Chromatography"

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413.2	NPW	"Oil and Grease"
413.2	S	
418.1	NPW S	"Petroleum Hydrocarbons (Spectrophotometric, Infrared)"
504.1	DW	"EDB, DBCP and 123TCP in Water by Microextraction and Gas Chromatography"
505	DW	"Analysis of Organohalide Pesticides and Commercial Polychlorinated Biphenyl (PCB) Products in Water by Microextraction and Gas Chromatography"
515.1	DW	"Determination of Chlorinated Acids in Water by Gas Chromatography with an Electron Capture Detector"
524.2	DW	"Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry"
531.1	DW	"Measurement of N-Methylcarbomoyloximes and N- Methylcarbamates in Water by Direct Aqueous Injection HPLC with Post Column Dervivatization"
547	DW	"Determination of Glyphosate in Drinking Water by Direct- Aqueous Injection HPLC, Post-Column Derivatization, and Fluorescence Detection"
552.1		"Determination of Haloacetic Acids and Dalapon in Drinking Water by Ion-Exchange Liquid-Solid Extraction and Gas Chromatography with an Electron Capture Detector"
624	DW	Appendix A to Part 136 Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater Method 624- Purgeables"
625	DW	Appendix A to Part 136 Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater Method 625- Base/Neutrals and Acids"
1311	S	"Toxicity Characteristic Leaching Procedure"
1311ZHE	S	"Toxicity Characteristic Leaching Procedure"
1164A	NPW	"N-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated N-Hexane Extractable Material) by Extraction and Gravimetry"
3005A	NPW	"Acid Digestion of Waters for Total Recoverable or Dissolved Metals for Analysis by FLAA or ICP Spectroscopy"
3010A	S	"Acid Digestion of Aqueous Samples and Extracts for Total Metals for Analysis by FLAA or ICP Spectroscopy"
3050B	S	"Acid Digestion of Sediment, Sludge, and Soils"
3510C	DW NPW	"Separatory Funnel Liquid-Liquid Extraction"
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3540	S	"Soxhlet Extraction"
3545	S	"Pressurized Fluid Extraction(PFE)"
3665	NPW S	"Sulfuric Acid/Permanganate Cleanup"
5030B	NPW	"Purge-and-Trap for Aqueous Samples"
5035	S	"Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples"
6010B	NPW S	"Inductively Coupled Plasma-Atomic Emission Spectrometry"
6020	NPW S	"Inductively Coupled Plasma-Mass Spectrometry"
7470A	NPW	"Mercury in Liquid Waste (Manual Cold-Vapor Technique)"
7471A	S	"Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)"
8021B	NPW S	"Aromatic and Halogenated Volatiles By Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors"
8015B	NPW	"Nonhalogenated Volatile Organics by Gas Chromatography"
	S	(Gasoline Range and Diesel Range Organics)
8015AZ	.S.	"C10-C32 Hydrocarbons in Soil-8015AZ"
8081A	NPW S	"Organochlorine Pesticides by Gas Chromatography"
8082	NPW S	"Polychlorinated Biphenyls (PCBs) by Gas Chromatography"
8260B	NPW S	"Volatile Organic Compounds by Gas Chromatography/ Mass Spectrometry (GC/MS)"
8270C	NPW S	"Semivolatile Organic Compounds by Gas Chromatography/ Mass Spectrometry (GC/MS)"
8310	NPW S	"Polynuclear Aromatic Hydrocarbons"
9045C	S	"Soil and Waste pH"
9060	NPW	"Total Organic Carbon"
9067	NPW S	"Phenolics (Spectrophotometric, MBTH With Distillation)"
9095	S	Paint Filter
Walkley/Black	S	FOC/TOC WB
SM2320 B	DW NPW	"Alkalinity"
SM2540 B	NPW	"Total Solids Dried at 103-105° C"

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SM2540 C	DW	"Total Dissolved Solids Dried at 180° C"	
SM2040 C	NPW		
SM2540 D	NPW	"Total Suspended Solids Dried at 103-105° C"	
SM4500-CL G	DW	"Chlorine (Residual) 4500-CL G. DPD Colorimetric Method"	
SM4500-H+B	DW NPW	"pH Value"	
SM4500-NH3 C	NPW S	"4500-NH3" Ammonia	
SM4500-Norg C	NPW S	"4500-Norg" Total Kjeldahl Nitrogen (TKN)	
SM5210 B	NPW	*5210 B. 5-day BOD Test	
SM5310 B	DW	"5310" Total Organic Carbon (TOC)	
8000B	NPW S	"Determinative Chromatographic Separations"	
8000C	NPW S	"Determinative Chromatographic Separations"	

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#### **Criteria for Standard Operating Procedures**

HEAL has Standard Operating Procedures (SOPs) for each of the test methods listed above. These SOPs are based upon the listed methods and detail the specific procedure and equipment utilized as well as the quality requirements necessary to prove the integrity of the data. SOPs are reviewed or revised every twelve months or sooner if necessary. The review/revision is documented in the Master SOP Logbook filed in the QA/QC Office. All SOPs are available in the LIMS linked under the specific test method. Administrative SOPs, which are not linked in the LIMS, are available on desktops throughout the laboratory in the link to administrative SOPs folder.

Hand written corrections or alterations to SOPs are not permitted. In the event that a correction is needed and a revision is not immediately possible, a corrective action report will be generated documenting the correction or alteration, signed by the section Technical Director and the QA/QC Officer and will be scanned into the current SOP and will document the change until a new revision is possible.

Each HEAL test method SOP shall include or reference the following topics where applicable:

Identification of the test method: Applicable matrix or matrices: Limits of detection and quantitation: Scope and application, including parameters to be analyzed; Summary of the test method; Definitions: Interferences: Safety: Equipment and supplies: Reagents and standards: Sample collection, preservation, shipment and storage; Quality control parameters; Calibration and standardization; Procedure: Data analysis and calculations: Method performance; Pollution prevention: Data assessment and acceptance criteria for guality control measures; Corrective actions for out-of-control data; Contingencies for handling out-of-control or unacceptable data; Waste management: References: and Any tables, diagrams, flowcharts and validation data.

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# 7.0 Calibration

All equipment and instrumentation used at HEAL are operated, maintained and calibrated according to manufacturers' guidelines, as well as criteria set forth in applicable analytical methodology. Personnel who have been properly trained in their procedures perform the operation and calibration. Brief descriptions of the calibration processes for our major laboratory equipment and instruments are found below.

### Thermometers

The thermometers in the laboratory are used to measure the temperatures of the refrigerators/freezers, ovens, water baths, hot blocks, ambient laboratory conditions, TCLP Extractions, digestion blocks, and samples at the time of log-in. All NIST traceable thermometers are either removed from use upon their documented expiration date or they are checked annually with a NIST-certified thermometer and a correction factor is noted on each thermometer log. See the most current Login SOP for detailed procedures on this calibration procedure.

Dickson Data Loggers are used to record sample and standard storage refrigerators over the weekend when the appropriate staff is not available to record the temperatures. These data loggers are shipped back to the manufacturer once a year to be re-calibrated.

## **Refrigerators/Freezers**

Each laboratory refrigerator or freezer contains a thermometer capable of measuring to a minimum precision of 0.1°C. The thermometers are kept with the bulb immersed in liquid. Each day of use, the temperatures of the refrigerators are recorded to insure that the refrigerators are within the required designated range. Samples are stored separately from the standards to reduce the risk of contamination.

See the current Catastrophic Failure SOP for the procedure regarding how to handle failed refrigerators or freezers.

## Ovens

The ovens contain thermometers graduated by 1° C. The ovens are calibrated quarterly against NIST thermometers and checked each day of use as required and in whatever way is dictated by or appropriate for the method in use.

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# **Analytical and Table Top Balances**

The table top balances are capable of weighing to a minimum precision of 0.01 grams. The analytical balances are capable of weighing to a minimum precision of 0.0001 grams. Records are kept of daily calibration checks for the balances in use. Working weights are used in these checks. The balances are annually certified by an outside source and the certifications are on file with the QA/QCO.

Balances, unless otherwise indicated by method specific SOPs, will be checked each day of use with at least two weights that will bracket the working range of the balance for the day. Daily balance checks will be done using working weights that are calibrated annually against Class S weights. Class S weights are calibrated by an external provider as required. The Class S weights are used once a year, or more frequently if required, to assign values to the Working Weights. During the daily balance checks, the working weights are compared to their assigned values and must pass in order to validate the calibration of the balance. The assigned values, as well as the daily checks, for the working weights are recorded in the balance logbook for each balance.

# Instrument Calibration

An instrument calibration is the relationship between the known concentrations of a set of calibration standards introduced into an analytical instrument and the measured response they produce. Calibration curve standards are a prepared series of aliquots at various known concentration levels from a primary source reference standard. Specific mathematical types of calibration techniques are outlined in SW-846 8000B and/or 8000C. The entire initial calibration must be performed prior to sample analyses.

The lowest standard in the calibration curve must be at or below the required reporting limit.

Refer to the current SOP to determine the minimum requirement for calibration points.

Most compounds tend to be linear and a linear approach should be favored when linearity is suggested by the calibration data. Non-linear calibration should be considered only when a linear approach cannot be applied. It is not acceptable to use an alternate calibration procedure when a compound fails to perform in the usual manner. When this occurs, it is indicative of instrument issues or operator error.

If a non-linear calibration curve fit is employed, a minimum of six calibration levels must be used for second-order (quadratic) curves.

When more than 5 levels of standards are analyzed in anticipation of using second-order calibration curves, all calibration points MUST be used regardless of the calibration option employed. The highest or lowest calibration point may be excluded for the purpose of

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Analytical methods vary in QC acceptance criteria. HEAL follows the method specific guidelines for QC acceptance. The specific acceptance criteria are outlined in the analytical methods and their corresponding SOPs.

## pH Meter

The pH meter measures to a precision of 0.01 pH units. The pH calibration logbook contains the calibration before each use, or each day of use, if used more than once per day. It is calibrated using a minimum of 3 certified buffers. Also available with the pH meter is a magnetic stirrer with a temperature sensor. See the current pH SOP (SM4500 H+ B) for specific details regarding calibration of the pH probe.

# **Other Analytical Instrumentation and Equipment**

The conductivity probe is calibrated as needed and checked daily when in use.

Eppendorf (or equivalent brands) pipettes are checked gravimetrically prior to use.

## Standards

All of the source reference standards used are ordered from a reliable commercial vendor. A Certificate of Analysis (CoA), which verifies the quality of the standard, accompanies the standards from the vendor. The Certificates of Analysis are dated and stored on file by the Technical Directors or their designee. These standards are traceable to the National Institute of Standards (NIST). When salts are purchased and used as standards the certificate of purity must be obtained from the vendor and filed with the CoAs.

All standard solutions, calibration curve preparations, and all other quality control solutions are labeled in a manner that can be traced back to the original source reference standard. All source reference standards are entered into the LIMS with an appropriate description of the standard. Dilutions of the source reference standard (or any mixes of the source standards) are fully tracked in the LIMS. Standards are labeled with the date opened for use and with an expiration date.

As part of the quality assurance procedures at HEAL, analysts strictly adhere to manufacturer recommendations for storage times/expiration dates and policies of analytical standards and quality control solutions.

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#### Reagents

HEAL ensures that the reagents used are of acceptable quality for their intended purpose. This is accomplished by ordering high quality reagents and adhering to good laboratory practices so as to minimize contamination or chemical degradation. All reagents must meet any specifications noted in the analytical method. Refer to the current Purchase of Consumables SOP for details on how this is accomplished and documented.

Upon receipt, all reagents are assigned a separate ID number, and logged into the LIMS. All reagents shall be labeled with the date received into the laboratory and again with the date opened for use. Recommended shelf life, as defined by the manufacturer, shall be documented and controlled. Dilutions or solutions prepared shall be clearly labeled, dated, and initialed. These solutions are traceable back to their primary reagents and do not extend beyond the expiration date listed for the primary reagent.

All gases used with an instrument shall meet specifications of the manufacturer. All safety requirements that relate to maximum and/or minimum allowed pressure, fitting types, and leak test frequency, shall be followed. When a new tank of gas is placed in use, it shall be checked for leaks and the date put in use will be written in the instrument maintenance logbook.

HEAL continuously monitors the quality of the reagent water and provides the necessary indicators for maintenance of the purification systems in order to assure that the quality of laboratory reagent water meets established criteria for all analytical methods.

Reagent blank samples are also analyzed to ensure that no contamination is present at detectable levels. The frequency of reagent blank analysis is typically the same as calibration verification samples. Refrigerator storage blanks are stored in the volatiles refrigerator for a period of one week and analyzed and replaced once a week.

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## 8.0 Maintenance

Maintenance logbooks are kept for each major instrument and all support equipment in order to document all repair and maintenance. In the front of the logbook, the following information is included:

Unique Name of the Item or Equipment Manufacturer Type of Instrument Model Number Serial Number Date Received and Date Placed into Service Location of Instrument Condition of Instrument Upon Receipt

For routine maintenance, the following information shall be included in the log:

Maintenance Date Maintenance Description Maintenance Performed by Initials

A manufacturer service agreement (or equivalent) covers most major instrumentation to assure prompt and reliable response to maintenance needs beyond HEAL instrument operator capabilities.

Refer to the current Maintenance and Troubleshooting SOP for each section in the laboratory for further information.

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#### 9.0 Data Integrity

For HEAL's policy on ethics and data integrity, see section 3.0 of this document. Upon being hired, and annually there after, all employees at HEAL undergo documented data integrity training. All new employees sign an Ethics and Data Integrity Agreement, documenting their understanding of the high standards of integrity required at HEAL and outlining their responsibilities in regards to ethics and data integrity. See Appendix I for a copy of this agreement.

In instances of ethical concern, analysts are required to report the known or suspected concern to their Technical Director, the Laboratory Manager, or the QA/QCO. This will be done in a confidential and receptive environment, allowing all employees to privately discuss ethical issues or report items of ethical concern.

Once reported and documented, the ethical concern will be immediately elevated to the Laboratory Manager and the need for an investigation, analyst remediation, or termination will be determined on a case-by-case basis.

All reported instances of ethical concern will be thoroughly documented and handled in a manner sufficient to rectify any breaches in data integrity with an emphasis on preventing similar incidences from happening in the future.

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## 10.0 Quality Control

## Internal Quality Control Checks

HEAL utilizes various internal quality control checks, including duplicates, matrix spikes, matrix spike duplicates, method blanks, laboratory control spikes, laboratory control spike duplicates, surrogates, internal standards, calibration standards, quality control charts, proficiency tests and calculated measurement uncertainty.

Refer to the current method SOP to determine the frequency and requirements of all quality controls. In the event that the frequency of analysis is not indicated in the method specific SOP, duplicate samples, laboratory control spikes (LCS), Method Blanks (MB), and matrix spikes and matrix spike duplicates (MS/MSD) are analyzed for every batch of twenty samples.

When sample volume is limited on a test that requires an MS/MSD an LCSD shall be analyzed to demonstrate precision and accuracy and when possible a sample duplicate will be analyzed.

Duplicates are identical tests repeated for the same sample or matrix spike in order to determine the precision of the test method. A Relative Percent Difference (RPD) is calculated as a measure of this precision. Unless indicated in the SOP, the default acceptance limit is </= 20%.

Matrix Spikes and Matrix Spike Duplicates are spiked samples (MS/MSD) that are evaluated with a known added quantity of a target compound. This is to help determine the accuracy of the analyses and to determine the matrix affects on analyte recovery. A percent recovery is calculated to assess the quality of the accuracy. In the event that the acceptance criteria is not outlined in the SOP, a default limits of 70-130% will be utilized. When an MSD is employed an RPD is calculated and when not indicated in the SOP shall be acceptable at </

When appropriate for the method, a Method Blank should be analyzed with each batch of samples processed to assess contamination levels in the laboratory. MBs consist of all the reagents measured and treated as they are with samples, except without the samples. This enables the laboratory to ensure clean reagents and procedures. Guidelines should be in place for accepting or rejecting data based on the level of contamination in the blank. In the event that these guidelines are not dictated by the SOP or in client specific work plans, the MB should be less than the MDL reported for the analyte being reported. Blanks shall be no more negative than the negative of the PQL for that test and instrument unless otherwise stated in the SOP/method. Corrective action must be initiated if negative blanks are out of control.

A Laboratory Control Spike and Laboratory Control Spike Duplicate (LCS/LCSD) are reagent blanks, free from the analytes of interest, spiked with verified known amounts of

Page 33 of 54 Quality Assurance Plan 9.4 Effective July 1<sup>st</sup>, 2010 analytes or a material containing known and verified amounts of analytes. It is generally used to establish intra-laboratory or analyst-specific precision and bias or to assess the performance of all or a portion of the measurement system. Guidelines are outlined in each SOP for the frequency and pass fail requirements for LCS and LCSDs. These limits can be set utilizing control charts as discussed below.

Surrogates are utilized when dictated by method and are substances with properties that mimic the analytes of interest. The surrogate is an analyte that is unlikely to be found in environmental samples. Refer to the appropriate Method and SOP for guidelines on pass/fail requirements for surrogates.

Internal Standards are utilized when dictated by the method and are known amounts of standard added to a test portion of a sample as a reference for evaluating and controlling the precision and bias of the applied analytical method. Refer to the appropriate Method arid SOP for guidelines on pass/fail requirements for Internal Standards.

Proficiency Test (PT) Samples are samples provided by an unbiased third party. They are typically analyzed twice a year, between five and seven months apart, or at any other interval as defined in the method SOP. They contain a pre-determined concentration of the target compound, which is unknown to HEAL. HEAL's management and all analysts shall ensure that all PT samples are handled in the same manner as real environmental samples utilizing the same staff, methods, procedures, equipment, facilities and frequency of analysis as used for routine analysis of that analyte. When analyzing a PT, HEAL shall employ the same calibration, laboratory quality control and acceptance criteria, sequence of analytical steps, number of replicates and other procedures as used when analyzing routine samples. PT results are reported as normal samples, within the working range of the associated calibration curve. In the event an analyte concentration is less than the PQL, the result shall be reported as less than the PQL.

With regards to analyzing PT Samples HEAL shall not send any PT sample, or portion of a PT sample, to another laboratory for any analysis for which we seek accreditation, or are accredited. HEAL shall not knowingly receive any PT sample or portion of a PT sample from another laboratory for any analysis for which the sending laboratory seeks accreditation, or is accredited. Laboratory management or staff will not communicate with any individual at another laboratory concerning the PT sample. Laboratory management or staff shall not attempt to obtain the assigned value of any PT sample from the PT Provider.

Upon receiving a Not Acceptable PT result for any analyte, a root cause analysis is conducted and the cause of the failure determined and corrected. As defined by TNI, two out of the past three PTs must be acceptable to maintain accreditation for any given analyte. If this requirement is not met a successful history will be reestablished by the analysis of an additional PT sample. For accredited tests, the PT provider will be notified, when the PT is for corrective action purposes. The analysis dates of successive PT samples for the same accredited analyte shall be at least fifteen days apart.

Page 34 of 54 Quality Assurance Plan 9.4 Effective July 1<sup>st</sup>, 2010 Calibration standards are standards run to calibrate. Once the calibration is established the same standards can be analyzed as Continuing Calibration Verifications (CCV), used to confirm the consistency of the instrumentation. Calibration standards can be utilized at the beginning and end of each batch, or more frequently as required. Typically Continuing Calibration Blanks (CCB) are run in conjunction with CCVs. Refer to the current method SOP for frequency and pass/fail requirements of CCVs and CCBs.

Control Limits are limits of acceptable ranges of the values of quality control checks. The control limits approximate a 99% confidence interval around the mean recovery. Any matrix spike, surrogate, or LCS results outside of the control limits require further evaluation and assessment. This should begin with the comparison of the results from the samples or matrix spike with the LCS results. If the recoveries of the analytes in the LCS are outside of the control limits, then the problem may lie with the application of the extraction, with cleanup procedures, or with the chromatographic procedure. Once the problem has been identified and addressed, corrective action may include reanalysis of samples or reextraction followed by reanalysis. When the LCS results are within the control limits, the issue may be related to the sample matrix or to the use of an inappropriate extraction, cleanup, and/or determinative method for the matrix. If the results are to be used for regulatory compliance monitoring, then steps must be taken to demonstrate that the analytes of concern can be determined in the sample matrix at the levels of interest. Data generated with laboratory control samples that fall outside of the established control limits are judged to be generated during an "out-of-control" situation. These data are considered suspect and shall be repeated or reported with qualifiers.

Control limits are to be updated only by Technical Directors, Section Supervisors or the Quality Assurance Officer. Control limits should be established and updated according to the requirements of the method being utilized. When the method does not specify, and control limits are to be generated or updated for a test, the following guidelines shall be utilized.

Limits should typically be generated utilizing the most recent 20-40 data values. In order to obtain an even distribution across multiple instruments and to include more than a single day's worth of data, surrogate limits should be generated using around 100 data values. The data values used shall not reuse values that were included in the previous Control Limit update. The data values shall also be reviewed by the LIMS for any Grubbs Outliers, and if identified, the outliers must be removed prior to generating new limits. The results used to update control limits should meet all other QC criteria associated with the determinative method. For example, MS/MSD recoveries from a GC/MS procedure should be generated from samples analyzed after a valid tune and a valid initial calibration that includes all analytes of interest. Additionally, no analyte should be reported when it is beyond the working range of the calibration currently in use. MS/MSD and surrogate limits should be generated using the same set of extraction, cleanup, and analysis procedures.

All generated limits should be evaluated for appropriateness. Where limits have been established for MS/MSD samples, the LCS/LCSD limits should fall within those limits, as the LCS/LCSD are prepared in a clean matrix. Surrogate limits should be updated using all

Page 35 of 54 Quality Assurance Plan 9.4 Effective July 1<sup>st</sup>, 2010 sample types and should be evaluated to ensure that all instruments as well as a reasonable dispersion across days are represented by the data. LCS/LCSD recovery limits should be evaluated to verify that they are neither inappropriately wide nor unreasonably tight. The default LCS/LCSD acceptance limits of 70-130% and RPD of 20% (or those limits specified by the method for LCS/LCSD and/or CCV acceptability), should be used to help make this evaluation. Technical directors may choose to use warning limits when they feel their generated limits are too wide, or default LCS limits when they feel their limits have become arbitrarily tight.

Once new Control Limits have been established and updated in the LIMS, the Control Charts shall be printed and reviewed by the appropriate section supervisor and primary analyst performing the analysis for possible trends and compared to the previous Control Charts. The technical director initials the control charts, indicating that they have been reviewed and that the updated Limits have been determined to be accurate and appropriate. Any manual alterations to the limits will be documented and justified on the printed control chart. These initialed charts are then filed in the QA/QCO office.

Once established, control limits should be reviewed after every 20-30 data values and updated at least every six months, provided that there are sufficient points to do so. The limits used to evaluate results shall be those in place at the time that the sample was analyzed. Once limits are updated, those limits apply to all subsequent analyses.

When updating surrogate control limits, all data, regardless of sample/QC type, shall be updated together and assigned one set of limits for the same method/matrix.

In the event that there are insufficient data points to update limits that are over a year old, the default limits, as established in the method or SOP, shall be re-instated. Refer to the requirements in SW-846 method 8000B and 8000C for further guidance on generating control limits.

Calculated Measurement Uncertainty is calculated annually using LCSs in order to determine the laboratory specific uncertainty associated with each test method. These uncertainty values are available to our clients upon request and are utilized as a trending tool internally to determine the effectiveness of new variables introduced into the procedure over time.

#### Precision, Accuracy, Detection Levels

#### Precision

The laboratory uses sample duplicates, laboratory control spike duplicates, and matrix spike duplicates to assess precision in terms of relative percent difference (RPD). HEAL requires the RPD to fall within the 99% confidence interval of established control charts or an RPD of less than 30% if control charts are not

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RPD = 2<u>x (Sample Result – Duplicate Result)</u> X 100 (Sample Result + Duplicate Result)

#### Accuracy

The accuracy of an analysis refers to the difference between the calculated value and the actual value of a measurement. The accuracy of a laboratory result is evaluated by comparing the measured amount of QC reference material recovered from a sample and the known amount added. Control limits can be established for each analytical method and sample matrix. Recoveries are assessed to determine the method efficiency and/or the matrix effect.

Analytical accuracy is expressed as the Percent Recovery (%R) of an analyte or parameter. A known amount of analyte is added to an environmental sample before the sample is prepared and subsequently analyzed. The equation used to calculate percent recovery is:

%Recovery = {(concentration\* recovered)/(concentration\* added)} X 100

\*or amount

HEAL requires that the Percent Recovery to fall within the 99 % confidence interval of established control limits. A value that falls outside of the confidence interval requires a warning and process evaluation. The confidence intervals are calculated by determining the mean and sample standard deviation. If control limits are not available, the range of 80 to 120% is used unless the specific method dictates otherwise. Percent Recoveries outside of this range mandate additional action such as analyses by Method of Standard Additions, additional sample preparation(s) where applicable, method changes, and out-of-control action or data qualification.

#### **Detection Limit**

Current practices at HEAL define the Detection Limit (DL) as the smallest amount that can be detected above the baseline noise in a procedure within a stated confidence level.

HEAL presently utilizes an Instrument Detection Limit (IDL), a Method Detection Limit (MDL), and a Practical Quantitation Limit (PQL). The relationship between these levels is approximately IDL: MDL: PQL = 1:5:5.

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The IDL is a measure of the sensitivity of an analytical instrument. The IDL is the amount which, when injected, produces a detectable signal in 99% of the analyses at that concentration. An IDL can be considered the minimum level of analyte concentration that is detectable above random baseline noise.

The MDL is a measure of the sensitivity of an analytical method. MDL studies are required annually for each quality system matrix, technology and analyte, unless indicated otherwise in the referenced method. An MDL determination (as required in 40CFR part 136 Appendix B) consists of replicate spiked samples carried through all necessary preparation steps. The spike concentration is three times the standard deviation of three replicates of spikes. At least seven replicates are spiked and analyzed and their standard deviation(s) calculated. Routine variability is critical in passing the 10 times rule and is best achieved by running the MDLs over different days and when possible over several calibration events. The Manual for the Certification of Laboratories Analyzing Drinking Water, 5<sup>th</sup> edition Chapter IV section 7.2.11 recommends that MDLs be performed over a period of at least three days in order to include the day to day variations. The method detection limit (MDL) can be calculated using the standard deviation according to the formula:

$$MDL = s * t (99\%),$$

where t (99%) is the Student's t-value for the 99% confidence interval. The t-value depends on the number of trials used in calculating the sample standard deviation, so choose the appropriate value according to the number of trials.

Number of Trials	t(99%)
6	3.36
7	3.14
8	3.00
9	2.90

The calculated MDL must not be less than 10 times the spiked amount or the study must be performed again with a lower concentration.

Where there are multiple MDL values for the same test method in the LIMS the highest MDL value is utilized.

The PQL is significant because different laboratories can produce different MDLs although they may employ the same analytical procedures, instruments and sample matrices. The PQL is about two to five times the MDL and represents a practical, and routinely achievable, reporting level with a good certainty that the reported value is reliable. It is often determined by regulatory limits. The reported PQL for a sample is dependent on the dilution factor utilized during sample analysis.

In the event that an analyte will not be reported less than the PQL, an MDL study is not required and a PQL check shall be done, at least annually, in place of the MDL

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study. The PQL check shall consist of a QC sample spiked at or below the PQL. All sample-processing and analysis steps of the analytical method shall be included in the PQL check and shall be done for each quality system matrix, technology, and analyte. A successful check is one where the recovery of each analyte is within the established method acceptance criteria. When this criterion is not defined by the method or SOP, a default limit of +/-50% shall be utilized.

#### **Quality Control Parameter Calculations**

#### Mean

The sample mean is also known as the arithmetic average. It can be calculated by adding all of the appropriate values together, and dividing this sum by the number of values.

Average =  $(\Sigma x_i) / n$ 

 $x_i$  = the value x in the I<sup>th</sup> trial n = the number of trials

#### Standard Deviation

The sample standard deviation, represented by s, is a measure of dispersion. The dispersion is considered to be the difference between the average and each of the values  $x_i$ . The variance,  $s^2$ , can be calculated by summing the squares of the differences and dividing by the number of differences. The sample standard deviation, s, can be found by taking the square root of the variance.

Standard deviation = s =  $\left[\sum (x_1 - average)^2 / (n - 1)\right]^{\frac{1}{2}}$ 

#### Percent Recovery (LCS and LCSD)

Percent Recovery = <u>(Spike Sample Result)</u> X100 (Spike Added)

Percent Recovery (MS, MSD)

Percent Recovery = <u>(Spike Sample Result – Sample Result)</u> X100 (Spike Added)

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#### **Control Limits**

Control Limits are calculated by the LIMS using the average percent recovery (x), and the standard deviation (s).

Upper Control Limit = x + 3sLower Control Limit = x - 3s

These control limits approximate a 99% confidence interval around the mean recovery.

#### **RPD (Relative Percent Difference)**

Analytical precision is expressed as a percentage of the difference between the results of duplicate samples for a given analyst. Relative percent difference (RPD) is calculated as follows:

RPD = 2 <u>x</u> (Sample Result – Duplicate Result) X 100 (Sample Result + Duplicate Result)

#### **Uncertainty Measurements**

Uncertainty, as defined by ISO, is the parameter associated with the result of a measurement that characterizes the dispersion of the values that could reasonably be attributed to the measurement. Ultimately, uncertainty measurements are used to state how good a test result is and to allow the end user of the data to properly interpret their reported data. All procedures allow for some uncertainty. For most analyses, the components and estimates of uncertainty are reduced by following well-established test methods. To further reduce uncertainty, results generally are not reported below the lowest calibration point (PQL) or above the highest calibration point (UQL). Understanding that there are many influential quantities affecting a measurement result, so many in fact that it is impossible to identify all of them, HEAL calculates measurement uncertainty are kept on file in the method folders in the QA/QC office.

Measurement Uncertainty contributors are those that may be determined statistically. These shall be generated by estimating the overall uncertainty in the entire analytical process by measuring the dispersion of values obtained from laboratory control samples over time. At least 20 of the most recent LCS data points are gathered.

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The standard deviation(s) is calculated using these LCS data points. Since it can be assumed that the possible estimated values of the spikes are approximately normally distributed with approximate standard deviation(s), the unknown value of the spike is believed to lie in 95% confidence interval, corresponding to an uncertainty range of +/-2(s).

Calculate standard deviation (s) and 95% confidence interval according to the following formulae:

$$s = \sqrt{\frac{\sum (x - \overline{x})^2}{(n-1)}}$$

Where: s = standard deviation

x = number in series

 $\bar{x}$  = calculated mean of series

n = number of samples taken

95% confidence =  $2 \times s$ 

Example: Assuming that after gathering 20 of the most recent LCS results for Bromide, we have calculated the standard deviations of the values and achieved a result of 0.0326, our measurement uncertainty for Bromide (at 95% confidence =  $2 \times s$ ) is 0.0652.

#### **Total Nitrogen**

Total nitrogen is calculated as follows:

Total Nitrogen = TKN + NO<sub>2</sub> + NO<sub>3</sub>

#### **Calibration Calculations**

1. Response Factor or Calibration Factor:

$$RF = ((A_x)(C_{is}))/((A_{is})(C_x))$$
  $CF = (A_x)/(C_x)$ 

a. Average RF or CF

$$RF_{AVE} = \Sigma RF_i / n$$

b. Standard Deviation  $s = SQRT \{ [\Sigma (RF_i - RF_{AVE})^2] / (n-1) \}$ 

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c. Relative Standard Deviation

RSD = s / RFAVE

Where:

 $\begin{array}{l} \mathsf{A}_{\mathsf{x}} = \operatorname{Area of the \ compound} \\ \mathsf{C}_{\mathsf{x}} = \operatorname{Concentration \ of \ the \ compound} \\ \mathsf{A}_{\mathsf{is}} = \operatorname{Area \ of \ the \ internal \ standard} \\ \mathsf{C}_{\mathsf{is}} = \operatorname{Concentration \ of \ the \ internal \ standard} \\ \mathsf{n} = \operatorname{number \ of \ pairs \ of \ data} \\ \mathsf{n} = \operatorname{number \ of \ pairs \ of \ data} \\ \mathsf{RF}_{\mathsf{I}} = \operatorname{Response \ Factor} \ (\text{or \ other \ determined \ value}) \\ \mathsf{RF}_{\mathsf{AVE}} = \operatorname{Average \ of \ all \ the \ response \ factors} \\ \Sigma = \operatorname{the \ sum \ of \ all \ the \ individual \ values} \end{array}$ 

2. Linear Regression

y=mx+b

a. Slope (m)

$$\mathbf{m} = (\mathbf{n} \Sigma \mathbf{x}_i \mathbf{y}_i - (\mathbf{n} \Sigma \mathbf{x}_i)^* (\mathbf{n} \Sigma \mathbf{y}_i)) / (\mathbf{n} \Sigma \mathbf{x}_i^2 - (\Sigma \mathbf{x}_i)^2)$$

b. Intercept (b)

b =y<sub>AVE</sub> - m\*(x<sub>AVE</sub>)

c. Correlation Coefficient (cc)

 $CC (r) = \{ \Sigma((x_i - x_{ave})^* (y_i - y_{ave})) \} / \{ SQRT((\Sigma(x_i - x_{ave})^2)^* (\Sigma(y_i - y_{ave})^2)) \}$ Or

CC (r) =[(Σw \* Σwxy) - (Σwx<sup>\*\*</sup>Σwy)] / (sqrt( ( [(Σw \* Σwx<sup>2</sup>) - (Σwx \* Σwx)] \* [(Σw \* Σwy<sup>2</sup>) - (Σwy \* Σwy)])))]

d. Coefficient of Determination

 $COD(r^2) = CC^*CC$ 

Where:

y = Response (Area) Ratio  $A_x/A_{ls}$ x = Concentration Ratio  $C_x/C_{ls}$ m = slope b = intercept

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n = number of replicate x,y pairs

 $x_i$  = individual values for independent variable

y<sub>i</sub> = individual values for dependent variable

 $\Sigma$  = the sum of all the individual values

 $x_{ave}$  = average of the x values

 $y_{ave}$  = average of the y values

w = weighting factor, for equal weighting w=1

3. Quadratic Regression

 $y = ax^2 + bx + c$ 

a. Coefficient of Determination

COD (r<sup>2</sup>) =( 
$$\Sigma(y_i-y_{ave})^2 - \{[(n-1)/(n-p)] \approx [\Sigma(y_i-Y_i)^2]\} ) / \Sigma(y_i-y_{ave})^2$$

Where:

y = Response (Area) Ratio  $A_x/A_{ls}$ x = Concentration Ratio  $C_x/C_{ls}$ a = x<sup>2</sup> coefficient b = x coefficient c = intercept y<sub>i</sub> = individual values for each dependent variable x<sub>i</sub> = individual values for each independent variable y<sub>ave</sub> = average of the y values n = number of pairs of data p = number of parameters in the polynomial equation (i.e., 3 for third order, 2 for second order) Yi = ((2\*a\*(C\_x/C\_{is})^2)-b^2+b+(4\*a\*c))/(4a)

b. Coefficients (a,b,c) of a Quadratic Regression

 $a = S_{(x2y)}S_{(xx)}S_{(xy)}S_{(xx2)} / S_{(xx)}S_{(x2x2)}[S_{(xx2)}]^{2}$ 

 $b = S_{(xy)}S_{(x2x2)}-S_{(x2y)}S_{(xx2)} / S_{(xx)}S_{(x2x2)}-[S_{(xx2)}]^2$ 

$$c = [(\Sigma y w)/n] - b^*[(\Sigma x w)/n] - a^*[\Sigma(x^2 w)/n]$$

Where:

n = number of replicate x,y pairs

x = x values

y = y values

 $w = S^{-2} / (\Sigma S^{-2}/n)$  $S_{(xx)} = (\Sigma x^{2}w) - [(\Sigma xw)^{2} / n]$ 

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$$\begin{split} S_{(xy)} &= (\Sigma xyw) - [(\Sigma xw)^*(\Sigma yw) / n] \\ S_{(xc2)} &= (\Sigma x^3 w) - [(\Sigma xw)^*(\Sigma x^2 w) / n] \\ S_{(x2y)} &= (\Sigma x^2 yw) - [(\Sigma x^2 w)^*(\Sigma yw) / n] \\ S_{(x2x2)} &= (\Sigma x^4 w) - [(\Sigma x^2 w)^2 / n] \\ Or If unweighted calibration, w=1 \\ S(xz) &= (Sx2) - [(Sx)^2 / n] \\ S(xy) &= (Sxy) - [(Sx)^*(Sy) / n] \\ S(xx2) &= (Sx3) - [(Sx)^*(Sx2) / n] \\ S(x2y) &= (Sx2y) - [(Sx2)^*(Sy) / n] \\ S(x2x2) &= (Sx4) - [(Sx2) / n] \\ \end{split}$$

#### **Concentration Calculations**

**On-Column Concentration for Average RRF Calibration using Internal Standard** 

On-Column Concentration  $C_x \simeq ((A_x)(C_y))/((A_y)(RF_{AVE}))$ 

**On-Column Concentration for Average CF Calibration using External Standard** 

On-Column Concentration  $C_x = (A_x)/(CF_{AVE})$ 

**On-Column Concentration for Linear Calibration** 

If determining an external standard, then exclude the  $A_{is}$  and  $C_{is}$  for internal standards On-Column Concentration  $C_x = ((Absolute\{[(A_x)/(A_{is})] - b\})/m) * C_{is}$ 

> Where: m = slope b = intercept  $A_x = Area of the Sample$   $C_{is} = Concentration of the Internal Standard$  $A_{ia} = Area of the Internal Standard$

**On-Column Concentration for Quadratic Calibration** 

If determining an external standard, then exclude the A<sub>ia</sub> and C<sub>ia</sub> for internal standards On-Column Concentration =[(+SQRT(b<sup>2</sup>-(4\*a\*(c-y)))-b)/(2\*a)] \* C<sub>ia</sub> Where:  $a = x^2$  coefficient b = x coefficient c = intercept

y = Area Ratio = A<sub>x</sub>/A<sub>ia</sub>

C<sub>ia</sub> = Concentration of the Internal Standard

#### **Final Concentration (Wet Weight)**

Concentration for Extracted Samples = <u>(On-Column Conc)(Dilution)(Final Volume)</u> (Initial Amount)(Injection Volume) Concentration for Purged Samples = <u>(On-Column Conc)(Purged Amount)(Dilution)</u> (Purged Amount)

#### **Dry Weight Concentration**

Dry Weight Concentration =<u>Final Concentration Wet Weight</u> Total Solids Page 44 of 54 Quality Assurance Plan 9.4 Effective July 1<sup>st</sup>, 2010

#### Percent Difference

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% Difference= <u>Absolute(Continuing Calibration RRF - Average RRF)</u> *100
Average RRF
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#### **Percent Drift**

% Drift= <u>Absolute(Calculated Concentration - Theoretical Concentration)</u> 100 Theoretical Concentration

#### **Dilution Factor**

Dilution Factor =(Volume of Solvent + Solute) / Volume of Solute

#### **Relative Retention Time**

RRT =RT of Compound / RT of ISTD

#### **Breakdown Percent**

Breakdown ≂ <u>Area of DDD + Area of DDE</u> Average (DDT, DDE and DDD)

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Area of Endrin Ketone + Area of Endrin Aldehyde Average (Endrin, Endrin Ketone, Endrin Aldehyde)

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#### 11.0 Data Reduction, Validation, Reporting, and Record Keeping

All data reported must be of the highest possible accuracy and quality. During the processes of data reduction, validation, and report generation, all work is thoroughly checked to insure that error is minimized.

#### Data Reduction

The analyst who generated the data usually performs the data reduction. The calculations include evaluation of surrogate recoveries (where applicable), and other miscellaneous calculations related to the sample quantitation.

If the results are computer generated, then the formulas must be confirmed by hand calculations, at minimum, one per batch.

See the current Data Validation SOP for details regarding data reduction.

#### Validation

A senior analyst, most often the section supervisor, validates the data. All data undergoes peer review. If an error is detected, it is brought to the analyst's attention so that he or she can rectify the error, and perform further checks to ensure that all data for that batch is sound. Previous and/or common mistakes are stringently monitored throughout the validation process. Data is reported using appropriate significant figure criteria. In most cases, two significant digits are utilized, but three significant digits can be used in QC calculations. Significant digits are not rounded until after the last step of a sample calculation. All final reports undergo a review by the laboratory manager, the project manager, or their designee, to provide a logical review of all results before they are released to the client.

If data is to be manually transferred between media, the transcribed data is checked by a peer. This includes data typing, computer data entry, chromatographic data transfer, data table inclusion to a cover letter, or when data results are combined with other data fields.

All hand-written data from run logs, analytical standard logbooks, hand-entered data logbooks, or on instrument-generated chromatograms, are systematically archived should the need for future retrieval arise.

See the current Data Validation SOP for details regarding data validation.

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#### **Reports and Records**

All records at HEAL are retained and maintained through the procedures outlined in the most recent version of the Records Control SOP.

The reports are compiled by the Laboratory Information Management System (LIMS). Most data is transferred directly from the instruments to the LIMS. After being processed by the analyst and reviewed by a data reviewer, final reports are approved and signed by the senior laboratory management. A comparative analysis of the data is performed at this point. For example, if TKN and NH3 are analyzed on the same sample, the NH3 result should never be greater than the TKN result. Lab results and reports are released only to appropriately designated individuals. Release of the data can be by fax, email, electronic deliverables, or mailed hard copy.

When a project is completed, the final report, chain of custody, any relevant supporting data, and the quality assurance/control worksheets are scanned as a .pdf file onto the main server. Original client folders are kept on file and are arranged by project number. Additionally, all electronic data is backed up routinely on the HEAL main server. The backup includes raw data, chromatograms, and report documents. Hard copies of chromatograms are stored separately according to the instrument and the analysis date. All records and analytical data reports are retained in a secure location as permanent records for a minimum period of five years (unless specified otherwise in a client contract). Access to archived information shall be documented with an access log. Access to archived electronic reports and data will be password protected. In the event that HEAL transfers ownership or terminates business practices, complete records will be maintained or transferred according to the client's instructions.

After issuance, the original report shall remain unchanged. If a correction to the report is necessary, then an additional document shall be issued. This document shall have a title of "Addendum to Test Report or Correction to Original Report", or equivalent. Demonstration of original report integrity comes in two forms. First, the report date is included on each page of the final report. Second, each page is numbered in sequential order, making the addition or omission of any data page(s) readily detectable.

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#### **12.0 Corrective Action**

Refer to the most recent version of the Data Validation SOP for the procedure utilized in filling out a Corrective Action Report. A blank copy of the corrective action report is available in Appendix I.

The limits that have been defined for data acceptability also form the basis for corrective action initiation. Initiation of corrective action occurs when the data generated from continuing calibration standard, sample surrogate recovery, laboratory control spike, matrix spike, or sample duplicates exceed acceptance criteria. If corrective action is necessary, the analyst or the section supervisor will coordinate to take the following guidelines into consideration in order to determine and correct the measurement system deficiency:

Check all calculations and data measurements systems (Calibrations, reagents, instrument performance checks, etc.).

Assure that proper procedures were followed.

Unforeseen problems that arise during sample preparation and/or sample analysis that lead to treating a sample differently from documented procedures shall be documented with a corrective action report. The section supervisor and laboratory manager shall be made aware of the problem at the time of the occurrence. See the appropriate SOP regarding departures from documented procedures.

Continuing calibration standards below acceptance criteria can not be used for reporting analytical data unless method specific criteria states otherwise.

Continuing calibration standards above acceptance criteria can be used to report data as long as the failure is isolated to a single standard and the corresponding samples are nondetect for the failing analyte.

Samples with non-compliant surrogate recoveries should be reanalyzed, unless deemed unnecessary by the supervisor for matrix, historical data, or other analysis-related anomalies.

Laboratory and Matrix Spike acceptance criteria vary significantly depending on method and matrix. Analysts and supervisors meet and discuss appropriate corrective action measures as spike failures occur.

Sample duplicates with RPD values outside control limits require supervisor evaluation and possible reanalysis.

A second mechanism for initiation of corrective action is that resulting from Quality Assurance performance audits, system audits, inter- and intra-laboratory comparison studies. Corrective Actions initiated through this mechanism will be monitored and coordinated by the laboratory QA/QCO.

Page 48 of 54 Quality Assurance Plan 9.4 Effective July 1<sup>st</sup>, 2010 All corrective action forms are entered in the LIMS and included with the raw data for peer review, signed by the technical director of the section and included in the case narrative to the client whose samples were affected. All Corrective action forms in the LIMS are reviewed by the QA/QCO.

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#### 13.0 Quality Assurance Audits, Reports and Complaints

#### Internal/External Systems' Audits, Performance Evaluations, and Complaints

Several procedures are used to assess the effectiveness of the quality control system. One of these methods includes internal performance evaluations, which are conducted by the use of control samples, replicate measurements, and control charts. External performance audits, which are conducted by the use of inter-laboratory checks, such as participation in laboratory evaluation programs and performance evaluation samples available from a NELAC-accredited Proficiency Standard Vendor, are another method.

Proficiency samples will be obtained twice per year from an appropriate vendor for all tests and matrices for which we are accredited and for which PTs are available. HEAL participates in soil, waste water, drinking water, and underground storage tank PT studies. Copies of results are available upon request. HEAL's management and all analysts shall ensure that all PT samples are handled in the same manner as real environmental samples utilizing the same staff, methods, procedures, equipment, facilities, and frequency of analysis as used for routine analysis of that analyte. When analyzing a PT, HEAL shall employ the same calibration, laboratory quality control and acceptance criteria, sequence of analytical steps, number of replicates, and other procedures as used when analyzing routine samples.

With regards to analyzing PT Samples, HEAL shall not send any PT sample, or portion of a PT sample, to another laboratory for any analysis for which we seek accreditation, or are accredited. HEAL shall not knowingly receive any PT sample or portion of a PT sample from another laboratory for any analysis for which the sending laboratory seeks accreditation, or is accredited. Laboratory management or staff will not communicate with any individual at another laboratory concerning the PT sample. Laboratory management or staff shall not attempt to obtain the assigned value of any PT sample from the PT Provider.

Internal Audits are performed annually by the QA/QCO in accordance with the current Internal Audit SOP. The system audit consists of a qualitative inspection of the QA system in the laboratory and an assessment of the adequacy of the physical facilities for sampling, calibration, and measurement. This audit includes a careful evaluation and review of laboratory quality control procedures. Internal audits are performed using the guidelines outlined below, which include, but are not limited to:

- 1. Review of staff qualifications, demonstration of capability, and personnel training programs
- 2. Storage and handling of reagents, standards, and samples
- 3. Standard preparation logbook and LIMS procedures
- 4. Extraction logbooks
- 5. Raw data logbooks
- 6. Analytical logbooks or batch printouts and instrument maintenance logbooks
- 7. Data review procedures

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- 8. Corrective action procedures
- 9. Review of data packages, which is performed regularly by the lab manager/QA Officer.

The QA/QCO will conduct these audits on an annual basis.

#### Management Reviews

HEAL management shall periodically, and at least annually, conduct a review of the laboratory's quality system and environmental testing activities to ensure their continuing suitability and effectiveness, and to introduce necessary changes or improvements. The review shall take account of:

- 1. the suitability and implementation of policies and procedures
- 2. reports from managerial and supervisory personnel
- 3. the outcome of recent internal audits
- 4. corrective and preventive actions
- 5. assessments by external bodies
- 6. the results of inter-laboratory comparisons or proficiency tests
- 7. changes in volume and type of work
- 8. client feed back
- 9. complaints
- 10. other relevant factors, such as laboratory health and safety, QC activities, resources, and staff training.

Findings from management reviews and the actions that arise from them shall be recorded and any corrective actions that arise shall be completed in an appropriate and agreed upon timescale.

#### Complaints

Complaints from clients are documented and given to the laboratory manager. The lab manager shall review the information and contact the client. If doubt is raised concerning the laboratory's policies or procedures, then an audit of the section or sections may be performed. All records of complaints and subsequent actions shall be maintained in the client compliant logbook for five years unless otherwise stated.

#### Internal and External Reports

The QA/QCO is responsible for preparation and submission of quality assurance reports to the appropriate management personnel as problems and issues arise. These reports include the assessment of measurement systems, data precision and accuracy, and the results of performance and system audits. Additionally, they include significant QA

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problems, corrective actions, and recommended resolution measures. Reports of these Quality Assurance Audits describe the particular activities audited, procedures utilized in the examination and evaluation of laboratory records, and data validation procedures. Finally, there are procedures for evaluating the performance of Quality Control and Quality Assurance activities, and laboratory deficiencies and the implementation of corrective actions with the review requirements.

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#### 14.0 References (Analytical Protocols Utilized at HEAL)

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- 5. <u>Handbook of Chemistry and Physics, 62nd Edition</u>, CRC Press, Inc. 1981-1982.
- 6. <u>Handbook on Reference Methods for Soil Testing</u>, The Council on Soil Testing & Plant Analysis, 1980 and 1992
- 7. <u>Laboratory Procedures for Analyses of Oilfield Waste.</u> Department of Natural Resources, Office of Conservation, Injection and Mining Division, Louisiana, August 1988
- 8. <u>Manual for the Certification of Laboratories Analyzing Drinking Water, Criteria and procedures</u> <u>Quality Assurance Fifth Edition, U.S. Environmental Protection Agency, January 2005.</u>
- 9. <u>Manual of Operating Procedures for the Analysis of Selected Soil, Water, Plant Tissue and</u> <u>Wastes Chemical and physical Parameter.</u> Soil, Water, and Plant Analysis Laboratory, Dept. of Soil and Water Science, The University of Arizona, August 1989
- 10. The Merck Index, Eleventh Edition, Merck & Co., Inc. 1989.
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- 14. Polycyclic Aromatic Hydrocarbons in Water Systems, CRC Press, Inc.
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- 18. <u>Soil Survey Laboratory Methods Manual.</u> Soil Survey Laboratory Staff. Soil Survey Investigations Report No. 42, version 2.0, August 1992.
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- 20. <u>Standard Methods for the Examination of Water and Wastewater:</u> AOHA, AWWA, and WPCG; 20th Edition, 1999.

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- 22. <u>Test Methods for Evaluating Solid Waste: Physical/Chemical Methods</u>, USEPA SW-846, 3rd Edition, Updates I, II, IIA, IIB, III, December, 1996.

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# Appendix D

#### App D 2011 Underground Process and V ter Piping Inpsection Summary

Line Number	Description (Service)	Line Size	Line Length	Starting Location	End Location	Drawing Reference	Construction Material	Inspection Scheduled	Inspection Date	Inspection Results Pass/Fail	Test/ Inspection Method	Repairs/Main t Needed	Repairs-Maint Completion date
1	Effilent Wtr. Transfer Line	6	· 3250L/F	Effilent Pond Outlet Pump P-616	Effluent Transfer P-671	D-500-800-031	PVC	2012	Jul-10	Pass	Hydrostatic	None	N/A
2 -	Effilent Wtr. Trans. Pump	6	908 L/F	North Evaporation Pond Outlet	Effilent Transfer Pump P-671	D-500-800-031	PVC	2012					
3	Effilent Wtr. Pump Disch.	6	2,797 L/F	Effluent Transfer P-671	Injection Well Building	D-500-800-031	PVC	2012	Oct-09	Pass	Hydrostatic	None	N/A
4	Injection Well Recir, Line	6	910 L/F	Injection Well Building	North Evaporation Pond	D-500-800-031	PVC	2012					
5	River Terrace Transfer Line	2	277 L/F	River Terrace Processing Skid	River Pump Building Water Basin	D-500-800-043	PVC	2012	Aug-11	Pass	Hydrostatic	None	N/A
ę	Crude Transfer Line	12	215 L/F	Pipe Rack East Of LPG Stg Tks.	Pipe Rack Southwest of Tk. # 31	N/A	Carbon steel	2008	May-08	Pass	Praxair	None	N/A
7	Steam Header at Terminals	6	215 L/F	Pipe Rack Southwest of Tk. # 31	Pipe Rack East Of LPG Stg. Tks.	N/A	Carbon steel	2012					
8	Condensate Return Header	4	215 L/F	Pipe Rack East Of LPG Stg Tks.	Pipe Rack Southwest of Tk. # 31	N/A	Carbon steel	2012					
9	C-4 To Blend	4	218 L/F	Pipe Rack East Of LPG Bullets	Pipe Rack Southwest of Tk. # 31	N/A	Carbon steel			*Temporaril	y Out of Service	•	
10	ULSD Sales Line	12	521 L/F	Pipe Rack Southwest of Tk. # 31	Filter Pad Area North Of Loading Pad	N/A	Carbon steel	2007	Nov-07	Pass	Praxair	None	N/A
11	Unleaded Gasoline Sales	12	534 L/F	Pipe Rack Southwest of Tk. # 31	Filter Pad Area North Of Loading Pad	N/A	Carbon steel	2007	Nov-07	Pass	Praxair	None	N/A
12	Transmix Sales from Tk #35	12	515 L/F	Pipe Rack Southwest of Tk. # 31	Filter Pad Area North Of Loading Pad	N/A	Carbon steel	out of service					
13	Lite Straight Run Product	4	218 L/F	Pipe Rack Southwest of Tk. # 31	Rack Area North Of B- 23	N/A	Carbon steel	2012					
14	VRU Return	3	275 L/F	Pipe Rack Southwest of Tk. # 31	Area Northeast of B-21	N/A	Carbon steel	*Temporarily Out of Service					
15	VRU Return (Former Poly Feed Lines)	2	275 L/F	Area Northeast of B- 21	Pipe Rack Southwest of Tk, # 31	N/A	Carbon steel	2012					
16	LPG Rerun Line	2	275 L/F	Area Northeast of B- 21	Pipe Rack Southwest of Tk. # 31	N/A	Carbon steel			*Temporaril	y Out of Service		
17	Saturate To Storage	2	275 L/F	Pipe Rack Southwest of Tk. # 31	Area Northeast of B- 21	. N/A	Carbon steel			*Temporaril	y Out of Service	)	
18	C-4 To Storage	2	275 L/F	Pipe Rack Southwest of Tk. # 31	Area Northeast of B- 21	. N/A	Carbon steel			*Temporaril	y Out of Service		
19	C-3 To Storage	2	275 L/F	Pipe Rack Southwest of Tk. # 31	Area Northeast of B- 21	N/A	Carbon steel			*Temporaril	y Out of Service	1	
20	Sour Naphtha From Tk. 3 & 4	8	388 L/F	Pipe Rack Southwest of Tk. # 31	Out Of Service	N/A	Carbon steel	out of service					
21	Off Road Diesel Sales From Tk.18	6	389 L/F	Pipe Rack Southwest of Tk. # 31	Filter Pad Area North Of Loading Pad	N/A	Carbon steel	2007	Nov-07	Pass	Praxair	None	N/A
22	Slop Line ToTk. # 22	4	390 L/F	Area Northeast of B- 21	Out of Service	N/A	Carbon steel	out of service					
23	Isomerate/Naptha Line	6	285 L/F	Low Rack West Of Tk.# 25	Area West of B-12	D-000-900-023	Carbon steel	2008	May-08	Pass	Praxair	None	N/A
24	Sub Grade Gasloine Tk #13 &14	8	392 L/F	Pipe Rack West Of Tk.# 36	Filter Pad Area North Of Loading Pad	N/A	Carbon steel	2007	Nov-07	Pass	Praxair	None	N/A
25	Premium Sales from Tk. 32	6	393 L/F	Pipe Rack West Of Tk.# 36	Filter Pad Area North Of Loading Pad	N/A	Carbon steel	2007	Nov-07	Pass	Praxair	None	N/A
26	Naptha to VRU	4	_313 L/F	Crude Line East of B- 21	Manifold @ VRU Unit	NewTech 595-M-601	Carbon steel	2008	May-08	Pass	Praxair	None	N/A
27	Naphta Feed To VRU Unit	4	223 L/F	Transfer Pump @ Tk. # 44	Manifold @ VRU Unit	NewTech 595-M-601	Carbon steel	out of service	May-08	Pass	Praxair	None	N/A
28	Naptha Fill/Rerun To Tk. #44	4	223 L/F	Manifold @ VRU Unit	Naptha Fill Line To Tk. # 44	NewTech 595-M-601	Carbon steel	out of service	May-08	Pass	Praxair	None	N/A
29	Off-Road Diesel To Bays #1 & 2	8	397 L/F	From F-706 Filter Piping	To Meter Spools @ Bays # 1&2	D-700-500-118	Carbon steel	2007	Nov-07	Pass	Praxair	None	N/A
30	(Old Kerosene) To Bay # 3	6	398 L/F	From F-706 Filter Piping	To Meter Spools @ Bays # 3	D-700-500-118	Carbon steel	2012					
31	Premiun Sales Line	10	399 L/F	From F-705 Filter Piping	To Meter Spools @ Bays # 1,2 & 3	D-700-500-118	Carbon steel	2007	Nov-07	Pass	Praxair	None	N/A
32	Unleaded GasolineSales Line	10	400 L/F	From F-704 Filter Piping	To Meter Spools @ Bays # 1,2 & 3	D-700-500-118	Carbon steel	2007	Nov-07	Pass	Praxair	None	N/A
33	ULSD To Bay # 4	8	401 L/F	From F-703 Filter Piping	To Meter Spool @ Bay # 4	D-700-500-123	Carbon steel	2007	Nov-07	Pass	Praxair	None	N/A

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## D ter Piping Inpsection Summary

Line Number	Description (Service)	Line Size	Line Length	Starting Location	End Location	Drawing Reference	Construction Material	Inspection Scheduled	Inspection Date	Inspection Results Pass/Fail	Test/ Inspection Method	Repairs/Main t Needed	Repairs-Maint Completion date
34	Ethanol Pump Suction Line	8	330 L/F	From Tk. # 45 Outlet Nozzel	To P-707 & P-707A Pump Suction	D-700-500-140	Carbon steel	2012					
35	Ethanol Unloading Line	4	330 L/F	From P-706 Pump Discharge	To Tk. # 45 Inlet Nozzel	D-700-500-140	Carbon steel	2012					
36	Naphtha Unloading Line	6	420 L/F	Suction Manifold @ P- 607A	Unloading line @ Tk. #18 and 19	B-600-500-296	Carbon steel	2007	Sep-07	Pass		None	N/A
37	Naptha Rundown To Tk.# 35	3	99	Line From North Pipe Rack Area	To Tk. # 35 Fill Nozzle	B-600-500-232	Carbon steel			*Temporaril	y Out of Service	)	
38	Naptha Feed Line to Unit	4	99	From P-607A Pump Discharge	To North Pipe Rack Feed To Units	B-600-500-236	Carbon steel			*Temporaril	y Out of Service	•	
39	Cooling Water Supply Line	12	165 L/F	From # 1 Cooling Tower Pumps	To Rack Area @ Reformer Unit	D-500-500-011	Carbon steel			*Temporarily	y Out of Service	•	
40 .	Cooling Water Return Line	12	165 L/F	From Rack Area @ Reformer	To #1 Cooling Tower Water Inlet	D-500-500-011	Carbon steel			*Temporarily	y Out of Service	•	
41	Cooling Water Supply Line	20	145 L/F	From # 2 Cooling Tower Pumps	To S. End of FCC Unit @ Twr. 207 Area	D-201-500-123	Carbon steel			*Temporarily	y Out of Service	)	
42	Cooling Water Return Line	20	145 L/F	From South End of FCC Unit	To # 2 Cooling Tower Water Inlet	D-201-500-123	Carbon steel			*Temporarily	y Out of Service	•	
43	Sewer Transfer Line	10	54 L/F	From Main Sewer Box # 12	11	D-500-500-402	Carbon steel	2012					
44	Sewer Transfer Line	10	46 L/F	11	To Observation Access Can # 10	D-500-500-402	Carbon steel	2010	Jul-10	Pass	Hydrostatic	None	N/A
45	Sewer Transfer Line	12	33 L/F	From Observation Access Can #10	To Observation Access Can # 6	D-500-500-402	Carbon steel	2012					
46	Sewer Transfer Line	12	73 L/F	From Observation Access Can # 6	To Main Sewer Box # 5	D-500-500-402	Carbon steel	2012					
47	Sewer Transfer Line	14	69 ⊔/F	From Main Sewer Box # 5	To Observation Access Can # 4	D-500-500-402	Carbon steel	2012	Aug-11	Pass	Hydrostatic	None	N/A
48	Sewer Transfer Line	14	86 L/F	From Observation Access Can #4	To Main Sewer Box # 3	D-500-500-402	Carbon steel	2012	Aug-11	Pass	Hydrostatic	None	N/A
49 .	Sewer Transfer Line	12	62 ⊔/F	From Main Sewer Box # 9	To main Sewer Box # 8	D-500-500-402	Carbon steel	2012					
50	Sewer Transfer Line	12	66 L/F	From Main Sewer Box # 8	To Main Sewer Box # 7	D-500-500-402	Carbon steel	2012					
51	Sewer Transfer Line	14	86 L/F	From Main Sewer Box # 7	To Main Sewer Box # 3	D-500-500-402	Carbon steel	2012	Aug-11	Pass	Hydrostatic	None	N/A
52	Sewer Transfer Line	14	145 L/F	From Main Sewer Box # 3	To Observation Access Can #2	D-500-500-402	Carbon steel	2012					
· 53	Sewer Transfer Line	14	100 L/F	From Observation Access Can #2	To Main Sewer Box # 1	D-500-500-402	Carbon steel	2012					
54	Sewer Transfer Line	12/10	TBD	From Main Sewer Box # 1	To Inlet @ API Seperator	D-500-500-106	Carbon steel	2012					
55	Sewer Collection Manifold	8>4	56 L/F	Area East Side of # 4 Boiler	To North Side of Sewer Box # 12	D-500-500-402	Carbon steel	2010	Jul-10	Pass	Hydrostatic	None	N/A
56	Sewer Collection Manifold	10>4	164 L/F	Area @ & Around Crude Twr.	To North Side Of Sewer Box # 11	D-500-500-402	Carbon steel	2010	Jul-10	Pass	Hydrostatic	None	N/A
57	Sewer Collection Manifold	8>4	100 L/F	Area @ & Around E- 106A & B	To Northwest Of Sewer Box # 10	D-500-500-402	Carbon steel	2010	Jul-10	Pass	Hydrostatic	None	N/A
58	Sewer Collection Manifold	6	10 L/f	Area @ V-101A Desalter	To East Side Of Sewer Box # 10	D-500-500-402	Carbon steel	2010	Jul-10	Pass	Hydrostatic	None	N/A
59	Sewer Collection Manifold	10>4	452 L/F	Area Thru Reformer Pump Row	To Observation Access Can # 6	D-500-500-098	Carbon steel	2012	Aug-11	Pass	Hydrostatic	None	N/A
60	Sewer Collection Manifold	10>4	316 L/F	Reformer	To Observation Access Can # 6	D-500-500-098	Carbon steel	2012	Aug-11	Pass	Hydrostatic	None	N/A
61	Sewer Collection Manifold	8>4	60 L/F	Desalter	To Observation Access Can #4	D-500-500-402	Carbon steel	2010	Jul-10	Pass	Hydrostatic	None	N/A
62	Sewer Collection Manifold	8>4	140 L/F	Area @ & Around T- 101 Tower	To West Side Of Sewer Box # 9	D-500-500-402	Carbon steel	2010	Jul-10	Pass	Hydrostatic	None	N/A
63	Sewer Collection Manifold	8>4	104 L/F	Area @ & Around P101 Charge P.	Sewer Box # 9	D-500-500-402	Carbon steel	2010	Jul-10	Pass	Hydrostatic	None	N/A
64	Sewer Collection Manifold	8>4	88 L/F	Area @ & Around T- 103 Tower	To Northwest Side Of Sewer Box # 8	D-500-500-402	Carbon steel	2010	Jul-10	Pass	Hydrostatic	None	N/A
.65	Sewer Collection Manifold	8>4	92 L/F	Area @ & Around Heavy Oil Exch.	To North Side Of Sewer Box # 8	D-500-500-402	Carbon steel	2010	Jul-10	Pass	Hydrostatic	None	N/A
<sup>•</sup> 66	Sewer Collection Manifold	8>4	41 L/F	Area @ & Around Main Air Blower	To Northwest Side Of Sewer Box # 3	D-500-500-134	Carbon steel	2012	Aug-11	Pass	Hydrostatic	None	N/A

#### App

#### 2011 Underground Process and V

# D ter Piping Inpsection Summary

Line Number	Description (Service)	Line Size	Line Length	Starting Location	End Location	Drawing Reference	Construction Material	Inspection Scheduled	Inspection Date	Inspection Results Pass/Fail	Test/ Inspection Method	Repairs/Main t Needed	Repairs-Maint Completion date
67	Sewer Collection Manifold	6>3	TBD	Area @ Burner Fuel Loading	To Observation Access Can (Precipitator)	D-600-500-127	Carbon steel	2012					
68	Sewer Collection Manifold	4	TBD	Area Drains @ Air Building	To Sewer Transfer Line( Box # 1 to API)	D-500-500-160	Carbon steel	2012					
69	Sewer Collection Manifold	4	86 L/F	P-224 Pump & Cat Surface Drain	To Sewer Transfer Line From FCC Process	D-201-500-001	Carbon steel	2011	Jul-09	Pass	Hydrostatic	None	N/A
70	Sewer Collect./Transfer Line	6	896 L/F	Gas Con Unit Collection M.H.	To FCC Sewer Box Manhole # 13	D-201-500-001	Carbon steel	2011	Aug-11	Pass	Hydrostatic	None	N/A
71	Sewer Transfer Line	10	35 L/F	From FCC Sewer Box M.H. # 13	To FCC Sewer Box # 14 (Roadway)	D-201-500-001	Carbon steel	2011	Aug-11	Pass	Hydrostatic	None	N/A
72	Sewer Transfer Line	10	TBD	From FCC Sewer Box M.H. #14	To 20" Inlet @ API	D-500-500-106	Carbon steel	2012					
73	Sewer Collection Manifold	6/4	335 L/F	Area @ & Around Gas Con. Unit	To Gas Con. Unit Sewer Collection	D-200-200-233	Carbon steel	2011	Aug-11	Pass	Hydrostatic	None	N/A
74	Sewer Transfer Line	10	159 L/F	From Treater Main Sewer Box # 16	To Sewer Box #15 - S.E. Of C-204	D-500-500-166	Carbon steel	2011	Aug-11	Pass	Hydrostatic	None	N/A
75	Sewer Transfer Line	10	162 L/F	Sewer Box #15 - S.E. Of C-204	To 20" Inlet @ API	D-500-500-105	Carbon steel	2012					
76	Sewer Collection Manifold	10>4	411 L/F	Area In & Around Treater Unit	To Treater Sewer Box At South Side Of Unit	D-500-500-122	Carbon steel	2011	Aug-11	Pass	Hydrostatic	None	N/A
77	Sewer Collection Manifold	6>2	550 L/F ·	Area In & Around Poly Unit	To Inlet Bay @ API	D-500-500-126	Carbon steel	out of service	May-09	Pass	Hydrostatic	None	N/A
78	Sewer Transfer Line	10	130 L/F	From Sewer Box # 17 @ DHT Unit	To Sewer Box # 18 @ S.E. Corner of Poly	D-500-500-097	Carbon steel	2011	Aug-11	Pass	Replaced with Stainless Steel Piping	None	N/A
79	Sewer Transfer Line	12	35 L/F	From Sewer Box # 18	To Inlet Manifold @ API Basin Area		Carbon steel	2012					
80	Sewer Collection Manifold	10>4	635 L/F	Area In & Around DHT/Larox Unit	To Sewer Box # 18 @ S.E. Corner of DHT		Carbon steel	2007	Aug-11	Pass	Hydrotest	None	N/A
81	Crude Transfer Line	12	99 L/F	Pipe Rack East Of LPG Stg Tks.	Pipe Rack South of Crude Unloading Bays	D-000-900-023	Carbon steel	2008	May-08	Pass	Praxair	None	N/A
82	Crude Transfer Line	12	194 L/F	Pipe Rack South of Crude Unloading Bays	Berm South of Tank #43	D-000-900-023	Carbon steel	2008	May-08	Pass	Praxair	None	N/A
83	Sewer Transfer Line	4	822 L/F	Discharge at Tk #37	Valve box at corner Northeast of DHT	AMEC 6/7	Carbon Steel/PVC	2010	Jun-10	Pass	Hydrostatic	None	N/A
84	Premium Sales Line from Tk #3 & 4	8	300 L/F	Area West of API Separator	DHT Option City		Carbon Steel	2007	Nov-07	Pass	Praxair	None	N/A
85	Diesel Reciepts	6	25 L/F	Roadway SW of Tk #17	Piperack btwn Tk #34 and Tk #25	D-800-600-104	Carbon Steel	2010	Jun-10	Pass	Hydrotest	None	N/A
86	Premium/Uneaded Reciepts	6	25 L/F	Roadway SW of Tk #17	Piperack btwn Tk #34 and Tk #25	D-800-600-099 D 600-800-113	Carbon Steel	2010	Jun-10	Pass	Hydrotest	None	N/A
87	Groundwater Recovery Transfer Line	3	970 L/F	Tk #38	Slop Line NE of Tk #31	D-600-800-121	Carbon Steel	2010	Aug-10	Pass	Hydrotest	None	N/A
88	Injection Well Transfer	4	45 L/F	Injection Well Building	Downhole Injection Well	D-500-800-031	Carbon Steel	2010	Oct-10	Pass	Hydrotest	None	N/A
89	VRU Return to Tanks 13 and 14	3	32 L/F	Pipe Bridge South of Tanks 13 and 14	Exits inside South Wall of Containtment Berm	B-600-500-532	Carbon Steel	2011	Jan-11	Pass	Hydrostatic	None	N/A
90	Tie-in Tank 11 Crude to LACT	6	116 L/F	Pipe Bridge North of LACT Unit	10 ft East of Tie-in to LACT Unit	B-600-500-561	Carbon Steel	2011	Dec-11	Pass	Hydrostatic	None	N/A
91	Crude to Tank 11	6	34 L/F	Under Pipe Rack South of Tank 11	Exits Berm South of Tank 11	B-600-500-558	Carbon Steel	2011	11-Nov	Pass	Hydrostatic	None	N/A

\*All lines that are temporarily out of service due to suspension of refining operations were steamed out and are hydrocarbon free

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Api D Tank Inspe Schedule

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Tank #	Service	Normal Capacity (bbls)	Last Test/ Inspection	Test/ Inspection Method	Next Test/ Inspection Scheduled	Date OCD-SFO Requirements Satisfied	Test/ Inspection Date	Repairs/Maint Needed	Repairs/Maint Completion Date
2	FILTERED WATER	64,347	2000	Internal	2010	2010	11/13/2010	None	11/13/2010
3	NAPHTHA	9,365	2003	Internal	2013	2013	10/1/2003	Seal Replacement	10/8/2003
4	NAPHTHA	9,365	2003	Internal	2013	2013	9/17/2003	Seal Replacement	9/24/2003
5	WASTE WATER SURGE	9096	2007	Internal	2017	2007	5/28/2008	None	• N/A
8	CRUDE SLOP	460	2007	External (Conrete Liner)	2017	2007	6/7/2007	None	N/A
9	CRUDE SLOP	460	2007	External (Conrete Liner)	2017	2007	11/10/07	None	N/A
10	SPENT CAUSTIC - O/S	360	O/S	O/S	O/S	O/S	O/S	Out of Service	O/S
11	CRUDE	50,358	2011	Internal	2021	2011	11/2/2011	Floor Coating **	N/A
12	CAT / POLY GAS - O/S	50,358	1999	Internal	2010	2010	5/5/2010	Emptied, Cleaned -	Not Inspected
13	UNLEAD SALES	27,646	2008	Internal	2018	2008	5/15/2010	New Floor Installed	5/15/2011
14	UNLEAD SALES	27,615	2005	Internal	2015	2005	9/21/2005	None	N/A
17	CAT FEED - O/S	38403	2007	Internal	2017	2007	1/15/2010		
18	#1 DIESEL SALES - O/S	50358	1999	Internal	2010	2010	4/23/2010	Emptied, Cleaned	- Inspected
19	#2 DIESEL SALES	34991	2000	Internal	2010	2010	12/01/10	Floor Repair	12/28/2010
20	NAPHTHA	10000	2007	Internal	2017	2007	10/29/07	New Construction	N/A
23	BASE GASOLINE - O/S	38,402	2002	Internal	2012	2012	06/15/10	Emptied, Cleaned -	Not Inspected
24	ULS DIESEL	10107	2006	Internal	2016	2006	03/01/06	New Construction	N/A
_ 25	ULS DIESEL	10107	2006	Internal	2016	2006	02/06/06	New Construction	N/A
26	SWEET NAPHTHA	3,264	2008	Praxair	2018	2008	05/29/08	None	N/A
27	HEAVY BURNER FUEL - O/S	9,854	2006	Internal	2016	2006	08/31/06	Emptied, Cleaned -	Not Inspected
28	CRUDE - O/S	77,854	2009	Internal	2019	2009	11/09/09	Emptied, Cleaned -	Not Inspected
29	#2 DIESEL/FCC SLOP - O/S	16,676	2005	Internal	2015	2005	07/10/10	Emptied, Cleaned -	Not Inspected
30	TRANSMIX	16,676	2004	Internal	2014	2004	05/24/10	None	5/24/2010
31	CRUDE O/S	98,676	2003	Internal	2013	2013	01/09/03	Emptied, Cleaned -	Not Inspected
32	PREMIUM UNLEAD SALES	17,913	1999	Internal/UTS*	2019	2009	04/01/09	None	N/A
33	RECOVERY WELL WATER	360	2008	Internal	2018	2008	04/09/08	None	N/A
34	INJECTION WELL RESERVIOR	360	2002	Internal	2012	2012	11/20/02	Repair Pinhole	1/20/2002
35	REFORMER FEED	43904	2005	Internal	2015	2005	03/18/10	Emptied, Cleaned -	Not Inspected
36	PREMIUM UNLEAD SALES	43904	2005	Internal	2015	2005	08/24/05	None	N/A
37	FRENCH DRAIN	121	2009	Internal/UTS*	2019	2009	06/11/09	None	N/A
38	EAST OUTFALL	302	2003	Internal	2013	2013	04/09/08	None	N/A
41	CRUDE STORAGE	2798	2008	Praxair	2018	2008	05/29/08	None	N/A
42A	TERMINALS SLOP	400	2007	API 650	2017	2007	06/01/07	New Construction	N/A
42B	TERMINALS SLOP	400	2007	API 650	2017	2007	06/01/07	New Construction	N/A
43	TERMINALS SLOP	560	O/S	O/S	O/S	O/S	O/S	Out of Service	O/S
44	ETHANOL	1,751	2008	Praxair	2018	2008	05/29/08	None	N/A
45	ETHANOL	4821	2008	Internal	2018	2008	02/20/08	None	N/A

\* UTS = Utransonic Thickness Survey O/S = \*\* = Floor Coating was done due to the Tank's change of service only. O/S = Out of Service

### App & D Sump Inspection Summary

Sump Number	Location	Type Material	Drawing Reference	Actual Inspection Date	Inspection results Pass/Fail	Repairs/Maint Needed	Repairs/Maint Completion date
16	Sump @ S.W. Side Of Tk. 3	Concrete	D-000-900-023	6/27/2011	Pass	None	
17	Sump Between Tk. 3 & 4	Concrete	D-000-900-023	6/27/2011	Pass	None	
18	Sump Between Tk. 4 & 5	Concrete	D-000-900-023	6/27/2011	Pass	None	
19	Sump @ N.Side Of Tk. 5	Concrete	D-000-900-023	6/27/2011	Pass	None	
20	Sump Between Tk. 11 & 12	Concrete	D-000-900-023	6/27/2011	Pass	None	
21	Sump Between Tk. 13 & 14	Concrete	D-000-900-023	6/28/2011	Pass	None	
22	Sump @ N. Side Of Tk. 17	Concrete	D-000-900-023	Permanentl	y Removed From	n Service and Dem	olished
23	Sump @ N.E. Side Of Tk. 18	Concrete	D-000-900-023	6/28/2011	Pass	None	
24	Sump @ N.E. Side Of Tk. 19	Concrete	D-000-900-023	6/29/2011	Pass	None	
25	Sump @ S.W. Side Of Tk. 20	DW Steel	D-000-900-023	6/30/2011	Pass	None	
26	Sump @ S. Side Of Tk. 23	Concrete	D-000-900-023	6/29/2011	Pass	None	
27	Sump @ E. Side Of Tk. 24	DW Steel	D-000-900-023	6/30/2011	Pass	None	
28	Sump @ E. Side Of Tk. 25	DW Steel	D-000-900-023	6/30/2011	Pass	None	
29	Sump @ N.W. Side Of Tk. 26	Concrete	D-000-900-023	6/29/2011	Pass	None	
30	Sump @ S.E. Side Of Tk. 27	Concrete	D-000-900-023	7/5/2011	Pass	None	
31	Sump @ West Side Of Tk. 28	Concrete	D-000-900-023	7/6/2011	Pass	None	
32	Sump @ N.E. Side Of Tk. 29	Concrete	D-000-900-023	7/18/2011	Pass	None	
33	Sump @ S.W. Side Of Tk. 30	Concrete	D-000-900-023	7/1/2011	Pass	None	
34	Sump @ N.W. Side Of Tk. 31	Concrete	D-000-900-023	7/20/2011	Pass	None	
35	Sump @ S.E. Side Of Tk. 31	Concrete	D-000-900-023	7/21/2011	Pass	None	
36	Sump @ East Side Of Tk. 32	Concrete	D-000-900-023	6/30/2011	Pass	None	
37	Sump @ N.E. Side Of Tk. 35	DW Steel	D-000-900-023	6/28/2011	Pass	None	
38	Sump @ N.E. Side Of Tk. 36	DW Steel	D-000-900-023	6/30/2011	Pass	None	•
39	Sump @ S. Side Of Tk. 18	DW Steel	D-000-900-023	6/29/2011	Pass	None	
40	Sump @ S. Side Of Tk. 19	Concrete	D-000-900-023	6/29/2011	Pass	None	
41	Sump @ S. Side Of Flare	Concrete	D-000-900-023	7/1/2011	Pass	None	
42	Sump @ N.W. Of Precipitator	Concrete	D-000-900-023	7/18/2011	Pass	None	

Sewer Box Number	Location	Type Material	Drawing Reference	Actual Inspection Date	Inspection results Pass/Fail	Repairs/Maint Needed	Repairs/Maint Completion date
1	Northwest of Main Pipe Bridge	Concrete	D-500-500-134	na	na	na	Could not test due to operational changes.
2	Southeast of Precipitator	Steel	D-500-500-134	8/1/2011	Pass	None	
3	Southeast of Main Blower	Concrete	D-500-500-134	7/28/2011	Pass	None	
4	Southeast of Old Desalter	Steel	D-500-500-134	8/3/2011	Pass	None	
5	Southeast of Control Room	Concrete	D-500-500-134	7/29/2011	Pass	None	
6	Southeast of Reformer	Steel	D-500-500-124	7/29/2011	Pass	None	
7	Southwest of Mainblower	Concrete	D-500-500-124	7/29/2011	Pass	None	
8	South of E-113's	Concrete	D-500-500-124	7/29/2011	Pass	None	
9	South of P-105's	Concrete 1	D-500-500-124	7/29/2011	Pass	None	
10	West of New Desalter	Steel	D-500-500-124	8/2/2011	Pass	None	•
11	South of T-102	Concrete	D-500-500-124	8/3/2011	Pass	None	
12	South of P-103;s	Concrete	D-500-500-124	8/2/2011	Pass	None	
13	In Roadway South of FCCU	Concrete	D-500-500-134	7/29/2011	Pass	None	
14	In Roadway Southwest of C-801's	Concrete	D-500-500-134	8/1/2011	Pass*	None	
15	In Roadway Southeast of Wet Gas	Concrete	D-500-500-134	8/1/2011	Pass*	None	
16	South of Treater	Concrete	D-500-500-134	8/1/2011	Pass*	None	
17	In Roadway East of DHT	Stainless Steel	D-500-500-134	8/1/2011	Pass <sup>-</sup>	None	
18	In Roadway Southeast of Poly Unit	Concrete	D-500-500-134	8/1/2011	Pass	None	

Appendix D Below-Grade Sewer Box Inspection Summary

## Waste 2011

Diek un Dete		Description	Containers		Ouentitu	Destination	Treatment	Cert. of Disposal/	
Pick-up Date	Manifest #	Description	No.	Туре	Quantity	Destination	Treaunent	Consumption	
3/14/2011	002844410 FLE	UN 2809, Waste Mercury D-009	1	DM	5 G	US Ecology Idaho, Inc. 20400 Lemley Road Grand View, ID 83624	Metals Recovery	Yes	
3/14/2011	002844410 FLE	NA3077, Hazardous Waste, Solid (Main Column Bottoms Sludge) D-006, D-009, K-170	1	DM	325 P	US Ecology Idaho, Inc. 20400 Lemley Road Grand View, ID 83624	Incineration	Yes	
3/14/2011	423421-11	UN 3077, Non-RCRA / Non-DOT Regulated Soil with Dye	1	DM	500 P	Idaho Waste Systems 16415 NW Waste Site Drive Boise, ID 83716	Landfill	Yes	

DM = Metal Drum P = Pounds G = Gallons

## WESTERN REFINING SOUTHWEST, INC. - BLOOMFIELD REFINERY P.O. BOX 159 BLOOMFIELD, NEW MEXICO 87413

#### MONTHLY INJECTION WELL REPORT DISCHARGE PLAN GW-130 NE1/4 SE1/4 SECTION 27, T29N, R11W NMPM, SAN JUAN COUNTY, NEW MEXICO

	AMOUNT OF WATER	AMOUNT TO SOLAR	TOTALIZER AMOUNT	DOWN-	INJE		URE	ANN	ULAR PRESS	URE		ON-LIN FLOW RAT	
PERIOD	FROM RIVER	EVAP PONDS	INJECTED	TIME	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG
2011	(GALLONS)	(GALLONS)	(GALLONS)	(HRS)	(PSIA)	(PSIA)	(PSIA)	(PSIA)	(PSIA)	(PSIA)	(GPM)	(GPM)	(GPM)
U			₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩				•			· ·			
JAN	3,038,000	. 0	1,344,152	0	1055	889	943	179	142	164	47	18	30
FEB	482,000	0	1,236,937	· 0	1078	891	937	· 188	155	170	51	18	30.2
MAR	1,578,000	0.	1,127,624	8	1118	889.0	<b>9</b> 92.7	202	116	152	45.0	18	25
	-												
APR	1,845,000	0	1,420,829	, 0	1109	892	966	190	. 145	163	54	18	32
MAY	2,250,000	0	1,658,138	0	1120	926	1044	209	150	180	47	25	38
JUN	1,351,000	2,448,862	1,056,598	217.5	1115	917	1042	210	163	166	47	22	34
JUL	2,684,000	3,052,200	1,823,541	0	1111	976	1045	236	117	165	49	30	40
AUG	1,991,000	1,745,829	1,569,856	45.75	1120	935	1048	153	101	125	53	22	38
SEP	1,478,000	2,823,969	2,823,969	13	1113	1012	1074	140	114	120	51	37	45
OCT	789,000	1,607,062	1,828,580	319	1062	910	1006	143	114	119.5	97	35	66.5
NOV	2,011,000	84,960	3,260,845	50	1057	931	1019	200	117	133.5	97	52	80.9
DEC	779,000	803,606	1,260,585	445	1037	935	1014	200	62	152.9	83	43	76.4

The total amount injected in 2011 Is/20,411,654 gallons.

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CERTIFICATION

Page 1

4/12/12

DATE: