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GALLUP

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August 30, 2012

Carl Chavez, Environmental Engineer
Oil Conservation Division
1220 S. Saint Francis
Santa Fe, NM 87505

Mr. John Kieling, Acting Chief
NMED - Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg 1
Santa Fe, NM 87505-6303

RE: 2011 Annual Ground Water Monitoring Report
Western Refining Company, Southwest Inc. - Gallup Refinery
EPA ID # NMD000333211

Dear Mr. Chavez and Mr. Kieling:

Western Refining Southwest, Gallup Refinery is pleased to submit the 2011 Annual Ground Water Monitoring Report. This report is being submitted to comply with the Discharge Permit 32, Condition 20.A, Annual Ground Water reporting requirements. Discharge Permit 32 was rescinded on February 15, 2012, however we are required to continue to abate pollution of ground water pursuant to 19.15.30 NMAC (Remediation) under case number AP-111.

The new Waste Water Treatment Plant (WWTP) was put into service in the second quarter of 2012 and will affect the sampling requirements for the influents, effluents at the aeration lagoons, and pond 1 under the old Discharge Permit 32. The waste water is now going to our new waste water treatment plant and into a new pond STP-1. Western is currently sampling the new WWTP under the start up requirements stated in NMED's Approval with Modifications Process Design Report for the Waste Water Treatment Plant, Dated May 24, 2010, until further notice.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Ed Riege, Environmental Manager
(505) 722-0217
ed.riege@wnr.com

cc: K. Van Horn, NMED HWB
C. Chavez, OCD
C. Johnson, Gallup

BINDER 1

Annual Ground Water Monitoring Report: Gallup Refinery – 2011

Western Refining
Gallup, New Mexico

August 30, 2012

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Ed Riege, MPH
Environmental Manager

Prepared by:

Cheryl Johnson
Environmental Specialist

Executive Summary

The Annual Ground Water Monitoring Report for 2011 (Report) has been prepared in response to requirements stated in the Ground Water Discharge Permit, GW-032, issued by the Oil Conservation Division (OCD) of the New Mexico Energy Minerals and Natural Resources Department to the Gallup Refinery owned by Western Refining ("Refinery"). Monitoring and field work activities conducted for 2011 followed the guidelines of the approved 2010 Facility Wide Ground Water Monitoring Plan (FWGWMP) (approved with modifications on August 25, 2010). This Executive Summary provides an overview of ground water monitoring results and additional monitoring and reporting required by the permit.

Ground Water Monitoring

There are a total of thirty-six monitoring wells distributed within the boundaries of the refinery of which, sixteen monitoring wells are located along the perimeter of the aeration lagoons and evaporation ponds. The ground water program consists of a number of sampling locations, target analytes, and monitoring frequencies which are monitored on a quarterly, semi-annual, and annual basis. There are two major sections of the Refinery which have been defined as the East and the West side for periodic monitoring.

East Side Ground Water

Ground water monitoring activities on the East side have shown the presence of methyl tert-butyl ether (MTBE) in four observation wells (OW) (OW-13, OW-14, OW-29, OW-30) located on the northeast corner of the active refinery perimeter (but not the refinery property as a whole). In three wells OW-14, OW-29, and OW-30, MTBE concentration levels range from 0.3 mg/L to 1.3 mg/L, all at levels above the Environmental Protection Agency Regional Screening Level (EPA RSL) of 0.012 mg/L. OW-13 continues to show trace levels of MTBE ranging from 0.004 mg/L in the first quarter to 6.5E-03 mg/L in the fourth quarter. Benzene detected in OW-14 range from 1.3 mg/L first quarter to 1.5 mg/L in the fourth quarter which are at levels above the New Mexico Water Quality Control Commission (NMWQCC) 20 NMAC 6.2.3103 standards for drinking water of 0.01 mg/L. Down gradient wells were non-detect for benzene, (below the levels of detection of analytical methods).

Two new wells (OW-50 and OW-52) installed in October 2009 down gradient of OW-30 and OW-29 has shown non-detectable concentration levels for benzene, toluene, ethylbenzene, xylene (BTEX) and MTBE for all four quarters of 2011. These wells were installed per New Mexico Environmental Department (NMED) requirement dated May 28, 2009 to "determine if contamination has migrated north, northwest of the refinery and potentially offsite" from up gradient wells OW-13 and OW-29.

Within the perimeter of the active refinery in this north-east section, there are three shallow recovery wells from which separate-phase hydrocarbons (SPH) have been

recovered and one which does not show any hydrocarbons (RW-2). 2011 year to date total product recovered from RW-1 was 0.42 gallons and 0.22 gallons recovered from RW-6. No product was detected in RW-2 and RW-5.

West Side Ground Water

The West side consists of ground water monitoring (GWM) wells near the aeration lagoons and alongside a series of large evaporation ponds. Immediately down gradient of the refinery's New American Petroleum Institute Separator (NAPIS), a sample from a shallow ground water monitoring well (NAPIS-2) had a detectable concentration level of MTBE ranging from 0.34 mg/L to 0.33 mg/L, greater than the EPA RSL standard of 0.012 mg/L. Benzene concentration levels range from 0.04 mg/L to 0.022 mg/L in the fourth quarter which are above the NMWQCC standards of 0.01 mg/L for benzene. Ethylbenzene levels were also above the NMWQCC standard of 0.75 mg/L in the first, second and fourth quarters of 2011. Monitoring of well GWM-1 in 2011 has shown benzene concentrations between 9.5E-03 mg/L to 8.5E-03 mg/L in the fourth quarter of 2011. Fluoride and chloride were also detected in concentrations above the NMWQCC standard of 250 mg/L in GWM-1 in all four quarters of 2011.

Also located on the West side are a series of boundary (BW), observation (OW), monitoring (MW), process (PW) and shallow monitoring (SMW) wells. Among the wells on the far west side are two deep process water wells PW-2 and PW-4. Neither of these wells has ever been known to have any detectable levels of any constituents. In one event in 2008, a semi-volatile organic compound (SVOC) was detected in PW-3 that is located on the East side. PW-3 was re-sampled and no SVOCs were detected. In 2010 PW-3 was sampled for SVOC and BTEX constituents and results were non-detect for both. Analytical sampling results for 2011 indicate non-detectable concentration levels of SVOC and BTEX plus MTBE for both PW-2 and PW-3. PW-3 is sampled on an annual basis as directed per NMED's Comment 12 of the May 16, 2011 NOD (May 2011 NOD) for the Annual Ground Water Monitoring Report: Gallup Refinery 2009. SMW-2 has shown levels of chloride above the NMWQCC standards and fluoride has also been detected in some of the boundary wells that are above the NMWQCC standards from 2008 to 2011.

Additional Monitoring and Reporting

As part of our Ground Water Discharge Permit GW-032, additional reporting is required on an annual basis and is provided in this report. This reporting includes:

- Monitoring of the aeration lagoons, ponds, and outfalls between the lagoons and ponds on a quarterly, semi-annual and annual basis.
- Summary of Waste Water Treated and Water Balance
- Summary of Underground Waste Water Lines Tested
- Summary of all EPA/NMED/RCRA Activity
- Major Refinery Activities and Events
- Summary of all Leaks, Spills and Releases

- Perimeter Inspections
- Temporary Land Farm Monitoring
- Monthly Flow Rate to NAPIS.

In the outfalls and evaporation ponds, results for benzene indicated no levels above the NMWQCC standards of 0.01 mg/L. Figure 2, a topographic map and Figure 3, an aerial photograph, depict the area topography and the general layout of the refinery.

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LIST OF ACRONYMS

AC	Alternating Current
AL	Aeration lagoons
BMP	Best Management Practices
BOD	Biochemical Oxygen Demand
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
BW	Boundary Well
COC	Chain of Custody
COD	Chemical Oxygen Demand
DC	Direct Current
DO	Dissolved Oxygen
DRO	Diesel Range Organics
DTP	Depth to Product
DTW	Depth to Water
EP	Evaporation ponds
EPA	Environmental Protection Agency
EPA MCL	EPA Maximum Contaminate Level
EPA RSL	EPA Regional Screening Level
Ft.	Foot/Feet
FWGWMP	Facility Wide Ground Water Monitoring Plan
GPM	Gallons per minute
GRO	Gasoline Range Organics
GWM	Ground Water Monitoring Well
HP	Horse Power
HWB	Hazardous Waste Bureau
IDW	Investigation Derived Waste
In.	Inch(s)
ISE	Ion Selective Electrode
LTU	Land Treatment Unit
MTBE	Methyl tert-butyl ether
mg/L	Milligrams/liter
mV	Millivolts
MW	Monitoring Well
NAPIS	New American Petroleum Institute Separator
NMED	New Mexico Environment Department
NPDES	National Pollutant Discharge Elimination System
NMWQCC	New Mexico Water Quality Control Commission (20NMAC 6.2.3103)
OBSM	Oil Bearing Secondary Material
OCD	Oil Conservation Division
OW	Observation Well
ORP	Oxidation Reduction Potential
PW	Process Well
RCRA	Resource Conservation and Recovery Act

LIST OF ACRONYMS – Continued

RW	Recovery Well
SMW	Shallow Monitoring Well
SPH	Separate Phase Hydrocarbons
SVOC	Semi-volatile Organic Compounds
SWPP	Storm Water Pollution and Prevention Plan
TDS	Total Dissolved Solids
μm	Micrometer
UPS	United Parcel Service
VOC	Volatile Organic Compounds
WWTP	Waste Water Treatment Plant
YTD	Year to Date

1.0 Introduction

This Annual Ground Water Monitoring Report for 2011 has been prepared in response to requirements stated in the Ground Water Discharge Permit, GW-032, issued by the Oil Conservation Division (OCD) of the New Mexico Energy Minerals and Natural Resources Department to the Gallup Refinery owned by Western Refining Southwest, Inc. ("Refinery").

This Report describes monitoring and remediation activities undertaken throughout 2011, and includes conclusions and recommendations. The ground water monitoring activities have collected data that are used to characterize the nature and extent of impacts to the ground water at the refinery, and to recognize any levels of constituents that exceed applicable standards. These standards are those set by the New Mexico Water Quality Control Commission (NMWQCC) 20 NMAC 6.2.3103, the U.S. Environmental Protection Agency's Maximum Contaminant Levels (EPA MCL) 40 CFR 141.62 and if NMWQCC or EPA MCL do not exist for a constituent, levels are compared against the Environmental Protection Agency (EPA) Regional Screening Level (RSL). Standards referenced are the most current relevant to the submittal of the annual ground water report.

1.1 Facility Ownership, Operation and Location

This report pertains to the Western Refining Southwest Inc. Gallup Refinery located at Exit 39 on Interstate I-40. This refinery is known as the Gallup Refinery and is located at Jamestown New Mexico, approximately 17 miles east of Gallup. Figure 1 shows the regional location of the refinery.

Owner: Western Refining, Inc., (Parent Corporation)
123 W. Mills Avenue
El Paso, TX 79901

Operator: Western Refining Southwest, Inc. (Postal address)
Route 3, Box 7
Gallup, New Mexico 87301

Western Refining Southwest, Inc. (Physical address)
I-40, Exit 39
Jamestown, New Mexico 87347

SIC code 2911 (petroleum refining) applies to the Gallup Refinery.

The following regulatory identification and permit governs the Gallup Refinery:

- U.S. EPA ID Number NMD000333211
- OCD Discharge Permit No. GW-032

The refinery status is corrective action/compliance. Annual, semi-annual and quarterly ground water sampling is conducted at the refinery to evaluate present conditions. The refinery is situated on an 810 acre irregular shaped tract of land that is substantially located within the lower one quarter of Section 28 and throughout Section 33 of Township 15 North, Range 15 West of the New Mexico Prime Meridian. A small component of the property lies within the northeastern one quarter of Section 4 of Township 14 North, Range 15 West. Figure 2 is a topographic map showing the general layout of the refinery in comparison to the local topography.

1.2 Background Information

The refinery primarily receives crude oil via two 6 inch diameter pipelines; two pipelines from the Four Corners Area enter the refinery property from the north. In addition, the refinery also receives natural gasoline feed stocks via a 4-inch diameter pipeline that comes in from the west along the Interstate 40 corridor from the Conoco gas plant. Crude oil and other products also arrive at the site via railroad cars. These feed stocks are then stored in tanks until refined into products.

The refinery incorporates various processing units that refine crude oil and natural gasoline into finished products. These units are briefly described as follows.

- The Crude Distillation Unit separates crude oil into various fractions; including gas, naphtha, light oil, heavy oil, and residuals.

- The Fluidized Catalytic Cracking Unit (FCCU) dissociates long-chain hydrocarbon molecules into smaller molecules, and essentially converts heavier oils into naphtha and lighter oils.

- The Alkylation Unit combines specific types of hydrocarbon molecules into a high octane gasoline blending component.

- The Reforming Unit breaks up and reforms low octane naphtha molecules to form high octane naphtha.

- The Hydro Treating Unit removes undesirable sulfur and nitrogen compounds from intermediate feed stocks, and also saturates the feed stocks with hydrogen to make diesel fuel.

- Additional Treater Units also remove impurities from various intermediate and blending feed stocks to produce finished products that comply with sales specifications.

- The Isomerization Unit converts low octane hydrocarbon molecules into high octane molecules.

- A set of Acid Gas Treating and Sulfur Recovery Units convert and recover various sulfur compounds from other processing units in order to produce either ammonium thiosulfate or a solid elemental sulfur byproduct.

As a result of these processing steps, the refinery produces a wide range of petroleum products including propane, butane, unleaded gasoline, diesel, kerosene, and residual fuel. In addition to the aforementioned processing units, various other equipment and systems support the operation of the refinery and are briefly described as follows.

Storage tanks are used throughout the refinery to hold and store crude oil, natural gasoline, intermediate feeds tocks, finished products, chemicals, and water. These tanks are all located aboveground and range in size from 80,000 barrels to less than a 1,000 barrels.

Pumps, valves, and piping systems are used throughout the refinery to transfer various liquids among storage tanks and processing units. A railroad spur track and a railcar loading rack are used to transfer feed stocks and products from refinery storage tanks into and out of railcars.

Several tank truck loading racks are used at the refinery to load out finished products and also may receive crude oil, other feed stocks, additives, and chemicals. A pipeline from the refinery that carries diesel fuel to the Pilot Travel Center (formerly Giant) was out of service in 2011. A tanker truck is used to deliver gasoline and diesel to the Pilot Travel Center.

A designated training area is used to conduct employee firefighting training. During these training activities waste water and/or wash water drains directly into a dedicated tank that is located in the vicinity. The waste water is removed via a vacuum truck and disposed of upstream of the NAPIS. Oily water and sludge is transferred via vacuum truck to the NAPIS for processing and oil-water separation.

The process waste water system is a network of curbing, paving, catch basins, and underground piping that collects waste water effluent from various processing areas within the refinery and is collected in Tanks 35, 27 and 28 (Equalization Tanks) and conveys this waste water to the NAPIS.

The NAPIS is a two compartment oil water separator. Oil is separated from the water based on the principle of gravity separation where the oil will float to the water surface so it can be skimmed off. The skimmed slop oil is passed to a collection chamber where it is pumped back into the refinery process. The clarified water is piped to the top of dual stripping columns where benzene is removed. The stripped water flows into the first aeration lagoon (AL-1). Sludge sinks to the bottom of the NAPIS which is periodically vacuumed out by a vacuum truck and disposed as hazardous waste at an approved hazardous waste landfill or recycled and reused in refineries that have this allowable Oil Bearing Secondary Materials (OBSM) exemption under Resource Conservation and Recovery Act (RCRA).

At the stripping columns, ambient air is blown upwards through the falling cascade of clarified waste water as it passes through distillation column packing. Countercurrent desorption of benzene from the water occurs due to the high volume of air passing over the relatively large surface area provided by the packing. The desorbed benzene is absorbed into the air stream and vented to the atmosphere. Effluent from the stripper columns gravity flows through piping into the first aeration lagoon.

At the aeration basins, the treated waste water is mixed with air in order to oxidize any remaining organic constituents and increase the dissolved oxygen concentration available in the water for growth of bacteria and other microbial organisms. The microbes degrade most of the hydrocarbons into carbon dioxide and water. Three 15-hp mechanical aerators provide aeration in the first aeration lagoon with two 15-hp aerators providing aeration in the second lagoon. Effluent from the second aeration lagoon flows onward into the first of several evaporation ponds of various sizes.

At the evaporation ponds, waste water is converted into vapor via solar and mechanical wind-effect evaporation. No waste water is discharged from the refinery to surface waters of the state. All treated waste water is routed to several evaporation ponds which

have large surface areas that are designed to efficiently evaporate water by sunlight and exposure to the changing ambient temperatures. The refinery does have a National Pollutant Discharge Elimination System (NPDES) Permit for storm water discharge and a Ground Water Discharge Permit.

The storm water system is a network of valves, gates, berms, embankments, culverts, trenches, ditches, natural arroyos, and retention ponds that collect, convey, control, treat, and release storm water that falls within or passes through refinery property. Storm water that falls within the processing areas is considered equivalent to process waste water and is sent through the NAPIS, benzene strippers and waste water treatment system for retention in evaporation ponds. Construction began on a new waste water treatment plant in early 2011.

Storm water discharge from the refinery is infrequent due to the arid desert-like nature of the surrounding geographical area. Gallup Refinery maintains a Storm Water Pollution Prevention Plan (SWPPP) that includes Best Management Practices (BMP) for effective storm water pollution prevention and control. The refinery has constructed several berms in various areas and improved outfalls (installed barrier dams equipped with gate valves) to minimize the possibility of potentially impacted runoff leaving the refinery property.

1.3 Site Characteristics

Built in the 1950's, the refinery is located within a rural and sparsely populated section of McKinley County in Jamestown, New Mexico, 17 miles east of Gallup, New Mexico. The setting is a high desert plain on the western slope of the continental divide. The surrounding land is comprised primarily of public lands and is used for cattle and sheep grazing at a density of less than six cattle or 30 sheep per section. The nearest population centers are the Pilot Travel Center (formerly Giant) refueling plaza, the Interstate 40 highway corridor, and a small cluster of residential homes located on the south side of Interstate 40 approximately 2 miles southwest of the refinery (Jamestown). Surface vegetation consists of native xerophytic vegetation including grasses, shrubs, small junipers and some prickly pear cacti. Average yearly rainfall for 2011 is less than 11 inches.

Local topography consists of an inclined down-slope from high ground in the southeast to a lowland fluvial plain in the northwest. The highest point on refinery property is located at the southeast corner boundary (elevation approximately 7,040 feet) and the lowest point is located at the northwest corner boundary (elevation approximately 6,860 feet). The refinery processing facility is located on a flat man-made terrace at an elevation of approximately 6,950 feet.

Surface water in this region consists of man-made evaporation ponds and aeration basins located within the refinery, a livestock watering pond (Jon Myer's Pond) located one mile east of the refinery, two small unnamed spring fed ponds located south of the refinery, and the South Fork of the Puerco River and its tributary arroyos. The various ponds and basins typically contain water consistently throughout the year. The South Fork of the

Puerco River and its tributaries are intermittent and generally contain water only during, and immediately after, the occurrence of precipitation.

The 810 acre refinery property site is located on a layered geologic formation. Surface soils generally consist of fluvial and alluvial deposits; primarily clay and silt with minor inter-bedded sand layers. Below this surface layer is the Chinle Formation, which consists of very low permeability clay stones and siltstones that comprise the shale of this formation. As such, the Chinle Formation effectively serves as an aquiclude. Inter-bedded within the Chinle Formation is the Sonsela Sandstone bed, which represents the uppermost potential aquifer in the region. The Sonsela Sandstone bed lies within and parallels the dip of the Chinle Formation. As such, its high point is located southeast of the refinery and it slopes downward to the northwest as it passes under the refinery. Due to the confinement of the Chinle Formation aquiclude, the Sonsela Sandstone bed acts as a water-bearing reservoir and is artesian at its lower extremis. Artesian conditions exist through much of the central and western portions of the refinery property.

Ground water flow within the Chinle Formation is extremely slow and typically averages less than 10^{-10} centimeters per second (less than 0.01 feet per year). Ground water flow within the surface soil layer above the Chinle Formation is highly variable due to the presence of complex and irregular stratigraphy; including sand stringers, cobble beds, and dense clay layers. As such, hydraulic conductivity may range from 10^{-8} centimeters per second in the clay soil layers located near the surface up to 10^{-2} centimeters per second in the gravelly sands immediately overlying the Chinle Formation. Figure 4 depicts the regional surface water flows are in a westerly direction. Figure 5 depicts surface water bodies and flow lines.

Shallow ground water located under refinery property generally flows along the upper contact of the Chinle Formation. Although the prevailing flow direction is from the southeast and toward the northwest; a subsurface ridge has been identified and is thought to deflect some flow in a northeasterly direction in the vicinity of the refinery tank farm.

2.0 Scope of Activities 2011.

The third quarter ground water sampling was combined with the annual sampling event per approval from NMED and OCD. Sampling began the week of September 26, 2011 and a few days later sampling was suspended due to adverse weather conditions which hampered access to wells located out in the field. Sampling continued in October 2011 and the analytical results are summarized in tables provided in Section 8 (Data Tables 8.1 thru 8.17). First, second, third and annual sampling activities were conducted by Western and fourth quarter sampling activities were conducted by Trihydro Corporation.

Quarterly, semi-annual, annual inspections are summarized in Table 1, Section 10 and copies of inspection sheets and field logs are available in Appendix C. The visual checks and SPH inspections are documented on the forms provided in Appendix C – Well and Field Logs and a summary of SPH recovered is listed on Table 2 in Appendix A. Other requirements per our Ground Water Discharge Permit (GW-032) are as follows:

- Treatment System Monitoring – Monthly Flow Rate – Appendix D
- Testing of Underground Process Waste Water lines – Appendix E
- Spill Reporting – Appendix H
- Perimeter Inspections - Appendix I
- Temporary Land Farm Semi-Annual Sampling – Appendix J

In addition to ground water monitoring, surface water monitoring is also conducted as follows

- Collect daily effluent samples from Benzene Strippers 1 and 2 located by the aeration lagoons and Benzene Stripper 3 located by the crude desalter in the process area. (Method 8021B plus MTBE).
- Collect effluent sample from the NAPIS and an influent sample from Benzene Stripper 3. (Method 8021B plus MTBE).
- Record monthly flow rate readings in gallons per minute (gpm) to Benzene Strippers 1 and 2 (flow leaving the NAPIS).
- Submit estimates of effluent flow from Benzene Stripper 3.
- Submit all sampling and monitoring data on a monthly basis due on the thirtieth day of the following month.

2.1 Monitoring and Sampling Program

The primary objective of ground water monitoring is to provide data which will be used to assess ground water quality at and near the refinery. Ground water elevation data are collected to evaluate ground water flow conditions. The ground water monitoring program for the refinery consists of sample collection and analysis from a series of monitoring, recovery, boundary, process and shallow monitoring wells, including outfalls, evaporation pond locations and surface water monitoring of effluents from the NAPIS to the Benzene Strippers 1, 2 and Benzene Stripper 3 at the crude desalter.

The monitoring network is divided into two investigation areas (East Side and West Side). The sampling frequency, analyses and target analytes vary for each investigation area and well/outfall/evaporation pond location. The combined data from these investigation areas is used to assess ground water quality beneath and immediately down-gradient of the refinery, and evaluate local ground water flow conditions. Samples are collected annually from monitoring wells that have measurable separate phase hydrocarbon (SPH) levels. For wells that are purged dry, samples are collected if recharge volume is sufficient for sample collection within 24 hours. Wells not sampled due to insufficient recharge will be documented in the field log.

Daily field activities, including observations and field procedures, will be recorded for each activity and maintained at the Gallup Refinery. Field logs will include the following information

- Well ID/ Evaporation pond location/ Outfall
- Date
- Start and finish sampling time
- Field team members, including visitors
- Weather conditions
- Daily activities and times conducted
- Observations
- Record of samples collected with sample designations
- Photo log (if needed)
- Field monitoring data, including health and safety monitoring (if needed)
- Equipment used and calibration records, if appropriate
- List of additional data sheets and maps completed
- An inventory of the waste generated and the method of storage or disposal
- Signature of personnel completing the field record

All samples collected for analysis will be recorded in the field report or data sheets. Chain-of-Custody (COC) forms will be completed at the end of each sampling day, prior to the transfer of samples off site, and will accompany the samples during shipment to the laboratory. A custody seal will be affixed to the lid of the shipping container. Copies of all COC forms generated are kept on site.

Field duplicates and trip blanks may be obtained for quality assurance during sampling activities.

2.2 Sampling Methods and Procedures

Each monitoring well is gauged for depth to water (DTW) and or depth to product (DTP) measurement to determine the amount of water to purge. A minimum of two well volumes are purged from each well prior to sampling. If water level is at a minimum or the well has low recharge rate, then the well is allowed to recharge within 24 hours before sample is collected. A pump is lowered slowly into the well to minimize disturbance to a depth of the midpoint of the screened interval of the well. The pump controller is started at a slow rate and gradually increased until water is discharged. Field water quality measurements must stabilize for a minimum of three consecutive readings taken at 2 to 5 minute intervals and are within the following limits before purging will be discontinued and sampling may begin: Dissolved Oxygen (DO) (10%), Specific Conductance (3%), Temperature (3%), pH (+/- 10 mV).

Ground water samples are obtained from each well within 24 hours of the completion of well purging. The samples are transferred to the appropriate, clean, laboratory-prepared containers provided by the analytical laboratory. Sample collection methods are documented in the field monitoring reports. Weather conditions, the volume of ground water purged, the instruments used, and the readings obtained at each interval are recorded on the field-monitoring log.

Well purging and sampling are performed using disposable bailers and/or appropriate sampling pumps where applicable. Some of the wells have dedicated pumps installed where a controller is used to power the submersible pump to purge water. In shallow wells, new disposable bailers are used for each well to hand bail purge water and retrieve water samples.
All purged ground water from monitoring wells is collected in 55 gallon drum(s) and/or a 5 gallon bucket(s) and disposed off in the refinery waste water treatment system upstream of the NAPIS.

Ground water samples intended for metals analysis are submitted to the laboratory as total and dissolved metals samples.

At a minimum, the following procedures are used when collecting/shipping samples.

- Protective eye wear (safety glasses, goggles and or face shield)
- Neoprene, nitrile, or other protective gloves are worn when collecting samples. New disposable gloves are used to collect sample at each sample point.

- All samples collected for chemical analysis are transferred into clean sample containers supplied by the analytical laboratory. The sample container is clearly marked and labeled.

- Ground water samples obtained for dissolved metals analysis are filtered through a 0.45 μm (micrometer) mesh size disposable filter.

- Samples are labeled, sealed, placed in cooler with ice until they are shipped via United Parcel Service (UPS) Red, Federal Express Overnight or personally delivered to the analytical laboratory.

- Standard COC procedures are followed for all samples collected. The COC form and sample request form are shipped inside the sealed storage container to be delivered to the laboratory, signed and dated.

- Field duplicates and trip blanks may be obtained for quality assurance during sampling activities. Trip blanks will accompany laboratory sample bottles and shipping and storage containers intended for volatile organic compound (VOC) analyses. Trip blanks will consist of a sample of analyte free de-ionized water placed in an appropriate sample container. Trip blanks will be analyzed at a frequency of one for each shipping event involving twenty or more samples.

In order to prevent cross-contamination, field equipment that comes into contact with water or soil is decontaminated before each sampling event. The decontamination procedure for the portable pump consists of rinsing/washing the equipment with a detergent water mixture followed by two rinses before use in another well. Any equipment that comes in contact with each well, such as data loggers or tape measure, is decontaminated with a detergent water mixture and rinsed with distilled water before each use.

2.2.1 Equipment

- A submersible bladder pump 2 inch, 115 volt AC to DC converter, Grundfos Redi-flo2 constructed of stainless steel with check valve and 1/2 in. Teflon tubing, adjustable rate controller powered by a gas generator is used to purge ground water from monitoring wells. Equipment is located downwind and at least 20 feet from the well so that exhaust fumes do not cross contaminate the samples.

- Water level instrument used is a Heron Instrument 100 feet DipperT electric water depth tape complying with US GGG-T-106E, EEC, Class II. This instrument measures water level, indication is a steady audible tone and hydrocarbon indication is an erratic audible tone.

- Parameter Instrument – YSI Model 556 MPS Multi Probe System which simultaneously measures DO, conductivity, temperature, and optional pH and

ORP (Oxidation Reduction Potential). As a backup, we also have an IQ Scientific Instrument, Model IQ180GLP which measures pH, DO, TDS (Total Dissolved Solids), Conductivity, salinity, ISE (Ion Selective Electrode), mV (Millivolts) and temperature.

- Disposable Bailers – Polyethylene bailer (1.5 in. X 36 in. overall length (OAL); capacity approximately 1 liter). Individually sealed packaging, single check valve bailer with slide in angle cut nozzle for sample removal. A new bailer is used for each well that requires hand bailing for purging and sample retrieval.

- Field equipment parameter instruments are calibrated to known standards, in accordance with the manufacturers' recommended schedules and procedures. Calibration checks are conducted before use and the instruments recalibrated if necessary. Calibration of equipment is noted in the daily field logs.

- If field equipment becomes inoperable, a properly calibrated replacement instrument is used in the interim. Instrumentation used during a sampling event is recorded in the daily field logs.

2.3 Collection and Management of Investigation Derived Waste

Investigation derived waste (IDW) generated during each ground water sampling event may include purge water, decontamination water, excess sample material, and disposable sampling equipment. All water purged from monitoring wells generated during sampling and decontamination activities is temporarily stored in a labeled 55-gallon drum(s) and/or 5 gallon bucket(s) until disposed of in the refinery waste water treatment system upstream of the NAPIS.

2.4 Collection of Surface Water Samples

At the evaporation ponds, samples are collected near the inlets, and are a grab sample at the pond edge near the inlet. This location is noted in the field notebooks. For outfalls, a grab sample is collected at the pipe end, and recorded.

2.5 Analytical Methods

Ground water and surface water samples collected during the monitoring events are analyzed for the constituents listed in Table 1, Section 9.0. In addition, the NMWQCC standard is used for total and dissolved metals analysis.

2.6 Perimeter Search

The refinery conducts a perimeter search of the refinery property on a bi-monthly basis starting in December 2004. The inspection focuses on hydrocarbon staining or any release that could result in material leaving the property boundary. Western Refining has

prepared an inspection checklist to be completed and signed by an environmental employee conducting the inspection. See Appendix I for copies of the inspection records.

2.7 Remediation Activities

SPH has been found in wells RW-1, RW-5 and RW-6. SPH is recovered from these wells using a submersible bladder pump, or hand-bailing using a disposable 3 foot polyethylene bailer. Table 2A-2D in Appendix A summarizes measurements, volume of product and water purged and also provides YTD product purged from each well. RW-2 is also listed as a recovery well but to date no visible hydrocarbon layer has been observed or measured in this well during quarterly inspections. In 2011, year to date product recovered is calculated to be 0.42 gallons from RW-1. RW-5 has shown a decline in SPH levels beginning in the second quarter of 2009 through 2011, and no indication of a SPH thickness level during quarterly inspections has been observed. Purging continues in RW-5 despite the lack of a visible layer of product in the purged water. RW-6 continues to show a decline in SPH levels from a level of 0.16 feet in the first quarter of 2009 to a level of 0.03 feet in the fourth quarter of 2011. SPH thickness level for the year in RW-6 ranged between 0.02 feet (first quarter) to 0.03 feet fourth quarter for 2011. YTD product recovery for 2011 is calculated to be around 0.22 gallons.

In RW-1 a bladder pump is used to pump out SPH on a quarterly basis into a labeled 55 gallon drum. Visible layer of product on the top is then measured with a tape measure and calculated as best as possible for volume of product recovered. In RW-5 and RW-6, a 3 foot disposable hand bailer is used to extract product and water from the wells. Bailed water is collected in a 5 gallon bucket and the visible layer of floating product is then measured as best as possible for estimated volume. The purged water is then disposed of in the refinery waste water treatment system upstream of the NAPIS.

3.0 Ground Water Elevation Surveys.

Ground water elevation data is collected from the wells listed in Table 1, Section 10.0. Summary of field measurements (DTW, DTP) taken during the quarterly, semi-annual and annual inspections is listed in Section 9. Ground water levels and SPH thickness measurements (from the RW series of wells) are collected quarterly to monitor ground water elevation and product thickness fluctuations over time. Maps were generated in July 2012 using elevation data collected from the survey conducted by DePauli Engineering on June 6, 2011 and from field inspection logs. Resurvey of active wells was required by NMED on June 6, 2011due to elevation discrepancies found on the 2009 Well Data Summary Table. Western submitted resurvey report to NMED on August 1, 2011, and to date survey has not been approved by NMED. Western's response to the Third Notice of Disapproval (NOD) was submitted on June 12, 2012 to NMED. The unapproved elevation data is included in this report in Section 9.

Field notes and measurement data is recorded in field logs from each well for 2011 and is attached as Appendix C. The depth to ground water and SPH thickness levels are measured to the nearest 0.01 ft. The depth to ground water and SPH thickness are recorded relative to the surveyed well casing rim or other surveyed datum. A corrected water table elevation is provided in wells containing SPH by adding 0.8 times the measured SPH thickness to the measured water table elevation (Section 9).

All water/product levels are measured to an accuracy of the nearest 0.01 ft. using an electrical conductivity based meter, the Heron Instruments 100 ft. DipperT electric water depth tape complying with US GGG-T-106E, EEC Class II. After determining the water level the well volume is calculated using the height of the liquid column and the internal cross sectional area of the well. The purge volume is a minimum of two times the well volume.

Ground water and SPH levels are measured in all wells within 48 hours of the start of ground water sampling activities. All manual extraction of SPH and water from recovery wells, observation wells, and collection wells is discontinued for 48 hours prior to the measurement of water and SPH levels.

Figure 6 (Section 11) shows the locations of all the active wells

4.0 Regulatory Criteria

We compare our data to the following most recent regulatory standards (Appendix B) at time of submission of report.

- New Mexico 20NMAC 20.6.2.3103 (NMWQCC). Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
- EPA 40 CFR 141.62. National Primary Drinking Water Regulations (Updated June 8, 2012) (EPA MCL).
- EPA Regional Screening Levels set for Residential Risk-Based Screening Levels (EPA RSL) for Tap Water (Ross) (April 2012).
- NMED total petroleum hydrocarbon (TPH) screening guidelines for Potable Ground water (GW-1), Table 2a. (June 2012).

5.0 Ground water Elevations and Separate-Phase Hydrocarbons

5.1 Potentiometric Map

Figure 8 (Section 11) presents a Potentiometric Elevation Map showing ground water elevations in some of the Chinle/Alluvium wells and contours and Section 10 provides ground water elevation data gathered for 2011. Maps were generated in July 2012 using elevation data from the survey conducted by DePauli Engineering on June 7, 2011 and field inspection logs for 2011.

On June 6, 2011, NMED issued a *"Requirement to Resurvey Ground water Monitoring Wells and Recovery Wells"* stemming from Comment 15d of NMED's May 16, 2011 Notice of Disapproval (NOD) for the Annual Ground Water Monitoring Report submitted for 2009. The Report discussed the need to resurvey all active wells to ensure that accurate ground water elevation data is provided for all future reports. Based on the NOD received by Western on May 16, 2011, Western decided to immediately have the wells surveyed and contracted DePauli Engineering for this service. The well survey was completed by DePauli Engineering on June 7, 2011, and Western submitted information to NMED on August 1, 2011. Western did not receive NMED's *"Requirement to Resurvey Ground water Monitoring Wells and Recovery Wells"* until June 6, 2011 and survey was already 80% complete by this time. The Corrected Well Elevation Survey submitted in Section 9 of this report has not been approved by NMED as of the writing of this report.

6.0 Ground water Monitoring Results

Section 8 contains the Ground Water Analytical Data Tables for 2011. Only constituents above levels of detection are generally described. Bold and highlighted values indicate that a constituent exceeds one or more of the standards listed. Appendix K (Binder 2) contains the laboratory analytical data reports. As Part of our Ground Water Discharge Permit (GW-32), additional reporting is required on an annual basis and is provided in this report. This reporting includes:

- Monitoring of the aeration lagoons, ponds and outfalls between the lagoons and ponds on a quarterly, semi-annual and annual basis. (Section 8)
- Summary of Waste Water Treated and Monthly Flow Rate (Appendix D)
- Summary of Underground Waste Water Lines Tested (Appendix E)
- Summary of All EPA/NMED/RCRA Activity (Appendix F)
- Major Refinery Activities and Events (Appendix G)
- Summary of All Leaks, Spills and Releases (Appendix H)
- Perimeter Inspections (Appendix I)
- Temporary Land Farm Monitoring (Appendix J)

6.1 Monitoring Wells That Have Constituent Levels Above Standards.

<u>BW-1C, 2A, 2B, 2C, 3B, 3C</u>

The boundary wells are sampled on an annual basis. Ground water samples are analyzed for the following constituents: Major cations/anions, 8260B plus MTBE, 8270 plus phenol and NMWQCC metals. The boundary wells were sampled on the following dates:

- BW-1C: 10/28/11
- BW-2A: 10/28/11
- BW-2B: 10/28/11
- BW-2C: 10/28/11
- BW-3B: 10/28/11
- BW-3C: 10/28/11

Fluoride was detected in all of the above listed BW wells during the annual inspection of 2011. BW-1C was detected at 2.6 mg/L; BW-2A at 1.1 mg/L; BW-2B at 1.6 mg/L; BW-2C at 2.0 mg/L; BW-3B at 1.3 mg/L and BW-3C at 1.4 mg/L; all concentration levels are above the NMWQCC standard of 1.6 mg/L and the EPA RSL standard of 0.62 mg/L.

Nitrite (1.7 mg/L) was also detected in BW-1C above the EPA RSL standard of 1.6 mg/L. Phosphorous was also detected above the EPA RSL standard of 3.1E-04 mg/L in BW-2A (0.58 mg/L) and in BW-3B (0.84 mg/L) in 2011. BW-2A (7.2E-03 mg/L) and BW-3B (4.9E-03 mg/L) arsenic levels were above the EPA RSL standard of 4.5E-05 mg/L. Dissolved metals detected in BW-2A, BW-2B, and BW-3B included arsenic and manganese at concentration levels above the EPA RSL and the NMWQCC standards. In BW-3C, bis(2-ethylhexyl)phthalate was detected at 0.014 mg/L which is above the EPA RSL standard of 7.1E-05 mg/L during the annual sampling event.

GWM-1

Ground water samples are collected on a quarterly basis per approved 2010 FWGWMP dated August 25, 2010. Previously, this well was on an annual sampling schedule. Third quarter sampling was combined with the annual sampling event per approval from NMED and OCD. Ground water samples were analyzed for the following parameters: Major cations, anions, 8260B plus MTBE, 8015B and NMWQCC metals. Quarterly water level measurement inspections and sampling were completed on the following dates:

- GWM-1: 2/16/11, 6/15/11, 9/26/11, 12/14/11.
- Weekly checks: 2/24/11, 3/3/11, 3/10/11, 3/17/11, 4/7/11, 4/18/11, 5/12/11, 5/23/11, 6/8/11, 6/15/11, 7/6/11.

BTEX constituents analyzed in this well are as follows: Benzene detected at concentrations above the NMWQCC standard of 0.01 mg/L for all four quarters ranging from 9.5E-03 mg/L first quarter to 8.5E-03 mg/L in the fourth quarter. See Graph 1 in Section 12 for 2006 through 2011 benzene trend.

Data gathered for MTBE levels in this well ranged from a low concentration of 0.047 mg/L in the second quarter to a high detection level of 0.054 mg/L in the fourth quarter. All four quarters were above the EPA RSL standard of 0.012 mg/L. Ethylbenzene also showed concentration levels above the EPA RSL standard of 1.3E-03 mg/L but did not exceed the NMWQCC or the EPA MCL standards. See Graph 2 for MTBE trend in Section 12.

VOC results are as follows for 2011: 1,2,4-Trimethylbenzene detection levels ranged from 0.018 mg/L in the second quarter to a high concentration of 0.019 mg/L during the annual sampling event in 2011. 1-Methylnaphthalene was detected in all four quarters ranging from 0.01 mg/L first quarter to 5.2E-03 mg/L in the fourth quarter. Naphthalene was detected in the second quarter (5.5E-03 mg/L) and third quarter (4.4E-03 mg/L) at levels above the EPA RSL standard of 1.4E-04 mg/L. Fluoride levels were above the NMWQCC standards for all four quarters ranging from 2.8 mg/L in the first quarter to a high of 3.5 mg/L in the third quarter. Chloride levels ranged from a low of 1200 mg/L in the second quarter to a high of 1400 mg/L in the first quarter (Graph 3). Diesel Range Organic (DRO) concentration levels were all above the NMWQCC standard of 0.2 mg/L in all four quarters of 2011 with the highest level recorded in the first quarter at 5.4 mg/L.

Total metals analysis indicated detection levels greater than the NMWQCC and EPA MCL standards for arsenic ranging from 0.097 mg/L fourth quarter to 0.16 mg/L in the first quarter (Graph 4). Barium was detected at 1.5 mg/L in the second and third quarter, iron ranged from 15 mg/L to 17 mg/L for 2011. Lead was detected above the EPA MCL standard of 0.015 mg/L in the fourth quarter at 0.023 mg/L. Manganese levels were also above the NMWQCC standards of 0.2 mg/L for all four quarters.

GWM-2, GWM-3

GWM-2 and GWM-3 are inspected on a quarterly basis. If either one of these wells indicate a water level during a quarterly inspection, the information is reported to NMED and OCD within 24 hours of discovery. Dependent on water level, samples are collected for analysis, and thereafter well is purged dry. Since its installation in 2005, no detection of a water level has been observed until 2008 during a quarterly inspection, water was detected in GWM-2. 24 hour notification was given to NMED and OCD as required. Samples were collected and wells were purged of remaining water. GWM-2 and GWM-3 did not recharge after purging and continued to show no presence of water during future quarterly inspections. In 2010 in the second quarter, inspection of GWM-2 and GWM-3 indicated a water level with GWM-2 showing a water level of 1.5 feet and 0.88 feet in GWM-3. 24 hour notification was given to NMED and OCD of finding. No samples were collected at this time as there was not enough water in each well to collect samples for required analysis. DTW was gauged and recorded on field log and wells were purged of remaining water. Both wells were re-checked on June 4, 2010 and found to be dry. No further action was taken until the next quarterly inspection. Water was detected in the third and fourth quarter of 2010 and notification was given to NMED and OCD within 24 hours of finding. Weekly inspections were done to monitor recharge rate on both wells and ground water samples were collected from both wells in September and October of 2010.

In the first quarter of 2011, during a quarterly inspection both wells were discovered to have a water level and 24 hour notification was given to NMED and OCD of finding. Per NMED's instructions, Gallup Refinery was instructed to take weekly measurements of both wells. Recharge rate remained steady and no significant water level increase was observed in GWM-2 or GWM-3 during this period. Weekly checks were discontinued in July 2011. DTW measurements in GWM-2 fluctuated in the first quarter from 17.48 feet to 15.08 feet. Second quarter DTW measurements remained constant around 14.5 feet and third and fourth quarters remained around 15.7 feet. In GWM-3 first quarter DTW measurements fluctuated from a high of 16.99 feet to a low of 14.4 feet in the first quarter. DTW measurements remained constant around 12.5 feet in the second quarter. Third and fourth quarter DTW measurements increased from 16.39 feet to 14.35 feet in the fourth quarter.

Ground water samples were collected in all four quarters of 2011. Third quarter sampling was combined with the annual sampling event per approval from NMED and OCD. Ground water samples were analyzed for the following parameters: 8021B plus

MTBE, GRO/DRO extended and major cations/anions. Inspections and sampling were performed on the following dates.

- GWM-2: 2/16/11, 6/15/11, 9/26/11, 12/14/11 – Sampled;
- Inspections: 2/24/11, 3/3/11, 3/10/11, 3/17/11, 4/7/11, 4/18/11, 5/12/11, 5/23/11, 6/8/11, 6/15/11, 7/6/11.
- GWM-3: 2/16/11, 6/15/11, 9/26/11, 12/14/11. – Sampled;
- Inspections: 2/24/11, 3/3/11, 3/10/11, 3/17/11, 4/7/11. 4/18/11, 5/12/11, 5/23/11, 6/8/11, 6/15/11, 7/6/11.

In GWM-2 fluoride was detected in the second quarter (3.1 mg/L) and in the third quarter (1.6 mg/L) at concentration levels above the NMWQCC standards. Chloride levels were also above the NMWQCC standard of 250 mg/L in all four quarters ranging from 910 mg/L first quarter to a high of 2200 mg/L in the third quarter. Nitrate levels were also above the applicable standards for the second, third and fourth quarters. Sulfate levels were also above the NMWQCC standards for all four quarters ranging from 660 mg/L in the first quarter to a high of 1200 mg/L in the third quarter.

GWM-3 also had fluoride and chloride concentration levels above the NMWQCC standards for all four quarters. Nitrate levels were also above the applicable standards for the first, third and fourth quarters. Sulfate levels were also the applicable standards for all four quarters of 2011 with third quarter having the highest concentration level of 2500 mg/L. DRO was detected in the second (1.1 mg/L), third (2.7 mg/L) and fourth (1.3 mg/L) quarter at concentration levels above the NMWQCC standard of 0.2 mg/L.

MW-1, MW-2, MW-4, MW-5

The monitoring wells are sampled on an annual basis. Ground water samples are analyzed for the following constituents: Major cations/anions, 8260 plus MTBE and NMWQCC Metals. The monitoring wells were inspected and sampled on the following dates:

- MW-1: 10/6/11
- MW-2: 10/10/11
- MW-4: 10/12/11
- MW-5: 10/10/11

In MW-1 fluoride was detected above the EPA RSL standard of 0.62 mg/L. Nitrates were also above the NMWQCC standard of 10 mg/L. MW-2 had a detectable level of fluoride at 0.79 mg/L. MW-4 had a detectable level of nitrite at 6.8 mg/L. MW-5 had a detectable level of fluoride at 0.79 mg/L during the annual sampling event. Dissolved metals analyses indicate that MW-1 and MW-5 had detectable levels of arsenic above the EPA RSL standard of 4.5E-05 mg/L.

NAPIS-1, NAPIS-2, NAPIS-3, KA-3

NAPIS wells are sampled on a quarterly basis. Third quarter sampling was combined with the annual sampling event per approval from NMED and OCD. Ground water samples are analyzed for the following constituents: Major cations/anions, 8260B plus MTBE, 8270 plus phenol, 8015B, and NMWQCC Metals. NAPIS Wells were sampled on the following dates:

- NAPIS-1: 3/2/11, 6/15/11, 9/27/11, 12/14/11
- Resampled: 1/30/12
- NAPIS-2: 3/2/11, 6/15/11, 9/27/11, 12/14/11
- Resampled: 1/30/12
- NAPIS-3; 3/2/11, 6/15/11, 9/27/11, 12/14/11
- KA-3: 3/2/11, 6/15/11, 9/27/11, 12/14/11

These shallow wells are located around the NAPIS. NAPIS-1 is an up gradient well located on the southeast side and NAPIS-2 is located immediately down gradient on the southwest side of the NAPIS. KA-3 and NAPIS-3 are located on the west side at the north end of the NAPIS. All NAPIS and KA wells are situated at or below ground level to allow vehicle/equipment access into and around the NAPIS.

In NAPIS 1 fluoride was detected at levels above the NMWQCC and EPA RSL standards for the third (1.1 mg/L) and fourth (0.67 mg/L) quarters. Nitrate concentration levels were also above the applicable standards for the third and fourth quarters. For total metals analysis, the following constituents were detected above the applicable standards during the second, third and fourth quarters: arsenic, iron and uranium. Dissolved metals analysis indicated concentration levels of arsenic and uranium above the applicable standards. Fourth quarter sample for method 8270C sample bottle broke in transit and was re-sampled on 1/30/12. No SVOCs were detected in this analysis.

BTEX results indicate the detection of benzene above the NMWQCC standard of 0.01 mg/L in all four quarters of 2011 for NAPIS-2 ranging from 0.04 mg/L in the first quarter to 0.022 mg/L in the fourth quarter. (Graph 5, Section 12) Ethylbenzene concentration levels were also detected above the NMWQCC standard of 0.89 mg/L in NAPIS 2 in the first, second and fourth quarters (Graph 6, Section 12). MTBE was also detected in all four quarters of 2011 for NAPIS 2 ranging from a high of 34 mg/L in the first quarter to a low of 0.28 mg/L in the second quarter. There was an increase of MTBE from November 2009 to December 2011 as shown in Graph 7, Section 12. No MTBE data is available for September 2008. NAPIS 2 had to be re-sampled for general chemistry parameters on 1/30/12 because this analysis was omitted during the fourth quarter sampling on 12/14/11. Fluoride and chloride concentration levels were all above the applicable standards for 2011. Nitrates were above the applicable standard in the third quarter with a concentration level of 80 mg/L. DRO concentration level was detected at 2.8 mg/L first quarter to a high of 3.4 mg/L in the fourth quarter (Graph 8, Section 12). Total metals and dissolved metals analyses indicated the following constituents were above the applicable standards: arsenic, barium, iron and manganese for 2011. The following

SVOCs were at concentration levels above the applicable standards: 1-Methyl-naphthalene, naphthalene and 1,1-Dichloroethene.

In NAPIS 3 chloride levels were above the applicable standard for all four quarters of 2011 and fluoride was at detectable levels in the second quarter at 1.5 mg/L. Nitrates were also at detectable levels in the first, third and fourth quarters. Total metals analysis indicated that the following constituents were above the applicable standards: arsenic, iron, manganese and uranium. Dissolved metals analysis show concentration levels above the applicable standards for the following constituents: Arsenic, manganese and uranium for 2011.

KA-3 also had detectable levels of benzene in the third (0.064 mg/L) and fourth (0.024 mg/L) quarter. Ethylbenzene concentration levels were also at detectable levels in the third (0.011 mg/L) and fourth (4.5E-03 mg/L) quarter. Analysis also indicated detectable levels of MTBE in all four quarters of 2011 ranging from first quarter (0.088 mg/L) to 0.057 mg/L in the fourth quarter. (Graph 9, Section 12.0). DRO concentration levels were detected in fourth quarter at 2.1 mg/L which is above the NMWQCC standard of 0.2 mg/L. The following total metals were detected at concentration levels above the applicable standards: arsenic, iron, manganese and uranium. For dissolved metals only arsenic, manganese and uranium were at detectable levels for 2011. SVOCs detected were 1-Methalnaphthalene (0.035 mg/L) and naphthalene (0.019 mg/L) in the fourth quarter of 2011.

OW-1, OW-10

In the approved 2010 FWGWMP (August 25, 2010), inspection requirements were changed on both of these wells to include sampling on a quarterly basis. Third quarter sampling was combined with the annual sampling event per approval from NMED and OCD. Ground water samples are analyzed for the following constituents: Major cations/anions, 8260B plus MTBE, 8015B and NMWQCC Metals. Ground water samples were taken on the following dates:

- OW-1: 3/1/11, 6/20/11, 10/27/11, 12/15/11
- OW-10, 2/28/11, 6/20/11, 10/26/11, 12/15/11

General chemistry analyses indicated that only nitrate was detected at concentration levels above the applicable standard in the first quarter at 1.1 mg/L in OW-1. Total metals analysis also had concentration levels above the applicable standards for iron in the fourth quarter (2.7 mg/L) and uranium in all four quarters ranging from 0.053 mg/L first quarter to fourth quarter results of 0.046 mg/L. Dissolved metals analysis detected concentration levels for arsenic in the second quarter at 1.4E-03 mg/L and uranium detected in all four quarters were at levels above the applicable standards.

OW-10 had detectable concentration levels of MTBE for all four quarters of 2011 ranging from 0.036 mg/L in the first quarter to 0.058 mg/L in the fourth quarter. Chloride concentration levels ranged from 490 mg/L first quarter to a high of 500 mg/L

in the third quarter. All four quarters had detectable levels of chloride for 2011. Nitrate was detected in the first quarter at 1.1 mg/L. Total metals analysis indicate only uranium was detected at concentration levels above the applicable standards for all four quarters. Dissolved metals analysis results showed that arsenic and uranium concentration levels were above the applicable standards for 2011. 1,1-Dichloroethane was detected in the second quarter at 1.3E-03 mg/L and <0.001 mg/L in the fourth quarter.

OW-11

OW-11 is sampled on an annual basis. Ground water samples are analyzed for the following constituents: Major cations/anions, 8260B plus MTBE, 8270 plus phenol, and NMWQCC Metals. Well was sampled on the following date:

- 10/26/11

Fluoride was detected at 2.2 mg/L which is above the NMWQCC standard of 1.6 mg/L and sulfate concentration level was detected at 940 mg/L for 2011. Uranium was also detected in OW-11 at 0.21 mg/L above the NMWQCC standard of 0.03 mg/L. Dissolved metals analysis also indicated uranium levels at 0.22 mg/L.

OW-13, OW-14, OW-29, OW-30

These wells are sampled on a quarterly basis. Third quarter sampling was combined with the annual sampling event per approval from NMED and OCDE. Ground water samples are analyzed for the following constituents: 8260B plus MTBE. These wells were sampled quarterly on the following dates:

- OW-13: 2/24/11, 6/20/11, 10/25/11, 12/13/11
- OW-14: 2/24/11, 6/20/11, 10/24/11, 12/13/11
- OW-29: 2/24/11, 6/20/11, 10/24/11, 12/13/11
- OW-30: 2/24/11, 6/20/11, 10/24/11, 12/15/11

OW-14 in this group of wells has shown a steady increase of benzene concentration levels beginning in October 2006. Benzene was detected in October 2006 at 3.4E-03 mg/L and as of December 2011 benzene detection level is at 1.5 mg/L. Trend of benzene levels over the years can be seen on Graph 10, Section 12. Ethylbenzene was also detected in all four quarters of 2011 ranging from first quarter (0.042 mg/L) to fourth quarter (0.036 mg/L) which are at levels above the applicable standards. Trend of ethylbenzene is located on Graph 11, Section 12. Data gathered for MTBE indicate concentration levels above the applicable standards for all four quarters of 2011. Concentration levels ranged from 1.4 mg/L first quarter to a high of 1.6 mg/L in the second quarter. (Graph 11, Section 12). 1-Methylnaphthalene was detected in all four quarters of 2011 ranging from 0.019 mg/L to 0.021 mg/L in the fourth quarter which are at concentrations levels above the EPA RSL applicable standard of 9.7E-04 mg/L.

MTBE was detected in all four quarters of 2011 for OW-29. Concentration levels ranged from 0.3 mg/L in the first quarter to a level of 0.49 mg/L in the fourth quarter.

In OW-30 MTBE was detected in all four quarters of 2011 which were at levels above the applicable standards. The results are as follows: First quarter 1.1 mg/L, second quarter 1.3 mg/L, third quarter 1.3 mg/L and fourth quarter 1.3 mg/L.

SMW-2, SMW-4

SMW-2 and SMW-4 are sampled on an annual basis. Ground water samples were analyzed for the following constituents: Major cations/anions, 8260B plus MTBE, 8015B, NMWQCC metals. Annual sampling was conducted on the following dates:

- SMW-2: 10/12/11
- SMW-4: 10/10/11

SMW-2 is located on the southeast corner of the closed LTU and SMW-4 is located on the north side of the closed LTU. Annual sampling resulted in detection levels of chloride (2600 mg/L) and sulfate (1600 mg/L) in 2011 which were above the applicable standards. Total metals indicated detectable levels of arsenic (5.2E-03 mg/L) and chromium (0.11 mg/L) in 2011. Dissolved metals analysis indicated detectable levels of arsenic (6.4E-03 mg/L) and uranium (0.11 mg/L) during the annual sampling. Trace levels of diethyl phthalate was first detected in 2008 at a concentration of 5.7E-04 mg/L and again in 2010 at 1.89E-03 mg/L. In 2011 method 8270C analysis was not a requirement for the annual sampling. In the past 1,4-dioxane was found at detectable levels during the first and third quarters of 2008.

SMW-4 annual sampling analysis indicated detectable levels of fluoride (1.1 mg/L) and nitrite (1.3 mg/L) in 2011. Total metals analysis indicated levels of arsenic (2.9E-03 mg/L) and chromium (0.058 mg/L) in 2011. Uranium was the only dissolved metal that had a detectable concentration level of 0.032 mg/L.

6.2 Wells with Constituent Levels below Standards

BW-1A, BW-1B, BW-1C

The boundary wells are sampled on an annual basis. Ground water samples were analyzed for the following constituents: Major cations/anions, 8260B plus MTBE, 8270 plus phenol and NMWQCC Metals. The boundary wells were inspected and sampled on the following dates:

- BW-1A: 10/28/11
- BW-1B: 10/28/11
- BW-1C: 10/28/11

BW-1A and BW-1B DTW measurements indicated that both of these wells were dry during the 2011 annual sampling event. No samples were collected from BW-1A and BW-1B.

BW-1C continues to show non-detectable levels of BTEX plus MTBE for the past 5 years. General chemistry parameters had concentration levels below the applicable standards for 2011 except for fluoride and nitrite. Concentration levels of total and dissolved metals for 2011 were all below the applicable standards. No VOCs were detected in this well.

BW-2A, BW-2B, BW-2C

The boundary wells are sampled on an annual basis. Ground water samples were analyzed for the following constituents: Major cations/anions, 8260B plus MTBE, 8270 plus phenol and NMWQCC Metals. The boundary wells were inspected and sampled on the following dates:

- BW-2A: 10/28/11
- BW-2B: 10/28/11
- BW-2C: 10/28/11

All three wells in this group have shown non-detectable levels of BTEX plus MTBE for the past 5 years. General chemistry parameters had concentration levels below the applicable standards for 2011 except for fluoride and phosphorous. Total metals concentration levels are all below the applicable standards except for arsenic (7.2E-03 mg/L) in BW-2A and manganese (0.26 mg/L) in BW-2B. Dissolved metals analysis were all below the applicable standards except for arsenic (6.5E-03 mg/L) in BW-2A, and manganese (0.25 mg/L) in BW-2B. No VOCs were detected in all three wells.

BW-3A, 3B, 3C

The boundary wells are sampled on an annual basis. Ground water samples are analyzed for the following constituents: Major cations/anions, 8260B plus MTBE, 8270 plus phenol and NMWQCC Metals. The boundary wells were inspected and sampled on the following dates:

- BW-3A: 10/28/11
- BW-3B: 10/28/11
- BW-3C: 10/28/11

BW-3A DTW measurement indicated no presence of water during the 2011 annual sampling event and therefore no samples were collected for this well. BW-3B and BW-3C continue to show non-detectable concentration levels of BTEX plus MTBE for the past 5 years. General chemistry parameters had concentration levels below the applicable standards for 2011 except for fluoride (1.3 mg/L) and phosphorous (0.84 mg/L) in BW-3B and fluoride (1.4 mg/L) in BW-3C. Concentration levels of total and dissolved metals

for 2011 were all below the applicable standards except for arsenic (4.9E-03 mg/L) in BW-3B and BW-3C (1.7E-03 mg/L). No VOCs were detected in BW-3B.

GWM-2, GWM-3

GWM-2 and GWM-3 are inspected on a quarterly basis. If either one of these wells indicate a water level during a quarterly inspection, the information is reported to NMED and OCD within 24 hours of finding. If there is a sufficient water level, samples are then collected and analyzed for 8260B plus MTBE, 8015B, and major cations/anions. Quarterly water level measurement inspections and sampling were completed on the following dates:

- GWM-2: 2/16/11, 6/15/11, 9/26/11, 12/14/11 - Sampled
- GWM-2: 2/24/11, 3/3/11, 3/10/11, 3/17/11, 4/7/11, 4/18/11, 5/12/11, 5/23/11, 6/8/11, 6/15/11, 7/6/11
- GWM-3: 2/16/11, 6/15/11, 9/26/11, 12/14/11 - Sampled
- GWM-3: 2/24/11, 3/3/11, 3/10/11, 3/17/11, 4/7/11, 4/18/11, 5/12/11, 5/23/11, 6/8/11, 6/15/11, 7/6/11

In 2011 quarterly inspections have indicated the presence of water in all four quarters for both GWM-2 and GWM-3. In the first quarter Gallup Refinery was instructed by NMED to conduct DTW measurements to assess water recharge rate in each of these wells. Bi-weekly measurement were continued into the third quarter and subsequently discontinued after no-significant water level increase was observed during this period. In each quarter, DTW measurement was taken and samples were collected after which, wells were purged dry of remaining water.

GWM-2 had no detectable BTEX constituents for 2010 and 2011 but did have trace levels of MTBE with a concentration level of 2.7E-03 mg/L in the fourth quarter of 2011. Major cations included calcium, magnesium, potassium and sodium were all at concentration levels below the applicable standards.

GWM-3 had no detectable BTEX constituents for 2010 and 2011. MTBE was non-detectable for the third and fourth quarters but did have a traceable level in the first and second quarter. Major cations included calcium, magnesium, potassium and sodium were all at concentration levels below the applicable standards.

MW-1, MW-2, MW-4, MW-5

The monitoring wells (MW) are sampled on an annual basis. Ground water samples were analyzed for the following constituents: Major cations/anions, 8260B plus MTBE and NMWQCC Metals. The monitoring wells were inspected and sampled on the following dates:

- MW-1: 10/6/11
- MW-2: 10/10/11

- MW-4: 10/12/11
- MW-5: 10/10/11

BTEX plus MTBE and method 8015B analysis indicated non-detectable levels for all four wells during the annual sampling event. In MW-1 chloride, bromide, phosphorous, and sulfate concentration levels were all below the applicable standards. Total and dissolved metals analysis show all constituent levels were below the applicable standards. Fluoride and Nitrates were above the applicable standards. Method 8260B analysis, were all at non-detectable levels.

OW-1 and OW-10

In the approved 2010 FWGWMP (August 25, 2010), inspection requirements were modified on both of these wells to include sampling on a quarterly basis. Third quarter sampling was combined with the annual sampling event per approval from NMED and OCD. Ground water samples are analyzed for the following constituents: Major cations/anions, 8260B plus MTBE, 8015B and NMWQCC Metals. Ground water samples were taken on the following dates:

- OW-1: 3/1/11, 6/20/11, 10/27/11, 12/15/11
- OW-10: 2/28/11, 6/20/11, 10/26/11, 12/15/11

BTEX results indicated non-detectable concentration levels for both OW-1 and OW-10 for 2011, however MTBE concentration levels continue to increase from first quarter 2010 (0.033 mg/L) to fourth quarter 2011 results of 0.058 mg/L. OW-1 and OW-10 general chemistry parameters were non-detect except for high levels of chloride (490 mg/L and 500 mg/L) in the first and third quarter of 2011. Total metals analysis was non-detect for OW-1 except for iron and uranium and for OW-10 only uranium 0.058 mg/L had a concentration level above the applicable standard for all four quarters of 2011. Dissolved metals analysis was non-detect for OW-1 and OW-10 except for concentration levels of uranium above the applicable standards. No SVOCs were detected in OW-1. In the second quarter of 2011, trace amounts of 1,1-Dichloroethane was detected at a concentration level of 1.3E-03 mg/L and fourth quarter results indicate no detectable levels of SVOCs for 2011 in OW-10.

OW-11

OW-11 is sampled on an annual basis. Ground water samples are analyzed for the following constituents: Major cations/anions, 8260B plus MTBE, 8270 plus phenol, and NMWQCC Metals. Well was sampled on the following date:

- 11/26/11

BTEX plus MTBE concentrations levels indicated non-detect for all four quarters. General chemistry results indicated concentration levels of chloride at 95 mg/L, bromide

at 0.19 mg/L and nitrate at 0.77 mg/L which are at concentration levels below the NMWQCC standards. Total metals analysis indicated a detectable level of barium (7.7E-03 mg/L) and manganese (0.016 mg/L) and selenium (0.003 mg/L) which are below the applicable standards. Dissolved metals also indicated concentration levels of the following which were below the applicable standards: Arsenic (0.002 mg/L), barium (7.5E-03 mg/L), calcium (11mg/L), magnesium (1.2 mg/L), manganese (0.016 mg/L), potassium (1.6 mg/L), selenium (3.4E-03 mg/L), sodium (640 mg/L) and zinc (0.11 mg/L).

OW-12

OW-12 is sampled on an annual basis. Ground water samples are analyzed for the following constituents: 8260B plus MTBE. This well was sampled on the following date:

- 10/26/11

BTEX plus MTBE concentration levels indicated non-detect for all four quarters of 2011.

OW-50, OW-52

OW-50 and 52 are sampled on a quarterly basis. Third quarter sampling was combined with the annual sampling event per approval from NMED and OCD. Ground water samples are analyzed for the following constituents: 8260B plus MTBE, 8270 plus phenol, 8015B, General Chemistry and NMWQCC Metals. Wells were sampled on the following dates:

- OW-50: 3/1/11, 6/20/11, 10/25/11, 12/15/11
- OW-52; 3/1/11, 6/20/11, 10/25/11, 12/13/11

Both of these wells were installed in October 2009 to monitor the possible migration of MTBE from up-gradient wells OW-14, 29 and 30. 2011 analyses of BTEX and MTBE parameters continue to show non-detectable concentration levels for 2010 and 2011. General chemistry parameters and DRO/GRO all indicate concentrations below the applicable standards. In OW-50 total and dissolved metals all indicate concentration levels to be below the applicable standards except for the metal arsenic (0.003 mg/L) which was detected in the first quarter. Arsenic was also above the detectable level in all four quarters for dissolved metals analysis and manganese was above the applicable standard in the first quarter. OW-52 dissolved metals analyses indicate concentration levels below the applicable standards for 2011, except for manganese which was above the applicable standards in the first quarter. Trace level of bis(2-ethylhexyl)phthalate was detected in OW-50 during the first quarter 2010 sampling at 0.011 mg/L and also benzoic acid was detected at 0.02 mg/L in the same period. Subsequent sampling results indicate non-detectable concentration levels for the remainder of 2010 and 2011.

PW-2, PW-3, PW-4

These process/production wells are on a 3 year sampling schedule beginning in 2008 for PW-2 and PW-3 and a start year of 2007 for PW-4. PW-3 sampling schedule was changed to annual sampling in 2009 due to the detection of 2-Methylnaphthalene (0.032 mg/L) during the annual sampling for 2007 which was conducted on 1/1/08. Pursuant to NMED's Comment 12 of the May 16, 2011 NOD (May 2011 NOD) for the Annual Ground Water Monitoring Report 2009, annual sampling is required for PW-3 until otherwise directed by NMED. Ground water samples are analyzed for the following constituents: 8260B plus MTBE, 8270 plus phenols, NMWQCC Metals, cyanide and nitrates. The wells were sampled on the following dates:

- PW-2: 10/26/11, 12/15/11
- PW-3: 10/31/11
- PW-4: 7/28/10

Annual sampling for PW-2, indicate non-detectable concentration levels for BTEX plus MTBE constituents. Total and dissolved metals analyses indicate non-detectable concentration levels except for arsenic which was above the EPA RSL standard of 4.5E-05 mg/L. Tetrachloroethene (PCE) was detected for the first time in the fourth quarter with a concentration level of 7.3E-03 mg/L. Detection of PCE is suspect and may have been detected from possible contamination from the lab or equipment, as the field blank submitted with this sample indicated the presence of toluene at a concentration level of 1.7E-03 mg/L. PW-2 was re-sampled on 12/15/11 to verify the presence of a VOC. Analysis indicated no detectable concentration levels of VOCs or SVOCs for PW-2.

PW-3 sampling schedule has been changed from every three years to annual due to the detection of 2-Methylnaphthalene and phenol during the annual sampling in 2007 which was conducted on 1/1/08. 2-Methylnaphthalene was detected in PW-3 at a concentration level of 0.032 mg/L. PW-3 was re-sampled in 2008 along with a blind duplicate and results were non-detect. In 2010 lab analysis indicated non-detect for method 8260B and 8270 parameters. In 2010 and 2011, analyses for VOCs and SVOCs all indicated no detectable concentration levels. PW-3 will continue to be on an annual sampling schedule until otherwise directed by NMED.

BTEX plus MTBE analytical results indicate non-detectable concentration levels for PW-3. Total and dissolved metals analyses were at non-detectable concentration levels except for the metal arsenic (3.5E-03 mg/L).

The next scheduled annual sampling for PW-4 is in 2013. For background information 2010 sampling event is presented as follows. 2010 annual sampling results indicated non-detectable levels of BTEX plus MTBE constituents. Anions indicated a detectable level of nitrate at 0.14 mg/L which is below the NMWQCC standard of 10 mg/L. Total metals had detectable concentration levels of iron at 0.23 mg/L, manganese 4.40E-03

mg/L and uranium at 2.1E-03 mg/l which are at levels below the NMWQCC applicable standards.

RW-1, RW-2, RW-5, RW-6

These recovery wells are monitored on a quarterly basis for depth to water measurements, and depth to product measurements where applicable. Product recovery is also done on a quarterly basis on RW-1, RW-5 and RW-6. Per approved 2010 FWGWMP (August 25, 2010), these series of wells are required to be sampled on an annual basis. The recovery wells are sampled for the following constituents: Major cations/anions, VOC, SVOC and NMWQCC metals. The wells were inspected and sampled on the following dates.

- RW-1: 3/9/11, 6/27/11, 10/3/11, 11/8/11
- RW-2: 3/9/11, 6/27/11, 10/3/11. 11/8/11
- RW-5: 3/9/11, 6/27/11, 10/4/11, 11/8/11
- RW-6: 3/9/11, 6/27/11, 10/4/11, 11/8/11

Quarterly inspections for RW-1 include product recovery which is conducted using a portable 2-inch bladder pump which is then lowered into the well. Purge water is collected in a 55 gallon drum or a 5 gallon bucket and the top visible layer of hydrocarbon is measured in inches before it is disposed of upstream of the NAPIS. Calculations are an estimated value based on the sampler's field notes. The purged water is disposed of upstream of the NAPIS. RW-1 has shown a steady decrease of hydrocarbon levels from 2005 to 2011. Total year to date hydrocarbon recovery for 2011 is 0.42 gallons compared to 2005 where 431.5 gallons of hydrocarbons was recovered from RW-1. RW-2 has not shown any hydrocarbon levels during quarterly inspections and therefore no product recovery is done at this well. RW-5 has shown a steady decrease of hydrocarbon levels compared to 2007 where 7.25 gallons was recovered and in 2011 there was no measurable product to recover. RW-6 has also shown a decrease in product recovery compared to 2007 where 12.28 gallons of product was recovered and 0.22 gallons of product was estimated to have been recovered from RW-6 in 2011. In RW-5 and RW-6, water is purged using a 3 foot disposable bailer. Purge water is collected in a 5 gallon bucket and disposed of upstream of the NAPIS. Visible layer of hydrocarbon is measured as best as practical in inches and recorded in the field log. Calculations are based on estimated values. 2011 and 2010 inspections in RW-5 indicate there is no measureable hydrocarbon layer in this well. Total year to date hydrocarbon recovery for 2011 in RW-6 was 0.22 gallons compared to 2010 year to date total of 0.15 gallons.

Annual sampling was conducted for the first time for the RW series of wells in 2011 as a new requirement to the 2010 FWGWMP. BTEX plus MTBE analyses indicated concentration levels above the applicable standards for RW-1 and RW-2. In RW-5 benzene, ethylbenzene, total xylene and MTBE all had concentration levels above the applicable standards. In RW-6, concentration levels of benzene, and ethylbenzene were the only two that were above the applicable standards. In RW-1, chloride, nitrite, and nitrate were above the applicable standards and in RW-2 and RW-5, only nitrite and

nitrate exceeded the applicable standard. Total metals analyses indicated concentration levels above the applicable standards for the following: arsenic, barium, iron, manganese and mercury for the RW wells. Dissolved metals analyses indicated concentration levels above the applicable standards for arsenic, barium, iron and manganese. Method 8260B and 8270C analyses indicated concentration levels above the applicable standards for 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, aniline, and phenol.

6.3 Evaporation Ponds, Influents, Effluents, Boiler Water to EP-2 and Leak Detection Units – Constituent Levels.

Evaporation Ponds 1 through 12B

In 2011, the approved FWGWMP (August 25, 2010) added ponds 9a, 11, 12A and 12B to the monitoring schedule as well as sampling frequency was changed to semi-annual. Prior to the approved 2010 FWGWMP, the ponds were sampled on an annual basis. Evaporation pond water samples are analyzed for the following constituents: General Chemistry, 8260B plus MTBE, NMWQCC metals, 8270 plus phenol, BOD, COD, E-Coli Bacteria. The ponds were sampled on the following dates:

- EP-1 thru EP-12B: 5/23/11, 5/24/11, 11/1/11, 11/2/11

EP-1 thru EP-12B had detectable levels of fluoride, chloride and sulfates above the NMWQCC standards. In EP-1thru EP-4, BOD and COD analyses indicate concentration levels above the NMWQCC general requirement standards. EP-5 thru EP-12B had detectable levels of COD for 2011. Total metals analyses indicate the following metals had concentration levels above the applicable standards for 2011: arsenic, chromium, iron, manganese and mercury. Dissolved metals analyses also indicated the following had concentration levels above the applicable standards: arsenic, iron, manganese and selenium.

Method 8270 analysis detected concentration levels of aniline in EP-1 thru EP-6 and in EP-11 thru EP-12B at concentrations above the EPA RSL standard of 0.012 mg/L. Bis(2-ethylhexyl)phthalate was detected in EP-2, EP-6, EP-7, EP-9a, and EP-11 at concentration levels above the EPA RSL standard of 7.2E-05 mg/L. 2, 4-Dimethylphenol was detected in EP-1 above the EPA RSL standard of 0.27 mg/L and trace levels detected in EP-2 thru EP-5 and in EP-11, EP-12A, and EP-12B. Phenol was also detected in EP-1 thru EP-8 and also in EP-11, EP-12A and EP-12B. No VOCs were detected in EP-1 thru EP-12B.

Influents: Infl to AL-1; Infl to AL-2; Infl to EP-1

These outfalls are sampled on a quarterly basis. Boiler Water to Evaporation Pond 2 (EP-2) is sampled on a semi-annual basis. Outfalls are analyzed for the following constituents. Influent to AL-1 and AL-2: 8260B plus MTBE, BOD, COD, Chloride, 8015B, pH and Phenol. Influent to EP-1: Major cations/anions, pH, BOD, COD, 8260B

plus MTBE, 8270 plus phenol, 8015B, and NMWQCC Metals. BW to EP-2 is sampled for major cations and major anions. Influents were sampled on the following dates:

- Infl to AL-1: 3/9/11, 6/16/11, 9/28/11, 12/14/11
- Infl to AL-2: 3/9/11, 6/16/11, 9/28/11, 12/14/11
- Infl to EP-1: 3/9/11, 6/15/11, 9/28/11, 12/15/11
- BW to EP-2: 5/23/11, 11/1/11

Infl to AL-1 BTEX analyses indicated concentration levels above the applicable standards for benzene, toluene, ethylbenzene and total xylene. MTBE analysis indicated non-detectable levels for 2011. Infl to AL-2 had detectable levels of benzene and ethylbenzene in the third and fourth quarters of 2011.

General chemistry parameters analyzed for Infl to AL-1 and AL-2 detected the following: Chloride was detected in Infl to AL-1 with first quarter results at 350 mg/L and in the fourth quarter at 1000 mg/L. Ph was also outside of the range specified by NMWQCC in Infl to AL-1, with pH levels ranging from 8.61 in the first quarter to 9.81 in the fourth quarter. DRO was also detected above the NMWQCC applicable standards ranging from 1600 mg/L in the first quarter to 1000 mg/L in the fourth quarter. BOD and COD concentration levels were both above the applicable standards for all four quarters of 2011.

The following VOCs were detected in Infl to AL-1 at concentration levels above the NMWQCC and the EPA RSL applicable standards: 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, naphthalene, 1-Methylnaphthalene, and 2-Methylnaphthalene were detected in the first, second, third and fourth quarters of 2011. 4-Isopropyltoluene was detected for the first time in the fourth quarter of 2011 at a concentration level of 0.011 mg/L. Acetone, 2-Butanone, carbon disulfide, isopropylbenzene, n-Butylbenzene, n-Propylbenzene and sec-Butylbenzene were all detected at concentration levels below the applicable standards for 2011.

The following SVOCs were detected in Infl to AL-1 at concentration levels above the NMWQCC and the EPA RSL applicable standards: Aniline, 2,4-Dimethylphenol, 2-Methylnaphthalene, naphthalene and phenol were detected in 2011. 1-Methylnapthalene was detected for the first time in the fourth quarter at a concentration level of 0.062 mg/L which is greater than the NMWQCC standard of 0.005 mg/L. 2-Methylphenol and 3+4-Methylphenol were all detected at concentration levels below the applicable standards for 2011.

The following VOCs were detected in Infl to AL-2 at concentration levels above the NMWQCC and the EPA RSL applicable standards: 1,2,4-Trimethylbenzene, naphthalene, 1-Methylnaphthalene, and 2-Methylnaphthalene. 1,3,5-Trimethylbenzene, acetone, 2-Butanone and n-Propylbenzene were all detected at concentration levels below the applicable standards for 2011.

The following SVOCs were detected in Infl to AL-2 at concentration levels above the NMWQCC and the EPA RSL applicable standards: Aniline, 2,4-Dimethylphenol, 2-Methylnaphthalene, naphthalene and phenol were detected in 2011. 2-Methylphenol and 3+4-Methylphenol were all detected at concentration levels below the applicable standards for 2011.

In Infl to EP-1, BTEX analyses detected trace levels of toluene and total xylene in the third and fourth quarter of 2011. MTBE concentration levels were at non-detectable levels for 2011. General chemistry parameters detected above the applicable standards were fluoride, chloride and sulfate. Nitrite and nitrate levels were also above the applicable standards as well as DRO. BOD and COD concentration levels were above the applicable standards for all four quarters of 2011. Total metals analyses detected concentration levels of arsenic, iron, and mercury. Barium, chromium, copper, manganese, selenium, uranium and zinc all had concentration levels below the applicable standards for 2011. Dissolved metals analyses detected concentration levels of arsenic and iron in all four quarters of 2011. Manganese had a concentration level above the applicable standard in the second quarter of 2011.

The following VOCs were detected in Infl to EP-1 at concentration levels above the NMWQCC and the EPA RSL applicable standards: 1,2,4-Trimethylbenzene, naphthalene, 1-Methylnaphthalene, and 2-Methylnaphthalene in the fourth quarter of 2011. Acetone, 2-Butanone and 1,3,5-Trimethylbenzene were all detected at concentration levels below the applicable standards for 2011.

The following SVOCs were detected in Infl to EP-1 at concentration levels above the NMWQCC and the EPA RSL applicable standards: Aniline, 2, 4-Dimethylphenol, and phenol were detected in 2011. 2-Methylphenol and 3+4-Methylphenol were all detected at concentration levels below the applicable standards for 2011.

Effluents: AL-2 to EP-1; Pilot Effluent, NAPIS Effluent

The effluents are sampled on a quarterly basis. Pilot Effluent is sampled for the following constituents: 8260B plus MTBE, 8015B, BOD, COD and NMWQCC Metals. NAPIS Effluent is sampled for the following constituents: General chemistry, 8260B plus MTBE, 8270 plus phenol, 8015B and NMWQCC Metals. AL-2 to EP-1 is sampled for the following constituents: Major cations/anions, 8260B plus MTBE, 8270 plus Phenol, 8015B and NMWQCC Metals. The effluents were sampled on the following dates:

- AL-2 to EP-1: 3/8/11, 6/15/11, 9/28/11, 12/14/11
- Pilot Effluent: 3/9/11, 6/16/11, 9/29/11, 12/14/11
- NAPIS Effluent: 3/8/11, 6/15/11, 9/28/11, 12/14/11

In Al-2 to EP-1, concentration levels for BTEX and MTBE constituents were all at non-detectable and/or below the applicable standards for 2011, except for benzene (6.1E-03

mg/L) which was above the EPA RSL standard of 3.9E-04 mg/L in the third quarter. General chemistry parameters that were above the applicable standards were as follows: fluoride, chloride, nitrite, nitrate and sulfate. DRO concentration levels were above the applicable standard for all four quarters ranging from 9.9 mg/L in the first quarter to 9.8 mg/L in the fourth quarter.

Total metals analysis detected concentration levels above the applicable standards for the following: arsenic, iron, manganese and mercury. Dissolved metals analysis detected concentration levels above the applicable standards for the following: arsenic, iron and manganese for AL-2 to EP-1 location.

Pilot Effluent had no detectable concentration levels for BTEX and MTBE for all four quarters of 2011. DRO concentration levels were above the applicable standard for all four quarters ranging from 7.0 mg/L in the first quarter to 3.8 mg/L in the fourth quarter. BOD and COD concentration levels were above the applicable standards for all four quarters for 2011. Total metals analysis indicated detectable concentration levels above the applicable standards for the following: arsenic and iron. Arsenic was the only metal with a concentration level above the applicable standard for the dissolved metals list in all four quarters of 2011. No VOCs were detected in all four quarters of 2011.

NAPIS Effluent had detectable concentration levels above the applicable standards for benzene ranging from first quarter of 8.1 mg/L to fourth quarter at 19 mg/L; toluene at 13 mg/L first quarter to 20 mg/L in the fourth quarter; ethylbenzene at 0.89 mg/L first quarter to 1.4 mg/L in the fourth quarter; total xylene ranged from 5.2 mg/L in the first quarter, to 8.9 mg/L in the fourth quarter. MTBE was at non-detectable levels for all four quarters of 2011. General chemistry parameters that were above the applicable standards were as follows: fluoride, chloride, nitrite, nitrate and sulfate. Bromide was also detected at concentration levels below the applicable standards. DRO concentration levels were above the applicable standard ranging from 23 mg/L in the first quarter to 140 mg/L in the fourth quarter. Total metals analyses indicated concentration levels above the applicable standards for the following: arsenic, iron, manganese and mercury. Dissolved metals analyses also detected concentration levels above the applicable standards for the following: arsenic, iron, manganese and selenium. VOCs with concentration levels above the applicable standards for all four quarters are as follows: 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene and naphthalene. SVOCs with concentration levels above the applicable standards are as follows: aniline, bis(2-ethylhexyl)phthalate, 2,4-Dimethylphenol, 2-Methylnaphthalene, naphthalene, phenol, pyridine and 1-Methylnaphthalene were detected for the first time in the third quarter.

Leak Detection Units (LDU): East LDU, West LDU, Oil Sump LDU

The LDU or otherwise known as the NAPIS secondary containment units identified as East LDU, West LDU and Oil Sump LDU, are a new addition to the approved 2010 FWGWMP (August 25, 2010). These units are sampled and inspected on a quarterly basis. Third quarter sampling was combined with the annual sampling event per approval

from NMED and OCD. LDUs are sampled for the following constituents: 8021B plus MTBE, 8015B and NMWQCC Metals. The units were sampled on the following dates:

- East LDU: 3/3/11, 6/15/11, 9/26/11, 12/14/11
- West LDU: 3/3/11, 6/15/11, 9/26/11, 12/14/11
- Oil Sump LDU: 3/3/11, 6/15/11, 9/26/11, 12/14/11

Concentration levels of BTEX were above the NMWQCC standards for all three LDU units for 2011. MTBE concentration levels were all at non-detectable levels for 2011 for all units. DRO concentration levels were above the applicable standards for all three units for 2011. Concentration levels above the applicable standards for metals analyses included arsenic, chromium, iron, lead and manganese for the East LDU; arsenic, barium, chromium, iron, lead, manganese and mercury for the West LDU; arsenic, barium, chromium, copper, iron, lead, and manganese, mercury and zinc for the Oil Sump LDU. Method 8260B analysis indicated concentration levels above the applicable standards for 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, naphthalene, and 2-Methylnaphthalene in the second quarter for the East LDU; 1,2,4-Trimethylbenzene was detected in the second quarter for both the West LDU and the Oil Sump LDU.

Boiler Water to Evaporation Pond 2 (BW to EP-2)

BW to EP-2 is sampled on a semi-annual basis and sampled for the following constituents: Major cations and anions. BW to EP-2 was sampled on the following dates:

- BW to EP-2: 5/23/11, 11/1/11

BW to EP-2 had detectable concentration levels of fluoride in the first and second semi-annual sampling event (0.75 mg/L and 0.9 mg/L) which are at levels below the NMWQCC standard of 1.6 mg/L but over the EPA RSL standard of 0.62 mg/L. Sulfate levels were detected at 1600 mg/L and 1800 mg/L above the NMWQCC standard of 600 mg/L for 2011. Bromide and nitrate also was detected at concentration levels below the applicable standards for 2011. Calcium, magnesium, potassium and sodium were detected in BW to EP-2 for 2011.

Evaporation Pond 2 Inlet (EP-2 Inlet)

EP-2 Inlet is sampled on an annual basis and sampled for the following constituents: 8260B plus MTBE, 8015B, BOD, COD and TDS. EP-2 Inlet was sampled on the following date:

- EP-2 Inlet: 10/31/11

Concentration levels of BTEX and MTBE were all below the NMWQCC standards. DRO was detected at 39 mg/L and TDS was detected at 6730 mg/L. BOD and COD concentration levels were above the applicable standards at 410 mg/L for BOD and 1520

mg/L for COD. Method 8260B analysis all indicated concentration levels at or below the applicable standards for 2011.

6.4 Deviations from OCD Groundwater Discharge Permit GW-032

The approved 2010 FWGWMP (August 25, 2010) guidelines include location additions as well as changes to sampling frequencies for 2011. The following sampling locations were added to the approved 2010 FWGWMP; EP-9a, EP-11, EP-12A and EP-12B. Sampling frequency was also changed to semi-annual versus annual. Inspection guidelines for OW-1 and OW-10 were also changed to include quarterly sampling. Three leak detection units located at the NAPIS were also added to sample and inspect on a quarterly basis. The four RW wells, listed as hydrocarbon recovery were also added to the annual sampling schedule.

PW-3 sampling frequency is currently on an annual sampling schedule pursuant to NMED directive per Comment 12 of the May 16, 2011 NOD (May 2011 NOD) for the Annual Ground Water Monitoring Report: Gallup Refinery 2009. PW-3 had shown a suspect level of 2-Methylnaphthalene (0.032 mg/L) from a sample collected in 2008. In 2008 Gallup Refinery collected an additional sample from this well, along with a blind duplicate and results were non-detect. Due to the detection of 2-Methylnaphthalene in 2008, PW-3 will continue to be sampled on an annual basis as directed by NMED.

All other outfalls required to be sampled under the OCD Ground Water Discharge permit GW-032, were monitored as required and the data has been presented in Section 8.0 and Appendix K.

7.0 Conclusions

This section is an overview of conclusions for the monitoring program required by the permit.

Ground Water Monitoring

There are a total of thirty-six monitoring wells distributed within the boundaries of the refinery of which, sixteen monitoring wells are located along the perimeter of the aeration lagoons and evaporation ponds. There are two major sections of the refinery which we have defined as the East and West side for periodic monitoring.

East Side Ground Water

Ground water monitoring activities on the East side have shown that MTBE is present in all four well locations (OW-13, OW-14, OW-29, and OW-30) which are located on the northeast corner of the active refinery perimeter. Of the three wells OW-14 has had detectable concentration levels above the applicable standards of benzene, ethylbenzene and MTBE, for the past five years and has gradually increased over time. Beginning in 2006, benzene concentration has been detected at 3.4E-03 mg/L, and in the fourth quarter of 2011 benzene concentration level was detected at 1.5 mg/L. Ethylbenzene concentration levels have also been detected, and steadily increasing from 2006. MTBE concentration levels are above the applicable standard in OW-14, OW-29 and in OW-30 and levels increasing slightly over time. OW-14 and OW-30 which is down gradient of OW-14 have the most detectable levels of MTBE ranging from 1.1 mg/L to 1.6 mg/L for 2011. OW-29 which is down gradient of OW-30 also has detectable levels of MTBE which has been increasing over time. OW-13 which is down gradient and directly northwest of OW-14 has also had trace levels of MTBE which are below the EPA RSL standard of 0.12 mg/L. Based on the data available, it appears that the concentration levels in OW-13 are slowly increasing. In March of 2010 dedicated pumps were installed in all four wells to prevent possible cross contamination from field work and/or sampling equipment.

Two new wells (OW-50 and OW-52) were installed in October 2009 down gradient of OW-13, OW-14 and OW-29 to monitor possible migration of MTBE from these wells. To date no detectable concentration levels of BTEX or MTBE constituents have been reported in lab analyses. 2011 BTEX and MTBE analyses indicate no detectable levels in all four quarters for 2011.

Within the perimeter of the active refinery in this north-east section, there are four shallow recovery wells (RW-1, RW-2, RW-5 and RW-6) from which SPH has been recovered and continues to be recovered. Of these wells RW-2 has shown no product level and RW-5 inspections for 2011 has shown no detectable hydrocarbon level. RW-1 and RW-6 are the only two recovery wells where hydrocarbons are recovered on a quarterly basis. 2011 year to date total of product recovered from RW-1 was 0.42 gallons and 0.22 gallons total of product recovered from RW-6.

West Side Monitoring

The West side consists of ground water monitoring wells near the aeration lagoons, NAPIS, and alongside a series of large evaporation ponds. There are four monitoring wells located around the NAPIS which were installed to address potential leaks of hydrocarbons from the NAPIS. NAPIS-1 which is located on the east side of the NAPIS has had no detectable concentration levels of BTEX or MTBE constituents since 2008. Immediately down gradient of the NAPIS (west side), concentration levels above the NMWQCC standards have been detected in NAPIS-2 and KA-3 and have remained steady. In 2011 NAPIS-3 lab data indicated no detectable levels of BTEX plus MTBE constituents since the fourth quarter of 2010. VOCs and SVOCs were detected in NAPIS-2, NAPIS-3 and KA-3 at concentration levels above the applicable standards. Also located at the NAPIS are three leak detection units which are inspected and sampled on a quarterly basis.

Monitoring of GWM-1 in 2011 has indicated that concentration levels of benzene have remained steady as well as ethylbenzene and MTBE. GWM-2 and GWM-3 are also monitoring wells located on the west side of the aeration lagoons and EP-1. Quarterly inspections of GWM-2 and GWM-3 for 2011 have shown water present in both wells for all four quarters. Since June of 2010, GWM-2 and GWM-3 continue to recharge at a slow rate after purging well dry. In each event, notification was given to NMED and OCD of finding within the 24 hour notification period. NMED required weekly water level gauging in both wells to determine recharge rate and after several weeks, weekly checks were discontinued. No significant recharge was noted in either of the wells. The continued presence of water in GWM-2 and GWM-3 may be a result of the fluctuation of ground water levels due to seasonal climate changes. The water level thickness in GWM-2 has not been any greater than 1.7 feet and in GWM-3 has been less than 1.0 foot.

Also located on the West side are a series of monitoring wells. Fluoride concentration levels above the NMWQCC standard has been detected in the following group of wells, BW-1C, BW-2A, BW-2B, BW-2C, BW-3B, and BW-3C. Some of the monitoring wells (MW, SMW) have shown traces of VOCs and SVOCs in 2008 and 2009. No VOCs have been detected in any of the BW, MW and SMW series of wells for 2011.

Additional Monitoring

As part of our Ground Water Discharge Permit GW-032, additional reporting is required on an annual basis and is provided in this report. This reporting includes:

- Monitoring of the aeration lagoons, ponds and outfalls between the lagoons and ponds on a quarterly and semi-annual basis.
- Summary of Underground Waste Water Lines Tested
- Summary of all EPA/NMED/RCRA Activity
- Major Refinery Activities and Events
- Summary of all Leaks, Spills and Releases

- Perimeter Inspections
- Temporary Land Farm Monitoring
- Monthly Flow Rate to NAPIS

7.2 Recommendations

- On February 15, 2012, NMED OCD division rescinded the current OCD Ground Water Discharge Permit GW-032 and replaced with abatement #AP-111. Due to existing ground water contamination, OCD is requiring Western to continue to abate pollution of ground water pursuant to 19.15.30 NMAC (REMEDIATION). This change will affect the sampling requirements on the effluents and influents in the NAPIS area as the new waste water treatment plant was put into service second quarter of 2012 as well as the installation of pond STP-1.
- Continue with the sampling requirements in the approved 2010 Facility Wide Ground Water Monitoring Work Plan (August 25, 2010).
- Submit the 2012 Annual Ground Water Monitoring Report on or before September 1, 2012.

8.0 Data Tables

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8.1 EFFLUENTS (AL-2 to EP-1, Pilot Effluent, NAPIS Effluent)
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
SAMPLE ID	DATE SAMPLED	METHOD					
AL-2 to EP-1	12/14/2011	8260B	<0.005	<0.005	<0.005	8.7E-03	<0.005
	9/28/2011[1]	8260B	**6.1E-03**	0.013	<0.005	<0.0075	<0.005
	6/15/2011	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	3/8/2011	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	11/3/2010	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	9/13/2010	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	6/8/2010	8260B	<0.01	<0.01	<0.01	<0.0015	<0.01
	3/9/2010	8260B	<0.005	0.011	<0.005	0.013	<0.005
	11/10/2009	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	8/19/2009	8260B	<0.005	4.4E-03	**1.4E-03**	0.011	<0.005
	5/26/2009	8260B	<0.005	<0.005	<0.005	7.3E-03	<0.005
	3/31/2009	8260B	<0.005	<0.005	<0.005	0.03	<0.005
	12/2/2008	8260B	**0.012**	0.085	**0.028**	0.021	<0.005
	9/9/2008	8260B	<0.02	<0.02	<0.02	<0.03	<0.02
	6/17/2008	8260B	<0.005	<0.005	<0.005	<0.005	<0.005
	3/10/2008	8260B	**0.19**	0.46	**0.099**	**0.68**	<0.01
Pilot Effluent	12/14/2011	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	9/28/2011[1]	8260B	<0.005	8.4E-03	<0.005	<0.0075	<0.005
	6/16/2011	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	3/9/2011	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	11/3/2010	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	9/16/2010	8260B	<0.001	<0.001	<0.001	<0.003	<0.0015
	6/28/2010	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	3/10/2010	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	11/10/2009	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	8/19/2009	8260B	<0.005	3.8E-03	<0.005	<0.0075	<0.005
	5/27/2009	8260B	<0.005	4.5E-03	<0.005	<0.0075	<0.005
	3/31/2009	8260B	<0.005	6.8E-03	<0.005	<0.0075	<0.005
	12/2/2008	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	9/9/2008	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	6/17/2008	8260B	<0.001	6.2E-03	<0.001	<0.0015	<0.001
	3/11/2008	8260B	<0.001	1.5E-03	<0.001	<0.0015	<0.00

8.1 EFFLUENTS (AL-2 to EP-1, Pilot Effluent, NAPIS Effluent)
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
SAMPLE ID	DATE SAMPLED	METHOD					
NAPIS Effluent	12/14/2011	8260B	**19**	**20**	**1.4**	**8.9**	<0.1
	9/28/2011[1]	8260B	**17**	**31**	**2.1**	**0.3**	<0.1
	6/15/2011	8260B	**8.9**	**21**	**2.0**	**12**	<0.1
	3/8/2011	8260B	**8.1**	**13**	**0.89**	**5.2**	<0.1
	11/3/2010	8260B	**4.2**	**12**	**1.5**	**8.4**	<0.1
	9/13/2010	8260B	**12**	**30**	**2.8**	**17**	<0.1
	6/8/2010	8260B	**1.5**	**6.0**	**0.67**	**3.8**	<0.05
	3/9/2010	8260B	**13**	**26**	**2.7**	**14**	<0.05
	11/10/2009	8260B	**5.9**	**16**	**1.6**	**9.4**	<0.05
	8/19/2009	8260B	**2.6**	**7.1**	**0.71**	**4.2**	<0.05
	5/26/2009	8260B	**4.1**	**14**	**1.6**	**10**	<0.05
	3/31/2009	8260B	**2.6**	**7.4**	**0.54**	**3.5**	<0.05
	12/2/2008	8260B	**1.4**	**3.3**	**0.36**	**1.9**	<0.05
	9/9/2008	8260B	**0.36**	0.39	**0.028**	**0.2**	<0.05
	6/17/2008	8260B	**0.84**	**1.5**	**0.14**	**0.89**	<0.1
	3/10/2008	8260B	**0.47**	0.73	**0.15**	**0.97**	<0.05

NOTES
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.1.1 EFFLUENTS (AL-2 to EP-1, Pilot Effluent, NAPIS Effluent)
General Chemistry Analytical Result Summary

			Parameters										
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)	DRO (mg/L)	GRO (mg/L)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6.6 to 8.6[1]	NE	0.2[2]	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE	NE	NE
SAMPLE ID	DATE SAMPLED	METHOD											
AL-2 to EP-1	12/14/2011	300.0/8015B	**41**	**2900**	2.5	**10**	**10**	<5.0	**890**	NA	NA	**9.8**	0.3
	9/28/2011	300.0/8015B	**30**	**3100**	1.5	**63**	**63**	<5.0	**1600**	NA	NA	**23**	1.1
	6/15/2011	300.0/8015B	**150**	**250**	<2.0	<1.0	1.9	<5.0	**1200**	NA	NA	**10**	1.7
	3/8/2011	300.0/8015B	**280**	**320**	1.4	<4.0	<4.0	<2.5	**920**	NA	NA	**9.9**	0.3
	11/3/2010	300.0/8015B	**77**	230	NL	<2.0	4	<10	**880**	NA	NA	**98**	0.36
	9/13/2010	300.0/8015B	**60**	240	NL	**1.2**	<1.0	<10	**1300**	NA	NA	**9.1**	0.51
	6/8/2010	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**66**	0.56
	3/9/2010	300.0/8015B	**130**	**280**	1.6	**7.4**	7.4	<5.0	**870**	NA	NA	**190**	<1.0
	11/10/2009	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**49**	0.48
	8/19/2009	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**41**	<5.0
	5/26/2009	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**12**	0.15
	3/31/2009	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**76**	0.63
	12/2/2008	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**160**	<5.0
	9/9/2008	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**44**	<5.0
	6/17/2008	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**140**	1.4
	3/10/2008	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**24**	1.7
Pilot Effluent	12/14/2011	300.0/8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**3.8**	<0.25
	9/28/2011	300.0/8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.3**	<0.25
	6/16/2011	300.0/8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**5.4**	<0.05
	3/9/2011	300.0/8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.0**	<0.25
	11/3/2010	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**15**	0.065
	9/16/2010	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**5.3**	<0.05
	6/28/2010	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**19**	<0.25
	3/10/2010	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**28**	<0.25
	11/10/2009	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**8.3**	<0.25
	8/19/2009	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**10**	<0.5
	5/27/2009	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**6.8**	<0.05
	3/31/2009	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**9.0**	<0.25
	12/2/2008	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**10**	<0.5
	9/9/2008	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**6.3**	<1.0
	6/17/2008	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**5.4**	0.078
	3/10/2008	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**12**	<0.05

8.1.1 EFFLUENTS (AL-2 to EP-1, Pilot Effluent, NAPIS Effluent)
General Chemistry Analytical Result Summary

			Parameters										
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)	DRO (mg/L)	GRO (mg/L)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6.6 to 8.6[1]	NE	0.2[2]	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE	NE	NE
SAMPLE ID	DATE SAMPLED	METHOD											
NAPIS Effluent	12/14/2011	300.0/8015B	**94**	**880**	3.3	**18**	**18**	<5.0	**790**	**9.4**	6000	**140**	150
	9/28/2011	300.0/8015B	**13**	**900**	<2.0	**110**	**110**	<10	**1300**	**9.57**	6200	**9.9**	150
	6/15/2011	300.0/8015B	**57**	**280**	<2.0	**5.0**	**10**	<10	**1200**	**9.09**	4700	**13**	99
	3/8/2011	300.0/8015B	**160**	**360**	2.6	<1.0	<1.0	<2.5	**920**	6.95	5800	**23**	71
	11/3/2010	300.0/8015B	**410**	240	NL	<2.0	**11**	<10	**820**	NA	NA	**68**	62
	9/13/2010	300.0/8015B	**20**	**260**	NL	<2.0	6.3	<10	**1300**	NA	3600	**39**	150
	6/8/2010	300.0/8015B	**37**	230	1.6	**4.2**	4.2	<5.0	**880**	**9.04**	3600	**150**	58
	3/9/2010	300.0/8015B	**43**	**290**	1.1	**5.5**	5.5	<2.5	**610**	NA	NA	**99**	120
	11/10/2009	300.0/8015B	**86**	**460**	5.4		<	**36**	450	**8.9**	3600	**130**	84
	8/19/2009	300.0/8015B	**31**	170	NL	**13**	**13**	<2.5	**1100**	**9.21**	4000	**31**	37
	5/26/2009	300.0/8015B	**73**	120	NL	**3.1**	3.1	**2.5**	**620**	8.29	2600	**110**	61
	3/31/2009	300.0/8015B	**20**	140	NL	**3.1**	3.1	<2.5	350	**9.12**	2300	**880**	48
	12/2/2008	300.0/8015B	**12**	160	NL	<1.0	1.2	<5.0	510	**8.63**	2200	**68**	20
	9/9/2008	300.0/8015B	**11**	78	NL	0.8	1.8	**14**	440	**9.44**	3300	**35**	<10
	6/17/2008	300.0/8015B	**19**	93	NL	<1.0	3.4	**37**	**630**	**9.07**	4600	**44**	11
	3/10/2008	300.0/8015B	**69**	**480**	NL	<5.0	<5.0	<25	**570**	**9.14**	2800	**290**	11

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
1) 20NMAC 6.2.2101 General Requirements
2) NMED Table 2a. TH Screening Guidelines for Potable Ground Water (GW-1). (Oct 2006)
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.1.2 EFFLUENTS (AL-2 to EP-1, Pilot Effluent, NAPIS Effluent) BOD/COD Analytical Result Summary

			Parameters	
			BOD (mg/L)	COD (mg/L)
WQCC 20NMAC 6.2.3103			<30[1]	<125[1]
SAMPLE ID	DATE SAMPLED	METHOD		
Pilot Effluent	12/14/2011	SM5210B/410.4	**260**	**673**
	9/29/2011	SM5210B/410.4	**360**	**378**
	6/16/2011	SM5210B/410.4	**370**	**638**
	3/9/2011	SM5210B/410.4	**590**	**870**
	11/3/2010	SM5210B/410.4	**270**	**900**
	9/20/2010	SM5210B/410.4	**420**	**1500**
	6/28/2010	SM5210B/410.4	**400**	**462**
	3/10/2010	SM5210B/410.4	**196**	**455**
	11/10/2009	SM5210B/410.4	NA	**410**
	8/19/2009	SM5210B/410.4	**905**	**712**
	5/27/2009	SM5210B/410.4	**442**	**431**
	3/31/2009	SM5210B/410.4	**1519**	**422**
	12/2/2008	SM5210B/410.4	**642**	**336**
	9/9/2008	SM5210B/410.4	**375**	**795**
	6/17/2008	SM5210B/410.4	**399**	**699**
	3/11/2008	SM5210B/410.4	**618**	**824**

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
1) 20 NMAC 6.2.2101 General Requirements

NOTES:

8.1.3 EFFLUENTS (AL-2 to EP-1, Pilot Effluent, NAPIS Effluent)
Total Metals Analytical Result Summary

			Parameters												
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Selenium (mg/L)	Silver (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**0.05**	**0.05**	**0.002**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**0.05**	**NE**	**0.002**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**0.62**	**11**	**NE**	**0.32**	**0.078**	**0.071**	**6.3E-04**	**0.047**	**4.7**
SAMPLE ID	**DATE SAMPLED**	**METHOD**													
AL-2 to EP-1	12/14/2011	200.7/200.8	**0.017**	0.19	<0.002	0.019	0.028	**13**	<0.005	0.14	0.01	<0.05	**0.02**	6.7E-03	0.24
	9/28/2011	200.7/200.8	**0.01**	0.099	<0.002	0.014	0.028	**6.1**	<0.005	0.079	0.02	<0.005	**2.4E-03**	<0.005	0.25
	6/15/2011	200.7/200.8	**0.017**	0.09	<0.002	0.027	0.017	**13**	<0.005	**0.22**	0.019	<0.005	1.1E-03	<0.0025	0.59
	3/8/2011	200.7/200.8	**0.013**	0.055	<0.002	0.025	7.7E-03	**5.7**	<0.005	**0.2**	<0.05	<0.005	2.9E-04	<0.0025	0.18
	11/3/2010	6010B	<0.02	0.077	<0.002	0.02	8.6E-03	**11**	<0.005	0.14	<0.05	<0.005	4.6E-04	NL	0.55
	9/13/2010	6010B	<0.02	0.18	<0.002	**0.84**	0.023	**11**	<0.005	**0.247**	<0.05	<0.005	1.1E-03	0.001	0.63
	6/8/2010	6010B	**0.023**	0.17	<0.002	0.014	0.025	**1.6**	0.0063	0.15	<0.05	<0.005	**8.2E-04**	NL	0.33
	3/9/2010	6020A	**9.6E-03**	9.68E-02	<0.001	3.92E-02	3.74E-02	**19.6**	9.7E-03	**0.476**	1.5E-02	<0.001	4.8E-04	1.67E-03	0.584
	11/10/2009	6010B	<0.1	0.056	<0.01	<0.03	<0.03	**1.9**	<0.025	0.12	<0.25	<0.025	2.9E-04	NL	0.11
	8/21/2009	6010B	<0.1	0.055	<0.01	<0.03	<0.03	**1.0**	<0.025	0.093	<0.25	<0.025	4.9E-04	0.002	0.3
	5/26/2009	6010B	<0.02	0.08	<0.002	<0.006	<0.006	**5.7**	7.3E-03	0.019	<0.05	<0.025	<0.0002	<0.001	0.59
	3/31/2009	6010B	**0.024**	0.099	<0.002	0.016	NL	NL	6.4E-03	NL	<0.05	<0.005	<0.0002	NL	NL
	12/2/2008	6010B	<0.02	0.2	<0.005	<0.01	<0.02	**6.8**	<0.005	**0.4**	0.034	<0.01	4.8E-04	NL	0.59
	9/9/2008	6010B	<0.02	0.069	<0.002	7.2E-03	<0.006	**2.5**	<0.005	0.13	<0.05	<0.005	<0.0002	<0.001	0.19
	6/17/2008	6010B	<0.02	0.14	<0.002	0.013	0.015	**9.0**	<0.005	0.13	<0.05	<0.005	**7.6E-04**	NL	1.6
	3/10/2008	6010B	<0.02	0.017	<0.002	0.1	<0.006	**11**	<0.005	**1.4**	<0.05	<0.005	<0.0002	**1.9**	1.9
Pilot Effluent	12/14/2011	200.7/200.8	**0.003**	0.026	<0.002	0.023	0.043	0.87	<0.005	0.061	<0.0025	<0.005	<0.0002	<0.0025	0.18
	9/28/2011	200.7/200.8	**2.9E-03**	0.024	<0.002	0.017	0.063	**1.5**	<0.005	0.12	<0.0025	<0.005	<0.0002	<0.0025	0.12
	6/16/2011	200.7/200.8	**2.8E-03**	0.19	<0.002	0.006	0.048	0.43	<0.005	0.052	2.8E-03	<0.005	<0.0002	<0.0025	0.12
	3/9/2011	200.7/200.8	**3.6E-03**	0.27	<0.002	<0.006	**0.13**	0.73	<0.005	0.063	<0.05	<0.005	<0.002	<0.0025	0.21
	11/3/2010	6010B	<0.02	<0.02	<0.002	<0.006	0.091	0.64	<0.005	0.055	<0.05	<0.005	<0.0002	NL	0.18
	6/16/2010	6010B	<0.02	<0.1	<0.01	<0.03	<0.03	**3.2**	<0.025	0.14	<0.25	<0.025	<0.0002	0.005	0.69
	6/28/2010	6010B	<0.02	<0.02	<0.002	<0.006	0.055	0.49	<0.005	0.058	<0.05	<0.005	<0.0002	0.001	0.12
	3/10/2010	6010B	<0.02	<0.02	<0.002	<0.006	0.061	0.56	<0.005	0.049	<0.05	<0.005	<0.0002	1.3E-03	0.14
	11/10/2009	6010B	<0.04	0.023	<0.004	<0.012	0.047	0.28	<0.01	0.041	<0.1	<0.01	<0.0002	NL	0.058
	8/19/2009	6010B	<0.02	<0.05	<0.01	<0.03	0.063	0.44	<0.025	0.079	<0.25	<0.025	<0.0002	0.001	0.15
	5/27/2009	6010B	<0.02	<0.01	<0.002	<0.006	0.034	0.33	<0.005	0.048	<0.05	<0.005	<0.0002	<0.001	0.046
	3/31/2009	6010B	<0.02	0.033	<0.002	<0.006	0.031	0.72	<0.005	0.12	<0.05	<0.005	<0.0002	0.001	0.098
	12/2/2008	6010B	<0.02	0.021	<0.005	0.01	0.4	0.36	<0.005	0.086	<0.02	<0.01	<0.0002	NL	0.068
	9/9/2008	6010B	<0.02	0.017	<0.002	<0.006	0.21	0.49	<0.005	0.085	<0.05	<0.005	<0.0002	<0.001	0.057
	3/10/2008	6010B	<0.02	0.022	<0.002	<0.006	0.018	0.35	<0.005	0.092	<0.5	<0.005	<0.0002	<0.1	0.055

8.1.3 EFFLUENTS (AL-2 to EP-1, Pilot Effluent, NAPIS Effluent)
Total Metals Analytical Result Summary

			Parameters												
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Selenium (mg/L)	Silver (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**0.05**	**0.05**	**0.002**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**0.05**	**NE**	**0.002**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**0.62**	**11**	**NE**	**0.32**	**0.078**	**0.071**	**6.3E-04**	**0.047**	**4.7**
SAMPLE ID	**DATE SAMPLED**	**METHOD**													
NAPIS Effluent	12/14/2011	200.7/200.8	**0.012**	0.24	<0.002	0.02	0.037	**19**	<0.005	**0.21**	0.01	<0.005	**9.9E-03**	5.2E-03	0.3
	9/28/2011	200.7/200.8	**9.1E-03**	0.056	<0.002	8.1E-03	0.03	**4.1**	<0.005	0.072	8.1E-03	<0.005	**3.5E-03**	<0.0025	0.22
	6/15/2011	200.7/200.8	**0.013**	0.066	<0.002	0.035	7.6E-03	**41**	<0.005	**0.29**	0.014	<0.005	**7.5E-04**	2.9E-03	0.91
	3/8/2011	200.7/200.8	**0.012**	0.12	<0.002	0.026	<0.006	**8.9**	<0.005	**0.21**	<0.05	<0.005	5.4E-04	<0.0025	0.4
	11/3/2010	6010B	<0.1	<0.1	<0.01	<0.03	<0.03	**13**	<0.025	0.16	<0.25	<0.025	6.0E-04	NL	0.32
	9/13/2010	6010B	<0.02	0.12	<0.002	0.16	0.014	**9.8**	<0.005	0.15	<0.05	<0.005	4.1E-04	0.002	1.2
	6/8/2010	6010B	<0.02	0.072	<0.002	6.7E-03	0.012	**7.8**	<0.005	0.1	<0.05	<0.005	1.4E-03	NL	0.11
	3/10/2010	6020A	**6.22E-03**	9.26E-02	<0.001	3.72E-02	2.23E-02	**11.1**	4.1E-03	**1.67**	1.55E-02	<0.001	**8.6E-04**	1.1E-03	0.206
	11/10/2009	6010B	<0.1	0.77	<0.01	0.035	0.053	**19**	**0.029**	0.15	<0.25	<0.025	5.5E-04	NL	0.47
	8/19/2009	6010B	<0.01	<0.05	<0.01	<0.03	<0.03	**13**	<0.025	0.06	<0.25	<0.025	<0.0002	0.002	0.16
	5/26/2009	6010B	<0.02	0.09	<0.002	0.011	0.023	**4.1**	6.3E-03	0.17	<0.05	<0.005	**0.009**	<0.001	0.34
	3/31/2009	6010B	<0.02	0.069	<0.002	<0.006	0.054	**1.7**	<0.005	0.056	<0.05	<0.005	3.0E-04	<0.001	0.26
	12/2/2008	6010B	<0.02	0.11	<0.005	<0.01	<0.02	**1.8**	<0.005	0.17	<0.02	<0.01	2.6E-04	<0.001	0.23
	9/19/2008	6010B	<0.02	0.062	<0.002	<0.006	<0006	0.076	<0.005	0.057	**0.052**	<0.005	<0.0002	<0.001	<0.02
	6/17/2008	6010B	<0.02	0.081	<0.002	<0.006	<0.006	**1.1**	<0.005	0.057	<0.05	<0.005	<0.0002	<0.1	0.19
	3/10/2008	6010B	<0.02	0.32	<0.002	0.019	0.053	**10**	**0.013**	**0.2**	<0.5	<0.005	<0.0002	<0.1	1.3

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.1.4 EFFLUENTS (AL-2 to EP-1, Pilot Effluent, NAPIS Effluent)
Dissolved Metals Analytical Result Summary

			Parameters															
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**0.05**	**0.05**	**NE**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**0.05**	**NE**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**0.078**	**0.071**	**NE**	**0.047**	**4.7**
SAMPLE ID	**DATE SAMPLED**	**METHOD**																
AL-2 to EP-1	12/14/2011	200.7/200.8	**6.4E-03**	0.023	<0.002	41	0.011	<0.006	**1.2**	<0.005	37	0.01	42	7.9E-03	<0.005	2600	4.5E-03	0.023
	9/28/2011	200.7/200.8	**8.6E-03**	0.017	<0.002	78	<0.006	<0.006	**1.3**	<0.005	120	0.049	920	0.018	0.005	2100	<0.005	0.053
	6/15/2011	200.7/200.8	**0.015**	0.049	<0.01	44	<0.03	<0.03	**12**	<0.025	17	**0.22**	100	0.024	<0.025	1100	<.005	0.43
	3/8/2011	200.7/200.8	**0.008**	0.027	<0.002	25	0.021	0.01	**5.4**	<0.005	12	**0.2**	50	<0.05	<0.005	740	<0.005	0.1
	11/3/2010	6010B	<0.02	0.035	<0.002	31	6.6E-03	<0.006	**2.6**	<0.005	11	0.13	36	<0.05	<0.005	630	NL	NL
	9/13/2010	6010B	<0.02	0.042	<0.002	37	**0.08**	<0.006	**1.6**	<0.005	14	**0.2**	25	<0.05	<0.005	730	<0.001	NL
	6/8/2010	6010B	<0.02	0.037	<0.002	40	8.9E-03	6.8E-03	**6.5**	<0.005	13	0.13	13	<0.05	<0.005	850	<0.001	0.064
	3/9/2010	6010B	**6.7E-03**	3.05E-02	<0.001	35.3	1.88E-02	7.28E-03	**12.1**	3.77E-03	10.7	**0.456**	58.2	9.77E-03	NL	678	<0.001	0.34
Pilot Effluent	12/14/2011	200.7/200.8	**1.3E-03**	0.011	<0.002	210	<0.006	<0.006	<0.02	<0.005	46	0.049	31	1.2E-03	<0.005	220	1.4E-03	0.013
	9/28/2011	200.7/200.8	**1.5E-03**	0.015	<0.002	NL	<0.006	<0.006	0.068	<0.005	NL	0.11	NL	2.9E-03	<0.005	NL	<0.001	0.014
	6/16/2011	200.7/200.8	<0.005	0.015	<0.010	200	<0.03	<0.03	0.11	<0.025	50	0.043	21	6.9E-03	<0.025	150	<0.005	<0.05
	3/9/2011	200.7/200.8	<0.002	0.19	<0.002	250	<0.006	0.19	0.22	<0.005	52	0.052	17	<0.05	<0.005	220	<0.005	0.05
	11/3/2010	6010B	<0.1	<0.1	<0.01	130	<0.03	<0.03	<0.1	<0.025	31	0.052	21	<0.25	<0.025	250	NL	NL
	9/16/2010	6010B	<0.02	0.022	<0.002	140	<0.006	<0.006	0.3	<0.005	30	0.057	18	<0.05	<0.005	240	0.001	NL
	6/28/2010	6010B	<0.02	<0.02	<0.002	NL	<0.006	<0.006	0.097	<0.005	NL	0.068	NL	<0.05	<0.005	NL	NL	NL
	3/10/2010	6020A	<0.02	<0.02	<0.002	NL	<0.006	9.5E-03	0.13	<0.005	NL	0.039	NL	<0.05	<0.005	NL	<0.001	<0.05
NAPIS Effluent	12/14/2011	200.7/200.8	**3.4E-03**	0.073	<0.002	84	0.017	<0.006	**12**	<0.005	22	0.19	42	9.6E-03	<0.005	1200	4.5E-03	0.13
	9/28/2011	200.7/200.8	**6.6E-03**	0.018	<0.002	34	<0.006	<0.006	0.58	<0.005	27	0.053	350	0.013	<0.005	1300	<0.005	0.019
	6/15/2011	200.7/200.8	<0.1	0.058	<0.01	61	0.032	<0.03	32	<0.025	17	0.29	37	0.017	<0.025	850	<0.01	0.75
	3/8/2011	200.7/200.8	<0.002	0.062	<0.002	44	0.024	<0.006	**5.9**	<0.005	12	**0.21**	35	**0.082**	<0.005	660	<0.005	0.2
	11/3/2010	6010B	<0.02	0.028	<0.002	6.7	0.024	<0.006	**6.0**	<0.005	7.7	0.17	76	<0.05	<0.005	570	NL	NL
	9/13/2010	6010B	<0.02	0.085	<0.002	60	**0.08**	<0.006	**3.7**	<0.005	14	0.14	13	<0.05	<0.005	790	0.002	NL
	6/8/2010	6010B	<0.02	0.035	<0.002	35	<0.006	<0.006	**4.6**	<0.005	10	0.094	10	<0.05	<0.005	730	NL	0.051
	3/10/2010	6020A	**2.3E-03**	5.66E-03	<0.001	136	9.56E-03	<0.001	0.693	<0.001	0.56	0.124	30.9	9.44E-03	NL	1910	1.04E-03	1.57E-02

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.1.5 EFFLUENTS (AL-2 to EP-1, Pilot Effluent, NAPIS Effluent)
Volatile Organic Compound Analytical Result Summary

			Parameters														
			1,2,4-Trimethyl benzene (mg/L)	1,3,5-Trimethyl benzene (mg/L)	Naphthalene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	Acetone (mg/L)	2-Butanone (mg/L)	Carbon Disulfide (mg/L)	Chloroethane (mg/L)	Chloroform (mg/L)	Isopropyl benzene (mg/L)	4-Isopropyl toluene (mg/L)	n-Butyl benzene (mg/L)	n-Propyl benzene (mg/L)	Sec-Butyl benzene (mg/L)
WQCC 20NMAC 6.2.3103			**NE**	**NE**	**0.03**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**0.1**	**NE**	**NE**	**NE**	**NE**	**NE**
40 CFR 141.62 MCL (June 8, 2012)			**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
EPA RSL for Tap Water (April 2012)			**0.015**	**0.087**	**1.4E-04**	**9.7E-04**	**0.027**	**12**	**NE**	**0.72**	**NE**	**1.9E-04**	**NE**	**NE**	**0.78**	**NE**	**NE**
SAMPLE ID	**DATE SAMPLED**	**METHOD**															
AL-2 to EP-1	12/14/2011	8260B	0.012	<0.005	**0.021**	**0.028**	**0.044**	0.75	0.39	0.082	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	9/28/2011[1]	8260B	<0.005	<0.005	<0.01	<0.02	0.024	0.62	0.23	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	6/15/2011	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	0.57	0.097	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	3/8/2011	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	<0.05	<0.05	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	11/3/2010	8260B	<0.005	<0.005	<0.01	**0.024**	**0.041**	1.8	0.14	<0.05	<0.01	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	9/13/2010	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	0.91	0.21	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	6/8/2010	8260B	<0.01	<0.01	<0.02	<0.04	<0.04	0.29	<0.1	<0.1	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	3/9/2010	8260B	**0.019**	<0.005	**0.045**	**0.21**	**0.34**	1.7	<0.05	<0.05	<0.01	<0.005	<0.005	<0.005	0.005	<0.005	<0.005
	11/10/2009	8260B	5.2E-03	<0.01	**0.012**	**0.04**	**0.047**	0.75	0.089	0.24	0.26	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	8/19/2009	8260B	0.012	0.004	**0.023**	**0.052**	**0.084**	1.2	<0.01	<0.01	<0.002	<0.001	<0.001	<0.001	4.4E-03	1.5E-03	NL
	5/26/2009	8260B	6.3E-03	2.5E-03	**2.3E-03**	**0.047**	**0.041**	1.5	0.081	<0.01	<0.002	<0.001	<0.001	<0.001	1.2E-03	NL	NL
	3/31/2009	8260B	**0.022**	5.8E-03	**0.05**	**0.17**	**0.24**	0.93	<0.01	<0.01	<0.02	<0.001	<0.001	<0.001	7.9E-03	NL	NL
	12/2/2008	8260B	**0.12**	0.041	**0.078**	**0.19**	**0.28**	1.9	0.095	<0.5	<0.01	<0.05	6.6E-03	6.7E-03	<0.05	0.013	NL
	9/9/2008	8260B	<0.02	<0.02	<0.04	<0.08	<0.08	2.2	<0.20	<0.2	<0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	6/17/2008	8260B	**0.039**	ND	**0.051**	**0.18**	**0.26**	3.8	0.35	<0.2	<0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	3/1008	8260B	**0.6**	**0.17**	**0.33**	**0.34**	**0.52**	2.2	0.48	<0.1	<0.02	<0.01	0.012	0.015	0.055	0.045	<0.01
Pilot Effluent	12/14/2011	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	0.062	<0.05	<0.05	<0.01	<0.005	<0.005	0.016	<0.005	<0.005	<0.005
	9/29/2011	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	<0.05	<0.05	0.057	<0.01	<0.005	<0.005	7.2E-03	<0.005	<0.005	<0.005
	6/16/2011	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	<0.05	<0.05	0.11	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	3/9/2011	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	<0.05	<0.05	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	11/3/2010	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	0.098	<0.05	<0.5	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	9/16/2010	8260B[1]	<0.001	<0.001	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
	6/28/2010	8260B	<0.005	<0.005	<0.005	<0.02	<0.02	<0.05	<0.05	0.19	<0.01	<0.005	<0.006	<0.007	<0.009	<0.010	<0.011
	3/10/2010	8260B	<0.005	<0.005	<0.005	<0.02	<0.02	<0.05	<0.05	0.19	<0.01	<0.005	<0.006	<0.007	<0.009	<0.010	<0.011
	11/10/2009	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	<0.05	<0.05	0.15	<0.01	**6.2E-03**	<0.005	<0.005	<0.005	<0.005	<0.005
	8/19/2009	8260B	<0.001	<0.001	<0.02	<0.004	<0.004	0.29	0.014	<0.01	<0.002	**6.5E-03**	<0.001	1.9E-03	<0.001	<0.001	<0.001
	5/27/2009	8260B	<0.001	<0.001	<0.002	<0.004	NL	0.17	<0.01	<0.01	<0.002	**3.5E-03**	<0.001	2.4E-03	<0.001	<0.001	<0.001
	3/31/2009	8260B	**0.66**	**0.17**	**0.5**	**0.29**	NL	0.36	0.012	<0.01	<0.002	**0.003**	<0.001	7.9E-03	<0.001	<0.001	<0.001
	12/2/2008	8260B	<0.001	<0.001	<0.002	<0.004	<0.004	0.058	<0.01	<0.01	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9/9/2008	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	0.3	<0.05	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	6/17/2008	8260B	<0.001	<0.001	<0.002	<0.004	<0.004	0.078	0.01	<0.01	<0.002	**4.4E-03**	<0.001	<0.001	<0.001	<0.001	<0.001
	3/10/2008	8260B	<0.001	<0.001	<0.002	<0.004	<0.004	0.49	<0.01	<0.01	<0.002	**6.9E-03**	<0.001	<0.001	<0.001	<0.001	<0.001

8.1.5 EFFLUENTS (AL-2 to EP-1, Pilot Effluent, NAPIS Effluent)
Volatile Organic Compound Analytical Result Summary

			Parameters														
			1,2,4-Trimethyl benzene (mg/L)	1,3,5-Trimethyl benzene (mg/L)	Naphthalene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	Acetone (mg/L)	2-Butanone (mg/L)	Carbon Disulfide (mg/L)	Chloroethane (mg/L)	Chloroform (mg/L)	Isopropyl benzene (mg/L)	4-Isopropyl toluene (mg/L)	n-Butyl benzene (mg/L)	n-Propyl benzene (mg/L)	Sec-Butyl benzene (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	0.03	NE	NE	NE	NE	NE	NE	0.1	NE	NE	NE	NE	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.015	0.087	1.4E-04	9.7E-04	0.027	12	NE	0.72	NE	1.9E-04	NE	NE	0.78	NE	NE
SAMPLE ID	**DATE SAMPLED**	**METHOD**															
NAPIS Effluent	12/14/2011	8260B	**1.1**	**0.4**	**0.31**	<0.4	<0.4	10.0	<1.0	<1.0	<0.2	<0.1	<0.1	<0.1	<0.1	0.21	<0.1
	9/28/2011[1]	8260B	**1.2**	**0.39**	**0.25**	<0.4	<0.4	<1.0	<1.0	<1.0	<0.2	<0.1	<0.1	<0.1	<0.1	0.18	<0.1
	6/15/2011	8260B	**2.0**	**0.69**	**0.34**	<0.4	<0.4	<1.0	<1.0	<1.0	<0.2	<0.1	0.18	<0.1	0.11	0.35	<.01
	3/8/2011	8260B	**0.67**	**0.2**	**0.39**	<0.4	<0.4	<1.0	<1.0	<1.0	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	11/3/2010	8260B	**1.4**	**0.44**	**0.49**	<0.4	**0.47**	<1.0	<1.0	<1.0	<0.2	<0.1	<0.1	<0.1	<0.1	0.21	<0.1
	9/13/2010	8260B	**3.0**	**0.09**	**0.56**	<0.4	<0.4	<1.0	<1.0	<1.0	<0.1	<0.1	<0.1	<0.1	0.17	0.37	<0.1
	6/8/2010	8260B	**0.67**	**0.22**	**0.25**	**0.24**	**0.45**	<0.05	<0.5	<0.5	<0.1	<0.05	<0.05	<0.05	0.062	0.094	<0.1
	3/9/2010	8260B	**3.0**	**0.91**	**0.56**	**0.27**	**0.52**	<0.05	<0.5	<0.5	<0.1	<0.05	0.17	<0.05	0.32	0.54	0.07
	11/10/2009	8260B	**1.2**	**0.44**	**0.83**	**0.41**	**0.68**	11	<0.5	<0.5	<0.1	<0.05	<0.05	<0.05	<0.05	0.21	<0.05
	8/19/2009	8260B	**0.69**	**0.2**	**0.59**	**0.24**	**0.42**	7.2	<0.5	<0.5	<0.1	<0.05	<0.05	<0.05	<0.05	0.082	<0.05
	5/26/2009	8260B	**3.0**	**0.37**	**0.49**	**0.3**	**0.5**	8.9	0.8	<0.1	<0.2	<0.1	0.087	0.03	0.11	0.16	<0.05
	3/31/2009	8260B	**0.66**	**0.17**	**0.5**	**0.29**	**0.51**	**20**	2.2	<0.5	<0.1	<0.05	0.057	<0.05	0.1	0.085	<0.01
	12/2/2008	8260B	**0.4**	**0.1**	**0.43**	**0.29**	**0.46**	4.7	<0.5	<0.5	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	9/9/2008	8260B	**0.053**	<0.02	**0.087**	<0.05	<0.08	**17**	1.9	<0.2	<0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	6/17/2008	8260B	**0.26**	<0.1	**0.29**	**0.4**	<0.4	**17**	2.5	<1.0	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	3/10/2008	8260B	**0.59**	**0.17**	**0.2**	**0.25**	**0.38**	0.5	<0.5	<0.5	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limts for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) 9/28/2011 & 9/29/2011 - Quarterly sampling combined with Annual sampling event

8.1.6 EFFLUENTS (AL-2 to EP-1, Pilot Effluent, NAPIS Effluent)
Semi Volatile Organic Compound Analytical Result Summary

			Parameters																	
			Aniline (mg/L)	Benzoic Acid (mg/L)	Benzyl Alcohol (mg/L)	Bis(2-ethylhexyl) phthalate (mg/L)	Carbazole (mg/L)	Chrysene (mg/L)	Dibenzofuran (mg/L)	2,4-Dimethyl phenol (mg/L)	Fluorene (mg/L)	2-Methyl naphthalene (mg/L)	2-Methyl phenol (mg/L)	3+4-Methyl phenol (mg/L)	Naphthalene (mg/L)	Phenanthrene (mg/L)	Phenol (mg/L)	Pyrene (mg/L)	Pyridine (mg/L)	1-Methyl naphthalene (mg/L)
WQCC 20NMAC 6.2.3103			**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**0.03**	**NE**	**0.005**	**NE**	**NE**	**NE**
40 CFR 141.62 MCL (June 8, 2012)			**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
EPA RSL for Tap Water (April 2012)			**0.012**	**58**	**1.5**	**7.2E-05**	**NE**	**3.E-03**	**6.E-03**	**0.27**	**0.22**	**0.027**	**NE**	**NE**	**1.4E-04**	**NE**	**4.5**	**0.087**	**0.015**	**9.7E-04**
SAMPLE ID	**DATE SAMPLED**	**METHOD**																		
AL-2 to EP-1	12/14/2011	8270C	**0.77**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	**0.51**	<0.05	<0.05	2.8	5.7	<0.05	<0.05	**11**	<0.05	<0.05	<0.05
	9/28/2011	8270C	**0.29**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	1.1	0.89	<0.05	<0.05	**0.2**	<0.05	<0.05	<0.05
	6/15/2011	8270C	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
	3/8/2011	8270C	**0.34**	<0.2	0.025	**0.015**	0.023	<0.01	<0.01	**0.37**	<0.01	<0.01	2.3	5.3	<0.01	0.017	**6.5**	<0.01	<0.01	
	11/3/2010	8270C	**0.16**	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	**0.31**	<0.05	<0.05	1.7	4.3	<0.05	0.068	**6.3**	<0.05	<0.05	
	9/13/2010	8270C	**0.23**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	0.4	0.064	<0.05	<0.05	**0.1**	<0.05	<0.05	
	6/8/2010	8270C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/9/2010	8270C	**0.15**	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	**24**	0.055	**0.18**	1.2	2.7	<0.05	0.15	**4.8**	<0.05	NL	
	11/10/2009	8270C	**0.15**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	**0.067**	1.2	2.2	<0.05	0.12	**1.2**	<0.05	<0.05	
	8/19/2009	8270C	**0.1**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.18	0.052	**0.18**	0.84	0.95	<0.05	0.26	**2.6**	0.063	<0.05	
NAPIS Effluent	12/14/2011	8270C	**0.85**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	**0.65**	<0.05	**1.1**	2.4	4.2	**0.55**	0.2	**8.4**	<0.05	**0.12**	**0.61**
	9/28/2011	8270C	**0.43**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	**0.33**	<0.05	**0.21**	1.5	3.2	**0.23**	<0.05	**6.3**	<0.05	<0.05	**0.12**[1]
	6/15/2011	8270C	**0.094**	<0.1	<0.05	**0.066**	<0.05	<0.05	<0.05	0.18	<0.05	**0.8**	0.48	0.96	**0.41**	0.12	**1.1**	<0.05	<0.05	
	3/8/2011	8270C	**1.1**	<0.1	<0.05	**0.054**	<0.05	<0.05	<0.05	**0.47**	<0.05	**0.24**	2.4	5.7	**0.29**	<0.05	**12**	<0.05	**0.051**	
	11/3/2010	8270C	**0.35**	0.37	<0.05	<0.05	<0.05	<0.05	<0.05	**0.41**	<0.05	**0.41**	1.5	3.6	**0.32**	<0.05	**5.7**	<0.05	<0.05	
	9/13/2010	8270C	**0.87**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	**0.36**	0.076	**2.3**	1.8	3.7	**2.2**	0.23	**4.5**	<0.05	<0.05	
	6/8/2010	8270C	**0.6**	<0.1	<0.05	<0.05	<0.05	<0.05	**0.085**	**0.71**	0.21	**4.4**	3.1	5.6	**0.89**	0.99	**12**	**0.1**	<0.05	
	3/9/2010	8270C	**1.1**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	**0.92**	0.11	**2.1**	3.1	8.1	**1.4**	0.35	**13**	0.059	**0.076**	
	11/10/2009	8270C	**1.4**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	**0.3**	0.11	**1.7**	4.4	7.4	**1.3**	0.33	**14**	ND	**0.08**	
	8/19/2009	8270C	**0.32**	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	**0.34**	0.21	**5.6**	1.3	2.2	**3.2**	1.0	**4.4**	**0.16**	<0.1	
	5/26/2009	8270C	NL	NL	NL	NL	NL	NL	NL	0.2	NL	NL	1.6	3.9	NL	NL	**7.2**	NL	NL	
	3/31/2009	8270C	<0.1	1.0	<0.1	<0.075	<0.05	<0.075	<0.05	<0.05	<0.05	<0.05	<0.075	0.57	<0.05	<0.05	**0.056**	<0.075	<0.15	
	12/2/2008	8270C	NL	NL	NL	NL	NL	NL	NL	0.12	NL	NL	0.62	3.2	NL	NL	**6.8**	<0.05	<0.05	
	9/9/2008	8270C	**2.1**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	**0.49**	<0.05	**0.063**	7.4	13	**0.076**	<0.05	**25**	<0.05	<0.05	
	6/17/2008	8270C	**0.4**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	**0.5**	4.9	8.5	**0.24**	0.16	**17**	<0.05	<0.05	
	3/10/2008	8270C	<0.05	<0.1	<0.05	<0.05	0.071	**0.12**	<0.05	<0.05	0.093	**0.59**	0.15	0.17	**0.22**	0.44	**0.19**	**0.15**	<0.05	

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) 8270C analysis detected 1-Methylnaphthalene for the first time.

8.2 INFLUENTS (Infl to AL-1, Infl to AL-2, Infl to EP-1)
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.90E-04	0.86	1.3E-03	0.19	0.012
SAMPLE ID	DATE SAMPLED	METHOD					
Infl to AL-1	12/14/2011	8260B	**0.27**	0.63	**0.11**	**0.8**	<0.005
	9/28/2011	8260B	**0.3**	**1.4**	**0.051**	**0.38**	<0.005
	6/16/2011	8260B	**0.035**	0.097	**0.02**	**0.15**	<0.005
	3/9/2011	8260B	**0.074**	0.14	**0.014**	0.1	<0.005
	11/3/2010	8260B	**0.011**	0.056	**0.019**	0.13	<0.005
	9/13/2010[3]	8260B	**0.012**	0.031	<0.005	0.038	<0.005
	6/7/2010[2]	8260B	NA	NA	NA	NA	NA
	3/9/2010[1]	8260B	**0.19**	0.6	**0.13**	**0.8**	<0.010
Infl to AL-2	12/14/2011	8260B	**0.02**	0.063	**0.025**	0.17	<0.01
	9/28/2011	8260B	**0.046**	0.093	**0.0077**	0.06	<0.005
	6/16/2011	8260B	<0.005	0.0072	<0.005	0.015	<0.005
	3/9/2011	8260B	<0.005	0.0062	<0.005	<0.0075	<0.005
	9/13/2010[3]	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	6/7/2010[2]	8260B	NA	NA	NA	NA	NA
	3/9/2010[1]	8260B	**0.017**	0.061	**0.017**	0.1	<0.1
Infl to EP-1	12/15/2011	8260B	<0.01	0.017	<0.01	0.057	<0.01
	9/28/2011	8260B	<0.005	0.0095	<0.005	<0.0075	<0.005
	6/15/2011	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	3/9/2011	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	11/3/2010	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	9/13/2010[3]	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	6/28/2010	8260B	<0.02	<0.02	<0.02	<0.03	<0.02
	3/10/2010	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	10/27/2009	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	5/6/2009	8260B	<0.005	<0.005	<0.005	0.012	<0.005
	12/2/2008	8260B	0.007	0.081	**0.03**	**0.23**	<0.005
	9/9/2008	8260B	<0.01	<0.01	<0.01	<0.0015	<0.01
	8/21/2008	8260B	**0.023**	0.028	<0.005	0.029	<0.005
	6/17/2008	8260B	<0.01	0.012	<0.01	0.024	<0.01
	1/1/2008	8260B	**0.13**	0.22	**0.39**	**0.22**	0.0052
	10/30/2006	8260B	<0.01	<0.01	<0.01	0.062	<0.015
	3/30/2006	8260B	**0.21**	0.44	**0.06**	**0.43**	<0.075

NOTES
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

1) 3/9/2010 samples, used unapproved Facility Wide Ground Water Monitoring Work Plan for analysis.
2) 6/7/2010 , Method 8260B analysis not requested to be analyzed.
3) 9/13/2010 used approved Facility Wide Ground Water Monitoring Work Plan sample schedule for analysis (approved August 25, 2010).

8.2.1 INFLUENTS (Infl to Al-1, Infl to AL-2, Infl to EP-1)
General Chemistry Analytical Result Summary

			Parameters												
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)	DRO (mg/L)	GRO (mg/L)	BOD (mg/L)	COD (mg/L)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6.6 to 8.6[1]	NE	0.2[2]	NE	<30[1]	<125[1]
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE	NE	NE	NE	NE
SAMPLE ID	DATE SAMPLED	METHOD													
Infl to AL-1	12/14/2011	300.0/8015B	NA	1000	NA	NA	NA	NA	NA	9.81	NA	48	6.6	1000	2440
	9/28/2011	300.0/8015B	NA	940	NA	NA	NA	NA	NA	9.82	NA	8.3	7.4	450	760
	6/16/2011	300.0/8015B	NA	290	NA	NA	NA	NA	NA	9.03	NA	5.9	2.2	730	905
	3/9/2011	300.0/8015B	NA	350	NA	NA	NA	NA	NA	8.61	NA	9.8	1.7	1600	2500
	11/3/2010	300.0/8015B	95	250	NL	<1.0	14	<0.1	950	NA	NA	8.1	8	530	1100
	9/13/2010[5]	300.0/8015B	NA	260	NA	NA	NA	NA	NA	10.24	NA	7.9	0.57	780	774
	6/7/2010[4]	300.0/8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	400	200
	3/9/2010[3]	300.0/8015B	NA	280	NA	NA	NA	NA	NA	10.44	NA	60	6	1150	1760
Infl to AL-2	12/14/2011	300.0/8015B	NA	2400	NA	NA	NA	NA	NA	10.42	NA	32	1.7	780	2330
	9/28/2011	300.0/8015B	NA	2100	NA	NA	NA	NA	NA	9.09	NA	23	1.2	340	654
	6/16/2011	300.0/8015B	NA	210	NA	NA	NA	NA	NA	8.45	NA	7.7	2	540	779
	3/9/2011	300.0/8015B	NA	330	NA	NA	NA	NA	NA	8.11	NA	9.2	0.45	1800	2500
	11/3/2010	300.0/8015B	160	210	NL	<2.0	5.7	<0.1	990	NA	NA	7.0	0.69	920	1700
	9/13/2010[5]	300.0/8015B	NA	240	NA	NA	NA	NA	NA	7.75	NA	7.3	0.47	280	378
	6/7/2010[4]	300.0/8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	310	1200
	3/9/2010[3]	300.0/8015B	NA	260	NA	NA	NA	NA	NA	8.99	NA	1.3	1.3	650	1890
Infl to EP-1	12/15/2011	300.0/8015B	49	3200	2.3	10	10	<2.5	1300	9.54	NA	38	0.63	520	1840
	9/28/2011	300.0/8015B	25	3300	580	67	67	<10	1800	8.68	NA	8.3	0.78	180	602
	6/16/2011	300.0/8015B	140	250	1.8	<1.0	<1.0	<5.0	1200	8.44	NA	10	0.56	600	965
	3/9/2011	300.0/8015B	260	300	3.0	<0.5	<0.5	<2.5	940	7.75	NA	8.4	0.34	1700	2400
	11/3/2010	300.0/8015B	100	220	NL	<0.002	<0.002	<1.0	940	7.54	4000	45	0.34	840	1700
	9/13/2010[5]	300.0/8015B	59	230	NL	1.5	1.5	<5.0	1300	NA	NA	9.4	0.38	200	375
	6/28/2010	300.0/8015B	140	220	1.9	<1.0	<1.0	<5.0	2000	7.42	5200	140	2.8	NA	NA
	3/10/2010	300.0/8015B	66	440	1.1	1.6	1.6	2.5	920	7.94	20000	150	0.34	159	795
	10/27/2009	300.0/8015B	120	250	1.3	0.8	0.68	<5.0	310	7.76	2600	29	0.83	265	1660
	5/6/2009	300.0/8015B	66	120	NA	NA	NA	NA	710	7.36	2600	100	2.1	556	545
	12/2/2008	300.0/8015B	NA	350	NA	NA	NA	NA	NA	7.62	NA	120	<0.005	231	840
	9/9/2008	300.0/8015B	NA	170	NA	NA	NA	NA	NA	7.93	NA	140	<.2	260	1360
	6/17/2008	300.0/8015B	NA	NA	NA	NA	NA	NA	NA	7.43	NA	140	2.7	NL	NL

8.2.1 INFLUENTS (Infl to Al-1, Infl to AL-2, Infl to EP-1)

General Chemistry Analytical Result Summary

			Parameters												
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)	DRO (mg/L)	GRO (mg/L)	BOD (mg/L)	COD (mg/L)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6.6 to 8.6[1]	NE	0.2[2]	NE	<30[1]	<125[1]
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE	NE	NE	NE	NE
SAMPLE ID	DATE SAMPLED	METHOD													

NOTES

NE = Not established

NA = Not analyzed

NL = Not listed on laboratory analysis

Bold and highlighted values represent values above the applicable standards

STANDARDS

WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.

a) Human Health Standards; b) Other standards for Domestic Water

1) 20 NMAC 20.6.2.2101 General Requirements

2) NMED Table 2a. TPH Screening Guidelines for Potable Ground Water (GW-1). (Oct 2006)

40 CFR 141.62 Detection Limits for Inorganic Contaminants

EPA Regional Screening Level (RSL) Summary Table

NOTES

3) 3/9/2010 samples, used unapproved Facility Wide Ground Water Monitoring Work Plan for analysis.

4) 6/7/2010 , Method 8260B analysis not requested to be analyzed.

5) 9/13/2010 used Facility Wide Ground Water Monitoring Work Plan sample schedule for analysis (approved August 25, 2010).

8.2.2 INFLUENTS (Infl to AL-1, Infl to AL-2, Infl to EP-1)
Total Metals Analytical Result Summary

			Parameters										
			Arsenic (mg/L)	Barium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Selenium (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			0.1	1.0	0.05	1.0	1.0	0.05	0.2	0.05	0.002	0.03	10
40 CFR 141.62 MCL (June 8, 2012)			0.01	2.0	0.1	1.3[1]	NE	0.015[1]	NE	0.05	0.002	0.03	NE
EPA RSL for Tap Water (April 2012)			4.5E-05	2.9	NE	0.62	11	NE	0.32	0.078	6.3E-04	0.047	4.7
SAMPLE ID	DATE SAMPLED	METHOD											
Infl to EP-1	12/15/2011	200.7	**0.015**	0.17	0.019	0.021	**11**	<0.01	0.13	0.016	**0.012**	5.3E-03	0.21
	9/28/2011	200.7	**9.7E-03**	0.09	0.013	0.028	**5.9**	<0.005	0.077	0.021	**2.3E-03**	<0.0025	0.23
	6/15/2011	200.7/200.8	**0.016**	0.099	0.029	0.017	**15**	<0.005	**0.22**	0.017	**9.0E-04**	<0.0025	0.62
	3/9/2011	200.7/200.8	**0.011**	0.045	0.023	7.2E-03	**6.5**	<0.005	**0.21**	<0.05	2.6E-04	<0.0025	0.18
	9/13/2010[3]	6010B	<0.02	0.17	**0.76**	0.02	**10**	<0.005	**0.23**	<0.05	5.6E-04	0.001	0.59
	6/28/2010	200.8	**0.021**	0.34	0.026	0.058	**25**	0.01	**0.31**	0.039	<0.0008	5.3E-03	0.55
	3/10/2010[2]	6010B	<0.02	0.17	**0.067**	0.033	**18**	8.7E-03	**0.72**	<0.05	3.7E-04	1.69E-03	0.39

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1. National Primary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) 3/10/2010 samples, used unapproved Facility Wide Ground Water Monitoring Work Plan for analysis.
3) 9/13/2010 used approved Facility Wide Ground Water Monitoring Work Plan sample schedule for analysis (approved August 25, 2010).

8.2.3 INFLUENTS (Infl to AL-1, Infl to AL-2, Infl to EP-1)
Dissolved Metals Analytical Result Summary

			Parameters													
			Arsenic (mg/L)	Barium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**0.05**	**NE**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**0.05**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**0.078**	**NE**	**0.047**	**4.7**
SAMPLE ID	**DATE SAMPLED**	**METHOD**														
Infl to EP-1	12/15/2011	200.7	**0.009**	0.022	43	0.01	<0.006	**1.7**	<0.005	43	0.093	0.39	8.8E-03	2400	4.7E-03	0.027
	9/28/2011	200.7	**9.1E-03**	0.017	72	<0.006	<0.006	**1.3**	<0.005	110	0.05	910	0.016	2100	<0.005	0.047
	6/15/2011	200.7	**0.013**	0.046	48	<0.03	<0.03	**16**	<0.025	18	**0.24**	75	0.023	1100	<0.005	0.57
	3/9/2011	200.7	**8.2E-03**	0.021	16	0.02	<0.006	**4.9**	<0.005	12	0.02	52	<0.05	710	<0.005	0.1
	11/3/2010	6010B	NL	NL	40	NL	NL	NL	NL	12	NL	40	NL	660	NL	NL
	9/13/2010[3]	6010B	<0.02	0.044	38	**0.12**	<0.006	**2.2**	<0.005	14	**0.2**	0.26	<0.05	740	<0.001	<0.001
	6/28/2010	6010B	**0.012**	0.039	NL	0.015	<0.006	**12**	<0.005	NL	**0.27**	NL	0.029	NL	NL	0.071
	3/10/2010[2]	6010B	<0.02	0.029	45	0.023	0.011	**9.6**	7.2E-03	14	**0.58**	32	<0.05	990	1.1E-03	0.28

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009), Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) 3/10/2010 samples, used unapproved Facility Wide Ground Water Monitoring Work Plan for analysis.
3) 9/13/2010 used approved Facility Wide Ground Water Monitoring Work Plan sample schedule for analysis (approved August 25, 2010).

8.2.4 INFLUENTS (Infl to AL-1, Infl to AL-2, Infl to EP-1)
Volatile Organic Compound Analytical Result Summary

			Parameters												
			1,2,4-Trimethyl benzene (mg/L)	1,3,5-Trimethyl benzene (mg/L)	Naphthalene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	Acetone (mg/L)	2-Butanone (mg/L)	Carbon Disulfide (mg/L)	Isopropyl benzene (mg/L)	4-Isopropyl toluene (mg/L)	n-Butyl benzene (mg/L)	n-Propyl benzene (mg/L)	sec-Butyl benzene (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	0.03	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.015	0.087	1.4E-04	9.7E-04	0.027	12	NE	0.72	NE	NE	0.78	NE	NE
SAMPLE ID	**DATE SAMPLED**	**METHOD**													
Infl to AL-1	12/14/2011	8260B	**0.35**	**0.12**	**0.12**	**0.13**	**0.22**	7.9	<0.05	0.065	0.019	0.011[3]	0.028	0.052	<0.005
	9/28/2011	8260B	**0.08**	0.024	**0.05**	**0.027**	**0.046**	0.85	0.38	<0.05	<0.005		<0.005	9.1E-03	<0.005
	6/16/2011	8260B	**0.1**	0.036	**0.047**	**0.043**	0.08	0.65	<0.05	<0.05	5.5E-03		7.9E-03	0.015	<0.005
	3/9/2011	8260B	**0.033**	9.8E-03	**0.077**	**0.074**	**0.13**	1.0	<0.05	<0.05	<0.005		<0.005	<0.005	<0.005
	11/3/2010	8260B	**0.14**	0.047	**0.078**	**0.15**	**0.25**	0.83	<0.05	<0.05	<0.05		0.029	0.019	6.2E-03
	9/13/2010[2]	8260B	**0.026**	0.007	**0.03**	<0.02	0.021	1.5	0.28	<0.05	<0.005		<0.005	<0.005	<0.005
	3/9/2010[1]	8260B	**0.41**	**0.12**	**0.27**	**0.091**	**0.16**	6.1	<0.1	<0.1	0.016		0.024	0.063	<0.01
Infl to AL-2	12/14/2011	8260B	**0.094**	0.033	**0.072**	**0.067**	0.11	4.3	0.63	<0.1	<0.01		<0.01	0.015	<0.01
	9/28/2011	8260B	**0.015**	<0.005	**0.021**	<0.02	**0.034**	1.5	0.52	<0.05	<0.005		<0.005	<0.005	<0.005
	6/16/2011	8260B	0.014	<0.005	**0.016**	**0.032**	**0.056**	0.63	<0.05	0.086	<0.005		<0.005	<0.005	<0.005
	3/9/2011	8260B	<0.005	<0.005	**0.012**	<0.02	0.023	1.3	<0.05	<0.05	<0.005		<0.005	<0.005	<0.005
	11/3/2010	8260B	0.006	<0.005	<0.01	**0.026**	**0.041**	1.7	<0.05	<0.05	<0.005		<0.005	<0.005	<0.005
	9/13/2010[2]	8260B	6.8E-03	<0.005	<0.01	<0.02	<0.02	2.2	0.3	<0.05	<0.005		<0.005	<0.005	<0.005
	3/9/2010[1]	8260B	**0.071**	0.021	**0.088**	**0.068**	**0.11**	6.9	<0.1	<0.1	<0.01		<0.01	0.01	<0.01
Infl to EP-1	12/15/2011	8260B	**0.048**	0.015	**0.034**	**0.054**	**0.088**	4.1	0.38	<0.1	<0.01		<0.01	<0.01	<0.01
	9/28/2011	8260B	<0.005	<0.005	<0.01	<0.02	0.023	0.65	0.26	<0.05	<0.005		<0.005	<0.005	<0.005
	6/15/2011	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	0.51	<0.05	<0.05	<0.005		<0.005	<0.005	<0.005
	3/9/2011	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	1.2	0.48	<0.05	<0.005		<0.005	<0.005	<0.005
	11/3/2010	8260B	<0.005	<0.005	<0.01	<0.02	0.021	1.5	0.13	<0.05	<0.005		<0.005	<0.005	<0.005
	9/13/2010[2]	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	0.93	0.2	<0.05	<0.005		<0.005	<0.005	<0.005
	6/28/2010	8260B	<0.02	<0.02	<0.04	<0.08	<0.08	0.055	<0.2	<0.2	<0.02		<0.02	<0.02	<0.02
	3/10/2010	8260B	**6.1**	<0.005	**0.033**	**0.065**	**0.1**	1.9	<0.05	<0.05	<0.005		<0.005	<0.005	<0.005
	5/6/2009	8260B	0.014	6.1E-03	<0.004	**0.095**	**0.096**	1.4	0.12	<0.02	<0.002		6.4E-03	<0.002	<0.002
	12/2/2008	8260B	**0.11**	0.037	**0.072**	**0.14**	**0.22**	1.7	0.1	<0.05	7.3E-03		0.019	0.013	<0.005
	9/9/2008	8260B	**0.04**	<0.01	**0.067**	**0.24**	**0.35**	1.7	0.21	<0.1	<0.1		0.011	<0.01	<0.01
	6/17/2008	8260B	**0.033**	<0.01	**0.053**	**0.087**	**0.13**	1.6	0.32	<0.1	<0.01		<0.01	<0.01	<0.01

DEFINITIONS	**STANDARDS**
NE = Not establishes	WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less
NA = Not analyzed	a) Human Health Standards; b) Other Standards for Domestic Water
NL = Not listed on laboratory analysis	40 CFR 141.62 Detection Limits for Inorganic Contaminants
Bold and highlighted values represent values above the applicable standards	EPA Regional Screening Level (RSL) Summary Table

NOTES:

1) 3/9/2010 samples, used unapproved Facility Wide Ground Water Monitoring Work Plan for analysis.

2) 9/13/2010 used approved Facility Wide Ground Water Monitoring Work Plan sample schedule for analysis (approved August 25, 2010).

3) 8260B analysis detected 4-Isopropyltoluene for the first time.

8.2.5 INFLUENTS (Infl to AL-1, Infl to AL-2, Infl to EP-1)
Semi-Volatile Organic Compound Analytical Result Summary

			Parameters										
			Aniline (mg/L)	Benzoic Acid (mg/L)	Benzyl Alcohol (mg/L)	2,4-Dimethyl phenol (mg/L)	2-Methylnaphthalene (mg/L)	2-Methylphenol (mg/L)	3+4-Methylphenol (mg/L)	Naphthalene (mg/L)	Phenanthrene (mg/L)	Phenol (mg/L)	1-Methylnaphthalene (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	NE	NE	NE	NE	NE	0.03	NE	0.005	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.012	58	1.5	0.27	0.027	NE	NE	1.4E-04	NE	4.5	9.7E-04
SAMPLE ID	DATE SAMPLED	METHOD											
Infl to AL-1	12/14/2011	8270C	**0.98**	<0.1	<0.05	**0.27**	**0.11**	3.0	5.6	**0.073**	<0.05	**12**	**0.062[1]**
	9/28/2011	8270C	**0.48**	<0.1	<0.05	**0.34**	0.05	1.6	3.2	**0.063**	<0.05	**4.4**	
	6/16/2011	8270C	<0.05	<0.01	<0.05	0.088	**0.14**	0.22	0.36	<0.05	0.056	**0.5**	
	3/9/2011	8270C	**0.69**	<0.01	<0.05	**0.28**	<0.05	1.7	3.8	<0.05	<0.05	**8.1**	
	11/3/2010	8270C	**0.58**	0.32	<0.05	**0.42**	**0.3**	1.5	3.1	**0.08**	0.17	**5.5**	
	9/13/2010[3]	8270C	**0.26**	0.13	<0.05	**0.36**	<0.05	0.93	1.8	<0.05	<0.05	**25**	
	6/7/2010	8270C	NL	NL	NL	0.2	NL	1.0	1.6	NL	NL	**2.6**	
	9/8/2009	8270C	NL	NL	NL	<0.05	NL	0.15	1.1	NL	NL	**2.4**	
	6/25/2009	8270C	NL	NL	NL	**0.27**	NL	1.6	3.4	NL	NL	**6.8**	
	2/26/2009	8270C	NL	NL	NL	0.066	NL	0.75	1.9	NL	NL	**4.7**	
	1/27/2009	8270C	NL	NL	NL	**0.84**	NL	1.1	4.2	NL	NL	**7.9**	
Infl to AL-2	12/14/2011	8270C	**0.91**	<0.1	<0.05	**0.7**	**0.089**	3.0	5.8	**0.058**	<0.05	**10**	
	9/28/2011	8270C	**0.39**	<0.1	<0.05	**0.27**	<0.05	1.7	2.5	<0.05	<0.05	**3.3**	
	6/16/2011	8270C	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
	3/9/2011	8270C	<0.05	<0.1	<0.05	0.1	<0.05	0.67	1.2	<0.05	<0.05	**2.4**	
	11/3/2010	8270C	**0.21**	0.14	<0.05	**0.3**	<0.05	1.7	3.8	<0.05	0.053	**6.1**	
	9/13/2010[3]	8270C	**0.29**	<0.1	<0.05	0.21	<0.05	0.81	0.63	<0.05	<0.05	<0.05	
	6/7/2010	8270C	NL	NL	NL	<0.05	NL	<0.05	<0.05	NL	NL	<0.05	
	9/8/2009	8270C	NL	NL	NL	0.098	NL	0.57	1.2	NL	NL	**0.89**	
	9/8/2009	8270C	NL	NL	NL	0.11	NL	1.3	2.5	NL	NL	**3.6**	
	2/26/2009	8270C	NL	NL	NL	<0.05	NL	1.2	2.4	NL	NL	**5.6**	
	1/27/2009	8270C	NL	NL	NL	**0.35**	NL	1.0	2.4	NL	NL	**2.5**	
Infl to EP-1	12/15/2011	8270C	**0.85**	<0.1	<0.05	**0.71**	<0.05	3.7	7.1	<0.05	<0.05	**12**	
	9/28/2011	8270C	**0.22**	<0.1	<0.05	0.15	<0.05	1.1	1.1	<0.05	<0.05	**0.49**	
Infl to EP-1	6/15/2011	8270C	**0.061**	<0.1	<0.05	0.1	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	
	3/9/2011	8270C	**0.24**	<0.1	<0.05	0.17	<0.05	1.1	2.2	<0.05	<0.05	**3.0**	
	11/3/2010	8270C	**0.25**	0.14	<0.05	**0.37**	<0.05	1.6	3.7	<0.05	0.06	**5.9**	
	9/13/2010[3]	8270C	**0.24**	<0.1	<0.05	0.18	<0.05	0.48	<0.05	<0.05	<0.05	<0.05	
	6/28/2010	8270C	**0.06**	<0.1	<0.05	<0.05	**0.097**	<0.05	<0.05	<0.05	0.1	<0.05	
	6/7/2010	8270C	NL	NL	NL	NL	<0.05	NL	NL	NL	NL	NL	
	3/10/2010[2]	8270C	**0.19**	<0.1	0.87	**0.37**	**0.16**	1.4	1.7	<0.05	0.12	**2.7**	
	10/27/2009	8270C	**0.16**	NL	NL	0.065	NL	NL	1.1	**3.9**	0.078	**2.1**	
	9/8/2009	8270C	NL	NL	NL	0.16	NL	1.2	2.4	NL	NL	**29**	
	5/6/2009	8270C	**0.071**	NL	NL	0.078	NL	0.48	NL	NL	0.12	NL	
	2/26/2009	8270C	NL	NL	NL	<0.05	NL	1.3	2.5	NL	NL	**4.8**	
	12/2/2008	8270C	NL	NL	NL	0.087	NL	0.55	0.86	NL	NL	**1.5**	
	9/9/2008	8270C	NL	NL	NL	0.2	NL	0.45	0.6	NL	NL	**1.3**	

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) Analyte detected for the first time during 4th quarter 2011 using 8270C analysis.
2) 3/10/2010 samples, used unapproved Facility Wide Ground Water Monitoring Work Plan for analysis.
3) 9/13/2010 used approved Facility Wide Ground Water Monitoring Work Plan sample schedule for analysis (approved August 25, 2010).

8.3 LEAK DETECTION UNITS (East LDU, West LDU, Oil Sump LDU)
BTEX and DRO/GRO Analytical Result Summary

			Parameters						
			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	DRO (mg/L)	GRO (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE	0.2[1]	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1.0	0.7	10	NE	NE	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012	NE	NE
SAMPLE ID	DATE SAMPLED	METHOD							
East LDU	12/14/2011	8021B	**1.8**	**4.2**	**0.56**	**6.7**	<0.25	**33**	33
	9/26/2011	8021B	**2.8**	**7.2**	**0.68**	**7.0**	<0.13	**34**	43
	6/15/2011	8260B	**1.8**	0.28	**0.32**	**3.8**	<0.02	**27**	13
	3/3/2011	8021B	**2.6**	**7.2**	**0.45**	**3.9**	<0.5	**35**	83
	11/11/2010	8260B	**10**	**28**	**1.3**	**9.0**	<0.05	**63**	100
	9/20/2010	8021B	**10**	**20**	**1.1**	**8.1**	<0.13	**120**	100
	3/18/2010	8021B	**9.1**	**17**	**1.4**	**9.9**	NL	**16000**	120
West LDU	12/14/2011	8021B	**2.3**	**8.3**	**0.83**	**7.2**	<0.25	**22**	45
	9/26/2011	8021B	**3.6**	**9.3**	**0.59**	**5.5**	<0.025	**14**	45
	6/15/2011	8260B	**0.094**	0.33	**0.029**	**0.26**	<0.01	**13**	2.2
	3/3/2011	8021B	**6.1**	**17**	**0.92**	**7.9**	<0.5	**15**	40
	11/11/2010	8260B	**7.0**	**18**	**0.9**	**6.1**	<0.001	**16**	67
	9/20/2010	8021B	**3.1**	**5.8**	**0.36**	**2.9**	<0.0025	**9.0**	26
	3/18/2010	8021B	**2.7**	**4.2**	**0.19**	**1.4**	NL	**16**	24
Oil Sump LDU	12/14/2011	8021B	**3.4**	**7.5**	**0.76**	**7.4**	<0.5	**14**	52
	9/26/2011	8021B	**3.5**	**10**	**0.76**	**6.4**	<0.5	**18**	49
	6/15/2011	8260B	**3.0**	**7.1**	**0.48**	**3.9**	<0.2	**20**	38
	3/3/2011	8021B	**5.6**	**13**	**1.2**	**7.9**	<0.5	**680**	120
	11/11/2010	8260B	**8.8**	**19**	**1.6**	**10**	<0.2	**390**	110
	9/20/2010	8021B	**9.4**	**29**	**6.1**	**40**	<0.5	**1400**	650
	3/18/2010	8021B	**5.6**	**33**	**6.4**	**38**	<0.95	**35**	69

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
1) NMED Table 2a. TPH Screening Guidelines for Potable Ground Water (GW-1). (Oct 2006)
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.3.1 LEAK DETECTION UNITS (East LDU, West LDU, Oil Sump LDU)

Total Metals Analytical Result Summary

			Parameters												
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Selenium (mg/L)	Silver (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**0.05**	**0.05**	**0.002**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**0.05**	**NE**	**0.002**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**0.62**	**11**	**NE**	**0.32**	**0.078**	**0.071**	**6.3E-04**	**0.047**	**4.7**
SAMPLE ID	**DATE SAMPLED**	**METHOD**													
East LDU	12/14/2011	200.7/200.8	**8.2E-03**	0.34	<0.002	**0.14**	<0.006	0.54	<0.005	**0.42**	<0.0025	<0.005	<0.0002	<0.0025	0.018
	9/26/2011	200.7/200.8	**3.9E-03**	0.59	<0.002	**0.12**	<0.006	0.58	<0.005	**0.56**	<0.0025	<0.005	<0.0002	<0.0025	0.036
	6/15/2011	200.7/200.8	**0.027**	0.94	<0.002	**0.14**	0.13	**31**	**0.047**	**1.3**	0.037	<0.005	<0.0002	<0.0025	3.3
	3/3/2011	200.7/200.8	**5.8E-03**	0.48	<0.002	0.035	<0.006	0.57	<0.005	**0.39**	<0.05	<0.005	<0.0002	<0.0025	0.014
	11/11/2010	6010B	<0.1	0.94	<0.01	**0.12**	<0.03	**1.1**	<0.025	**1.6**	<0.25	<0.025	<0.0002	<0.001	<0.1
	9/20/2010	6010B	<0.02	0.54	<0.002	0.039	<0.006	**7.6**	<0.005	**0.8**	<0.05	<0.005	<0.0008	<0.005	0.21
	3/18/2010	6010B	<0.1	**1.3**	<0.01	**0.25**	0.073	**24**	<0.025	**2.0**	<0.25	<0.025	<0.0008	<0.001	1.3
West LDU	12/14/2011	200.7/200.8	**0.011**	**1.4**	<0.002	**0.082**	0.045	**9.1**	**0.016**	**0.34**	<0.005	<0.005	**3.6E-03**	<0.0025	0.87
	9/26/2011	200.7/200.8	**4.1E-03**	0.23	<0.002	**0.072**	<0.006	**1.5**	<0.005	**0.89**	4.8E-03	<0.005	2.7E-04	<0.0025	0.064
	6/15/2011	200.7/200.8	**0.012**	0.65	<0.002	**0.093**	<0.006	**1.3**	<0.005	**1.1**	0.025	<0.005	<0.0002	<0.0025	0.061
	3/3/2011	200.7/200.8	**8.3E-03**	0.49	<0.002	**0.08**	<0.006	**4.1**	<0.005	**1.3**	<0.05	<0.005	<0.0002	<0.0025	0.067
	11/11/2010	6010B	<0.02	0.5	<0.002	**0.15**	<0.006	0.66	<0.005	**0.68**	<0.05	<0.005	<0.0002	<0.001	<0.02
	9/20/2010	6010B	<0.02	0.27	<0.002	**0.067**	<0.006	0.31	NL	**0.84**	<0.05	<0.005	<0.0002	<0.05	<0.02
	3/18/2010	6010B	<0.02	0.2	<0.002	**2.4**	<0.006	**5.3**	<0.005	**3.1**	<0.05	<0.005	<0.0008	<0.001	<0.05
Oil Sump LDU	12/14/2011	200.7/200.8	**0.012**	0.24	0.002	0.034	<0.006	0.59	<0.005	**0.37**	0.004	<0.005	<0.0002	<0.0025	0.018
	9/26/2011	200.7/200.8	**0.031**	**1.8**	2.20E-03	**0.16**	**0.62**	**120**	**0.2**	**0.93**	7.2E-03	<0.005	**7.7E-03**	2.6E-03	**11**
	6/15/2011	200.7/200.8	**6.5E-03**	0.5	<0.01	0.039	<0.03	0.38	<0.025	**0.35**	0.004	<0.025	<0.0002	<0.0025	<0.05
	3/3/2011	200.7/200.8	**9.8E-03**	0.62	<0.002	**0.072**	<0.006	**9.4**	5.6E-03	**0.81**	<0.05	<0.005	**2.4E-03**	<0.0025	0.47
	11/10/2010	6010B	<0.1	**7.2**	<0.01	**0.18**	0.25	**150**	**0.11**	**2.3**	<0.25	<0.025	**0.017**	<0.004	**7.9**
	9/20/2010	6010B	<0.1	**15**	<0.01	**0.23**	0.59	**130**	**0.24**	**1.6**	<0.25	<0.025	**0.011**	0.016	**13**
	3/18/2010	6010B	<2.0	<2.0	<0.2	**1.1**	**4.5**	NL	**1.7**	**3.3**	<5.0	<0.5	<0.004	**4.61E-02**	**88**

DEFINITIONS

NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS

WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.3.2 LEAK DETECTION UNITS (East LDU, West LDU, Oil Sump LDU)

Dissolved Metals Analytical Result Summary

			Parameters											
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**0.05**	**0.05**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**0.05**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**0.62**	**11**	**NE**	**0.32**	**0.078**	**0.071**	**0.047**	**4.7**
SAMPLE ID	**DATE SAMPLED**	**METHOD**												
East LDU	12/14/2011	200.7/200.8	**3.5E-03**	0.31	<0.002	**0.12**	<0.006	0.21	<0.005	**0.39**	1.8E-03	<0.005	<0.001	<0.01
	9/26/2011	200.7/200.8	**3.6E-03**	0.58	<0.002	**0.11**	<0.006	0.057	<0.005	**0.55**	1.9E-03	<0.005	<0.001	0.026
	6/15/2011	200.7/200.8	**0.016**	0.11	<0.01	**0.11**	<0.03	**1.2**	<0.025	**1.2**	0.037	<0.025	<0.01	<0.05
	3/3/2011	200.7/200.8	<0.005	0.48	<0.002	0.034	<0.006	0.11	<0.005	**0.38**	<0.05	<0.005	<0.005	<0.01
	11/11/2010	6010B	<0.02	0.33	<0.002	0.046	<0.006	0.16	<0.005	**0.59**	<0.05	<0.005	<0.001	<0.05
	9/20/2010	6010B	<0.02	0.31	<0.002	0.033	<0.006	0.14	<0.005	**0.73**	<0.05	<0.005	<0.005	<0.05
	3/18/2010	6010B	<0.04	0.21	<0.004	**0.22**	<0.012	0.86	<0.01	**2**	<0.1	<0.01	<0.001	<0.1
West LDU	12/14/2011	200.7/200.8	**7.1E-03**	0.3	<0.002	**0.066**	<0.006	**1.3**	<0.005	**0.31**	<0.005	<0.005	<0.005	0.04
	9/26/2011	200.7/200.8	**4.4E-03**	0.21	NL	**0.067**	<0.006	0.14	<0.005	**0.86**	7.5E-03	<0.005	<0.001	0.013
	6/15/2011	200.7/200.8	**0.013**	0.61	<0.01	**0.091**	<0.03	0.33	<0.025	**1.1**	0.031	<0.025	<0.005	<0.05
	3/3/2011	200.7/200.8	<0.005	0.46	<0.002	**0.077**	<0.006	**2.1**	<0.005	**1.3**	<0.05	<0.005	<0.005	0.012
	11/11/2010	6010B	<0.02	0.56	<0.002	**0.18**	<0.006	0.22	<0.005	**0.81**	<0.05	<0.005	<0.001	<0.05
	9/20/2010	6010B	<0.02	0.25	<0.002	**0.062**	<0.006	0.12	<0.005	**0.81**	<0.05	<0.005	<0.005	<0.05
	3/18/2010	6010B	<01	0.16	<0.01	**2.3**	<0.03	**3.2**	<0.025	**2.9**	<0.25	<0.025	<0.001	<0.25
Oil Sump LDU	12/14/2011	200.7/200.8	**6.2E-03**	0.23	<0.002	0.03	<0.006	0.28	<0.005	**0.35**	0.011	<0.005	<0.001	0.015
	9/26/2011	200.7/200.8	**6.2E-03**	0.24	<0.002	**0.058**	<0.006	0.1	<0.005	**0.53**	0.011	<0.005	<0.001	0.015
	6/15/2011	200.7/200.8	**4.8E-03**	0.46	<0.01	0.033	<0.03	<0.1	<0.025	**0.33**	4.1E-03	<0.025	<0.002	<0.05
	3/3/2011	200.7/200.8	<0.005	0.049	<0.002	**0.054**	<0.006	**2.4**	<0.005	**0.75**	**0.071**	<0.005	<0.005	0.01
	11/10/2010	6010B	<0.02	0.19	<0.002	0.037	<0.006	0.15	7.5E-03	**1.2**	<0.05	<0.005	<0.001	<0.05
	9/20/2010	6010B	<0.02	0.32	<0.002	0.03	<0.006	0.12	5.6E-03	**1.1**	<0.05	<0.005	<0.025	<0.05

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NE = Not established
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STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.3.3 LEAK DETECTION UNITS (East LDU, West LDU, Oil Sump LDU)
Volatile Organic Compound Analytical Result Summary

			Parameters							
			1,2,4-Trimethyl benzene (mg/L)	1,3,5-Trimethyl benzene (mg/L)	Naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	Acetone (mg/L)	Isopropyl benzene (mg/L)	4-Methyl-2-pentanone (mg/L)	n-Propyl benzene (mg/L)
WQCC 20NMAC 6.2.3103			**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
40 CFR 141.62 MCL (June 8, 2012)			**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
EPA RSL for Tap Water (April 2012)			**0.015**	**0.087**	**1.4E-04**	**0.027**	**12**	**NE**	**NE**	**NE**
SAMPLE ID	**DATE SAMPLED**	**METHOD**								
East LDU	6/15/2011	8260B	**0.54**	**0.16**	**0.11**	**0.095**	<0.2	0.023	0.23	0.044
	11/11/2010	8260B[1]	NL	NL	NL	NL	NL	NL	NL	NL
	9/20/2010	8021B	**0.81**	**0.26**	NL	NL	NL	NL	NL	NL
West LDU	6/15/2011	8260B	**0.041**	0.015	<0.02	<0.04	<0.1	<0.01	<0.1	<0.01
	11/11/2010	8260B[1]	NL	NL	NL	NL	NL	NL	NL	NL
	9/20/2010	8021B	**0.34**	0.1	NL	NL	NL	NL	NL	NL
Oil Sump LDU	6/15/2011	8260B	**0.5**	<0.2	<0.4	<0.8	5.3	<0.2	<2.0	<0.2
	11/11/2010	8260B[1]	NL	NL	NL	NL	NL	NL	NL	NL
	9/20/2010	8021B	**12**	**4.6**	NL	NL	NL	NL	NL	NL

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WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES:
1) *Method 8260B Short List Run*

8.4 OW-1, OW-10
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1.0	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
Well ID	**DATE SAMPLED**	**METHOD**					
OW-1	12/15/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	10/27/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	6/20/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	3/1/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	11/10/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	9/21/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	3/15/2010[1]	8021B	<0.001	<0.001	<0.001	<0.0015	<0.001
OW-10	12/15/2011	8260B	<0.001	<0.001	<0.001	<0.0015	**0.058**
	10/26/2011[2]	8260B	<0.001	<0.001	<0.001	<0.0015	**0.038**
	6/20/2011	8260B	<0.001	<0.001	<0.001	<0.0015	**0.046**
	2/28/2011	8260B	<0.001	<0.001	<0.001	<0.0015	**0.036**
	11/10/2010	8260B	<0.001	<0.001	<0.001	<0.0015	**0.036**
	9/21/2010	8260B	<0.001	<0.001	<0.001	<0.0015	**0.037**
	3/15/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	**0.033**

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STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) Quarterly sampling for OW-1 and OW-10 began in 4th Quarter 2010 per approved Facility Ground Water Plan dated August 25, 2010.

8.4.1 OW-1, OW-10

General Chemistry Analytical Result Summary

			Parameters									
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	DRO (mg/L)	GRO (mg/L)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6 to 9	0.2[1]	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE	NE
Well ID	DATE SAMPLED	METHOD										
OW-1	12/15/2011	300.0/8015B	0.31	63	0.25	<1.0	<1.0	<0.5	180	NA	<1.0	<0.05
	10/27/2011	300.0/8015B	0.3	65	0.21	<0.1	<0.1	<0.5	180	NA	NL	<0.05
	6/20/2011	300.0/8015B	0.33	64	0.3	<0.1	0.5	<0.5	180	8.87	<1.0	<0.05
	3/1/2011	300.0/8015B	0.29	68	0.27	**1.1**	1.1	<0.5	180	NA	<1.0	<0.05
	11/10/2010	300.0/8015B	0.31	64	NL	<1.0	<1.0	<0.5	180	NA	<1.0	<0.05
	9/10/2010	300.0/8015B	0.32	60	NL	<1.0	<1.0	<0.5	190	NA	<1.0	<0.05
	3/15/2010	300.0/8015B	0.33	58	0.24	4.1	4.1	<0.5	190	NA	<1.0	<0.05
OW-10	12/15/2011	300.0/8015B	0.31	**420**	0.54	<1.0	<1.0	<0.5	150	NA	<1.0	0.084
	10/26/2011	300.0/8015B	0.34	**500**	0.82	<2.0	0.38	<0.5	140	NA	NL	<0.05
	6/20/2011	300.0/8015B	<0.50	**300**	0.75	<2.0	0.52	<0.5	140	8.42	<0.001	0.053
	2/28/2011	300.0/8015B	0.34	**490**	0.76	**1.1**	1.1	<0.5	140	NA	<0.001	0.062
	11/10/2010	300.0/8015B	0.38	**450**	NL	<1.0	<1.0	<0.5	150	NA	<0.001	<0.05
	9/21/2010	300.0/8015B	0.35	**790**	NL	<1.0	<1.0	<0.5	160	NA	<0.001	<0.05
	3/15/2010	300.0/8015B	0.4	**390**	0.7	**2.2**	2.2	<0.5	150	NA	<0.001	0.064

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STANDARDS

WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.

a) Human Health Standards; b) Other Standards for Domestic Water

1) NMED Table 2a. TPH Screening Guidelines for Potable Ground Water (GW-1). (Oct 2006)

40 CFR 141.62 Detection Limits for Inorganic Contaminants

EPA Regional Screening Level (RSL) Summary Table

NOTES

8.4.2 OW-1, OW-10

Total Metals Analytical Result Summary

			Parameters											
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium (mg/L)	Mercury (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**0.05**	**1.0**	**0.05**	**0.2**	**0.05**	**0.05**	**0.03**	**0.002**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**0.1**	**NE**	**0.015[1]**	**NE**	**0.05**	**NE**	**0.03**	**0.002**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**11**	**NE**	**0.32**	**0.078**	**0.071**	**0.047**	**6.3E-04**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**												
OW-1	12/15/2011	200.7/200.8	<0.0025	0.066	<0.002	7.2E-03	**2.7**	<0.005	0.13	3.7E-03	<0.005	**0.046**	<0.0002	0.25
	10/27/2011	200.7/200.8	<0.0025	0.036	<0.002	<0.006	0.042	<0.005	0.013	3.5E-03	<0.005	**0.04**	<0.0002	<0.01
	6/20/2011	200.7/200.8	<0.0025	0.039	<0.002	<0.006	0.053	<0.005	0.016	5.6E-03	<0.005	**0.047**	<0.0002	<0.01
	3/1/2011	200.7/200.8	<0.0025	0.038	<0.002	<0.006	0.058	<0.005	0.013	<0.05	<0.005	**0.053**	NL	<0.01
	11/10/2010	6010B	<0.02	<0.02	<0.002	<0.006	<0.05	<0.005	6.6E-03	<0.05	<0.005	**0.039**	<0.0002	<0.02
	9/21/2010	6010B	<0.02	0.038	<0.002	<0.006	0.081	<0.005	0.023	<0.05	<0.005	**0.038**	<0.0002	<0.02
	3/15/2010	6010B	<0.02	0.031	<0.002	<0.006	0.16	<0.005	0.012	<0.05	<0.005	**3.94E-02**	<0.0002	<0.02
OW-10	12/15/2011	200.7/200.8	<0.0025	0.037	<0.002	<0.006	<0.02	<0.005	0.022	8.9E-03	<0.005	**0.058**	<0.0002	<0.01
	10/26/2011	200.7/200.8	<0.0025	0.045	<0.002	<0.006	<0.02	<0.005	0.043	7.1E-03	<0.005	**0.051**	<0.0002	<0.01
	6/20/2011	200.7/200.8	<0.0025	0.038	<0.002	<0.006	<0.02	<0.005	8.6E-03	0.013	<0.005	**0.057**	<0.0002	<0.01
	2/28/2011	200.7/200.8	<0.0025	0.045	<0.002	<0.006	<0.02	<0.005	0.03	<0.05	<0.005	**0.054**	NL	<0.01
	11/10/2010	6010B	<0.02	0.062	<0.002	<0.006	<0.02	<0.005	0.04	<0.05	<0.005	**0.052**	<0.0002	<0.02
	9/21/2010	6010B	<0.02	0.071	<0.002	<0.006	<0.02	<0.005	0.068	<0.05	<0.005	**0.057**	<0.0002	<0.02
	3/15/2010	6010B	<0.02	0.046	<0.002	<0.006	<0.02	<0.005	0.013	<0.05	<0.005	**5.25E-02**	<0.0002	<0.02

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STANDARDS

WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009), Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.4.3 OW-1, OW-10

Dissolved Metals Analytical Result Summary

			Parameters														
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**NE**	**0.05**	**0.05**	**NE**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**0.05**	**NE**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**0.32**	**NE**	**0.078**	**0.071**	**NE**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**															
OW-1	12/15/2011	200.7/200.8	<0.001	0.018	<0.002	<5.0	<0.006	<0.006	0.19	<0.005	0.013	<5.0	3.1E-03	<0.005	310	**0.043**	0.018
	10/27/2011	200.7/200.8	<0.001	0.035	<0.002	2.3	<0.006	<0.006	<0.02	<0.005	5.9E-03	<1.0	3.6E-03	<0.005	330	**0.04**	<0.01
	6/20/2011	200.7/200.8	**1.4E-03**	0.034	<0.002	2.0	<0.006	<0.006	<0.02	<0.005	4.5E-03	<1.0	6.2E-03	<0.005	340	**0.043**	0.048
	3/1/2011	200.7/200.8	<0.001	0.037	<0.002	2.1	<0.006	<0.006	<0.02	<0.005	4.1E-03	1.7	<0.05	<0.005	310	**0.032**	<0.01
	11/10/2010	6010B	<0.02	0.037	<0.002	2.2	<0.006	<0.006	<0.02	<0.005	4.6E-03	<1.0	<0.05	<0.005	300	**0.04**	<0.05
	9/21/2010	6010B	<0.02	0.029	<0.002	2.0	<0.006	<0.006	<0.02	<0.005	4.1E-03	<1.0	<0.05	<0.005	310	**0.038**	<0.05
	3/15/2010	6010B	<0.02	0.028	<0.002	2.0	<0.006	<0.006	<0.02	<0.005	<0.002	<1.0	<0.05	<0.005	280	**3.8E-02**	<0.05
OW-10	12/15/2011	200.7/200.8	<0.001	0.038	<0.002	49	<0.006	<0.006	<0.02	<0.005	0.023	1.1	8.9E-03	<0.005	430	**0.056**	<0.01
	10/26/2011	200.7/200.8	**0.001**	0.043	<0.002	64	<0.006	<0.006	<0.02	<0.005	0.04	<1.0	7.9E-03	<0.005	500	**0.05**	<0.01
	6/20/2011	200.7/200.8	**0.002**	0.034	<0.002	34	<0.006	<0.006	<0.02	<0.005	5.5E-03	<1.0	0.015	<0.005	400	**0.052**	0.16
	2/28/2011	200.7/200.8	<0.001	0.044	<0.002	62	<0.006	<0.006	<0.02	<0.005	0.029	3	<0.05	<0.005	490	**0.055**	<0.01
	11/10/2010	6010B	<0.02	0.047	<0.002	62	<0.006	<0.006	<0.02	<0.005	0.03	1.4	<0.05	<0.005	460	**0.052**	<0.05
	9/21/2010	6010B	<0.02	0.064	<0.002	100	<0.006	<0.006	<0.02	<0.005	0.055	1.8	<0.05	<0.005	580	**0.051**	0.088
	3/15/2010	6010B	<0.02	0.044	<0.002	48	<0.006	<0.006	<0.02	<0.005	0.012	<1.0	<0.05	<0.005	420	**4.97E-02**	<0.05

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STANDARDS
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a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009), Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.4.4 OW-1, OW-10

Volatile Organic Compound Analytical Result Summary

			Parameter
			1,1-Dichloroethane (mg/L)
WQCC 20NMAC 6.2.3103			0.025
40 CFR 141.62 MCL (June 8, 2012)			NE
EPA RSL for Tap Water (April 2012)			2.4E-03
Well ID	DATE SAMPLED	METHOD	
OW-10	12/15/2011	8260B	<0.001
	10/26/2011	8260B	<0.001
	6/20/2011	8260B	1.3E-03

DEFINITIONS
NE = Not establishes
NA = Not analyzed
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Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.5 OW-13, OW-14, OW-29, OW-30
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1.0	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
Well ID	DATE SAMPLED	METHOD					
OW-13	12/13/2011	8260B	<0.001	<0.001	<0.001	<0.0015	6.5E-03
	10/25/2011	8260B	<0.001	<0.001	<0.001	<0.0015	6.2E-03
	6/20/2011	8260B	<0.001	<0.001	<0.001	<0.0015	4.8E-03
	2/24/2011	8260B	<0.001	<0.001	<0.001	<0.0015	0.004
	11/8/2010	8260B	<0.001	<0.001	<0.001	<0.0015	3.8E-03
	9/22/2010	8260B	<0.001	<0.001	<0.001	<0.0015	3.1E-03
	6/7/2010	8021B	<0.001	<0.001	<0.001	<0.0015	2.7E-03
	3/25/2010	8021B	<0.001	<0.001	<0.001	<0.0015	2.3E-03
	11/3/2009	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	7/28/2009	8021B	<0.001	<0.001	<0.001	<0.0015	2.3E-03
	5/14/2009	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	2/24/2009	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	11/13/2008	8260B	<0.001	<0.001	<0.001	<0.002	1.6E-03
	8/19/2008	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	12/27/2007	8260B	<0.001	<0.001	<0.001	<0.0015	1.3E-03
	10/27/2006	8260B	<0.001	<0.001	<0.001	<0.0015	<0.0025
OW-14	12/13/2011	8260B	**1.5**	<0.005	**0.036**	<0.0075	**1.3**
	10/24/2011	8260B	**1.4**	<0.005	**0.045**	<0.0075	**1.4**
	6/20/2011	8260B	**1.8**	1.5E-03	**0.061**	<0.0015	**1.6**
	2/24/2011	8260B	**1.3**	1.9E-03	**0.042**	<0.0015	**1.4**
	11/8/2010	8260B	**0.63**	<0.001	**0.018**	<0.0015	**1.3**
	9/22/2010	8260B	**0.47**	<0.001	**8.3E-03**	<0.0015	**1.4**
	6/7/2010	8260B	**0.33**	1.8E-03	**8.5E-03**	<0.0015	**1.4**
	3/24/2010	8260B	**0.25**	<0.005	**0.01**	<0.0075	**1.5**
	11/12/2009	8021B	**0.034**	0.003	**6.4E-03**	<0.002	**1.2**
	7/30/2009	8021B	**0.074**	3.3E-03	<0.001	<0.0015	**1.3**
	5/12/2009	8260B	**0.11**	2.9E-03	**4.9E-03**	<0.002	**0.97**
	2/23/2009	8260B	**0.013**	1.4E-03	**5.5E-03**	<0.001	**1.0**
	11/12/2008	8260B	**8.2E-03**	<0.001	<0.001	<0.0015	**0.91**
	8/21/2008	8260B	**3.5E-03**	<0.001	<0.001	<0.0015	**1.3**
	1/1/2008	8260B	**0.014**	<0.001	<0.001	<0.0015	**0.92**
	12/28/2006	8260B	**4.2E-03**	<0.001	**2.5E-03**	<0.003	**0.18**
	10/27/2006	8260B	**3.4E-03**	<0.001	<0.001	<0.003	**0.016**
OW-29	12/13/2011	8260B	<0.001	<0.001	<0.001	<0.0015	**0.49**
	10/24/2011	8260B	<0.001	<0.001	<0.001	<0.0015	**0.47**
	6/20/2011	8260B	<0.001	<0.001	<0.001	<0.0015	**0.47**
	2/24/2011	8260B	<0.001	<0.001	<0.001	<0.0015	**0.3**
	11/9/2010	8260B	<0.001	<0.001	<0.001	<0.0015	**0.22**
	9/22/2010	8260B	<0.001	<0.001	<0.001	<0.0015	**0.19**
	6/7/2010	8260B	<0.001	<0.001	<0.001	<0.0015	**0.15**
	3/25/2010	8260B	<0.001	<0.001	<0.001	<0.0015	**0.12**
	11/3/2009	8021B	<0.001	<0.001	<0.001	<0.002	**0.082**

8.5 OW-13, OW-14, OW-29, OW-30
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			**0.01**	**0.75**	**0.75**	**0.62**	**NE**
40 CFR 141.62 MCL (June 8, 2012)			**0.005**	**1.0**	**0.7**	**10**	**NE**
EPA RSL for Tap Water (April 2012)			**3.9E-04**	**0.86**	**1.3E-03**	**0.19**	**0.012**
Well ID	**DATE SAMPLED**	**METHOD**					
OW-29	7/29/2009	8021B	<0.001	<0.001	<0.001	<0.0015	**0.049**
	5/14/2009	8260B	<0.001	<0.001	<0.001	<0.002	**0.041**
	2/25/2009	8260B	<0.001	<0.001	<0.001	<0.002	**0.021**
	11/14/2008	8260B	<0.001	<0.001	<0.001	<0.0015	**0.015**
	8/19/2008	8206B	<0.001	<0.001	<0.001	<0.0015	9.2E-03
	12/28/2007	8260B	<0.001	<0.001	<0.001	<0.0015	4.3E-03
	10/24/2006	8260B	<0.001	<0.001	<0.001	<0.003	<0.0025
OW-30	12/15/2011	8260B	<0.001	<0.001	<0.001	<0.0015	**1.3**
	10/24/2011	8260B	<0.001	<0.001	<0.001	<0.0015	**1.3**
	6/20/2011	8260B	<0.001	<0.001	<0.001	<0.0015	**1.3**
	2/24/2011	8260B	<0.001	<0.001	<0.001	<0.0015	**1.1**
	11/8/2010	8260B	<0.001	<0.001	<0.001	<0.0015	**1.1**
	9/27/2010	8260B	<0.001	<0.001	<0.001	<0.0015	**1.1**
	6/4/2010	8260B	<0.001	<0.001	<0.001	<0.0015	**1.0**
	3/24/2010	8260B	<0.005	<0.005	<0.005	<0.0075	**1.1**
	11/2/2009	8021B	<0.001	<0.001	<0.001	<0.002	**1.1**
	7/30/2009	8021B	<0.001	<0.001	<0.001	<0.0015	**1.1**
	5/13/2009	8260B	<0.001	<0.001	<0.001	<0.002	**1.1**
	2/23/2009	8260B	<0.001	<0.001	<0.001	<0.002	**1.0**
	11/12/2008	8260B	<0.001	<0.001	<0.001	<0.0015	**0.88**
	8/20/2008	8260B	<0.001	<0.001	<0.001	<0.0015	**1.1**
	12/28/2007	8260B	<0.001	<0.001	<0.001	<0.0015	**0.29**
	10/27/2006	8260B	<0.001	<0.001	<0.001	<0.003	<0.0025

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.5.1 OW-13, OW-14, OW-29, OW-30

Volatile Organic Compound Analytical Result Summary

			Parameters								
			1,2,4-Trimethylbenzene (mg/L)	1,2-Dichloroethane (EDC) (mg/L)	Naphthalene (mg/L)	1-Methylnaphthalene (mg/L)	1,1-Dichloroethane (mg/L)	Isopropylbenzene (mg/L)	n-Butylbenzene (mg/L)	n-Propylbenzene (mg/L)	Sec-butylbenzene (mg/L)
WQCC 20NMAC 6.2.3103			**NE**	**0.01**	**0.03**	**NE**	**0.025**	**NE**	**NE**	**NE**	**NE**
40 CFR 141.62 MCL (June 8, 2012)			**NE**	**0.005**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
EPA RSL for Tap Water (April 2012)			**0.015**	**1.5E-04**	**1.4E-04**	**9.7E-04**	**2.4E-03**	**NE**	**0.78**	**NE**	**NE**
Well ID	**DATE SAMPLED**	**METHOD**									
OW-13	12/13/2011	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	10/25/2011	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	6/20/2011	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	2/24/2011	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	11/8/2010	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	9/22/2010	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	6/7/2010	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	3/25/2010	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	11/3/2009	8021B[1]	<0.001	NL	NL	NL	NL	NL	NL	NL	NL
	7/28/2009	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	5/14/2009	8021B[1]	<0.001	NL	NL	NL	NL	NL	NL	NL	NL
	2/24/2009	8021B[1]	<0.001	NL	NL	NL	NL	NL	NL	NL	NL
	11/13/2008	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	8/19/2008	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	12/27/2007	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	10/27/2006	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
OW-14	12/13/2011	8260B	<0.005	<0.005	<0.01	**0.021**	<0.005	7.1E-03	<0.005	<0.005	<0.005
	10/24/2011	8260B	<0.005	<0.005	<0.01	**0.022**	<0.005	8.2E-03	<0.005	<0.005	<0.005
	6/20/2011	8260B	1.1E-03	**1.7E-03**	**2.1E-03**	**0.02**	1.2E-03	6.8E-03	<0.001	2.1E-03	2.4E-03
	2/24/2011	8260B	1.3E-03	**1.6E-03**	<0.002	**0.019**	<0.001	4.8E-03	<0.001	1.3E-03	2.7E-03
	11/8/2010	8260B	1.2E-03	**1.5E-03**	<0.002	**0.022**	<0.001	3.7E-03	<0.001	<0.001	2.7E-03
	9/22/2010	8260B	<0.001	**2.2E-03**	<0.002	**0.022**	<0.001	2.9E-03	<0.001	<0.001	2.8E-03
	6/7/2010	8260B	1.1E-03	**1.5E-03**	<0.002	**0.02**	<0.001	2.6E-03	<0.001	<0.001	2.4E-03
	3/24/2010	8260B	<0.005	<0.005	<0.01	<0.02	<0.005	<0.005	<0.005	<0.005	<0.005
	11/12/2009	8021B[1]	2.7E-03	NL	NL	NL	NL	NL	NL	NL	NL
	7/30/2009	8260B	<0.001	**1.7E-03**	<0.002	**0.021**	<0.001	3.3E-03	1.1E-03	<0.001	2.6E-03
	5/12/2009	8021B[1]	1.6E-03	NL	NL	NL	NL	NL	NL	NL	NL
	2/23/2009	8021B[1]	1.6E-03	NL	NL	NL	NL	NL	NL	NL	NL
	11/12/2008	8260B	<0.001	**1.8E-03**	<0.002	**0.016**	<0.001	1.5E-03	<0.001	<0.001	2.5E-03
	8/21/2008	8260B	<0.001	<0.001	<0.002	**0.012**	<0.001	1.6E-03	<0.001	<0.001	0.002
	1/1/2008	8260B	<0.001	<0.001	<0.002	**0.027**	<0.001	<0.001	0.052	<0.001	5.7E-03

8.5.1 OW-13, OW-14, OW-29, OW-30

Volatile Organic Compound Analytical Result Summary

			Parameters								
			1,2,4-Trimethylbenzene (mg/L)	1,2-Dichloroethane (EDC) (mg/L)	Naphthalene (mg/L)	1-Methylnaphthalene (mg/L)	1,1-Dichloroethane (mg/L)	Isopropylbenzene (mg/L)	n-Butylbenzene (mg/L)	n-Propylbenzene (mg/L)	Sec-butylbenzene (mg/L)
WQCC 20NMAC 6.2.3103			NE	0.01	0.03	NE	0.025	NE	NE	NE	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	0.005	NE	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.015	1.5E-04	1.4E-04	9.7E-04	2.4E-03	NE	0.78	NE	NE
Well ID	**DATE SAMPLED**	**METHOD**									
OW-14	12/28/2006	8260B	<0.001	**1.8E-03**	<0.002	<0.004	**0.016**	<0.001	0.015	<0.001	2.5E-03
	10/27/2006	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
OW-29	12/14/2011	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	10/24/2011	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	6/20/2011	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	2/24/2011	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	11/9/2010	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	9/22/2010	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	6/7/2010	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	3/25/2010	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	11/2/2009	8021B[1]	<0.001	NL	NL	NL	NL	NL	NL	NL	NL
	7/29/2009	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	5/13/2009	8021B[1]	<0.001	NL	NL	NL	NL	NL	NL	NL	NL
	2/24/2009	8021B[1]	<0.001	NL	NL	NL	NL	NL	NL	NL	NL
	11/14/2008	8260B	<0.001	**1.0E-03**	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	8/19/2008	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	12/28/2007	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	10/24/2006	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
OW-30	12/15/2011	8260B	<0.001	<0.001	<0.002	<0.004	<0.004	<0.001	<0.001	<0.001	<0.001
	10/24/2011	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	6/20/2011	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	2/24/2011	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	11/8/2010	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	9/27/2010	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	6/4/2010	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	3/24/2010	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	11/2/2009	8021B[1]	`<0.001	NL	NL	NL	NL	NL	NL	NL	NL
	7/30/2009	8260B	<0.001	**1.3E-03**	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	5/13/2009	8021B[1]	<0.001	NL	NL	NL	NL	NL	NL	NL	NL
	2/23/2009	8021B[1]	<0.001	NL	NL	NL	NL	NL	NL	NL	NL
	11/12/2008	8260B	<0.001	**1.3E-03**	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001

8.5.1 OW-13, OW-14, OW-29, OW-30

Volatile Organic Compound Analytical Result Summary

			Parameters								
			1,2,4-Trimethylbenzene (mg/L)	1,2-Dichloroethane (EDC) (mg/L)	Naphthalene (mg/L)	1-Methylnaphthalene (mg/L)	1,1-Dichloroethane (mg/L)	Isopropylbenzene (mg/L)	n-Butylbenzene (mg/L)	n-Propylbenzene (mg/L)	Sec-butylbenzene (mg/L)
WQCC 20NMAC 6.2.3103			**NE**	**0.01**	**0.03**	**NE**	**0.025**	**NE**	**NE**	**NE**	**NE**
40 CFR 141.62 MCL (June 8, 2012)			**NE**	**0.005**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
EPA RSL for Tap Water (April 2012)			**0.015**	**1.5E-04**	**1.4E-04**	**9.7E-04**	**2.4E-03**	**NE**	**0.78**	**NE**	**NE**
Well ID	**DATE SAMPLED**	**METHOD**									
OW-30	8/19/2008	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	12/28/2007	8260B	<0.001	**1.2E-03**	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001
	10/27/2006	8260B	<0.001	<0.001	<0.002	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) Method 8021B - Short List Run for analyticals

8.6 OW-50, OW-52
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			**0.01**	**0.75**	**0.75**	**0.62**	**NE**
40 CFR 141.62 MCL (June 8, 2012)			**0.005**	**1.0**	**0.7**	**10**	**NE**
EPA RSL for Tap Water (April 2012)			**3.9E-04**	**0.86**	**1.3E-03**	**0.19**	**0.012**
Well ID	**DATE SAMPLED**	**METHOD**					
OW-50	12/15/2011	8260B	<0.005	<0.005	<0.005	<0.0075	<0.005
	10/25/2011[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	6/20/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	3/1/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	11/9/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	9/27/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	6/1/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	3/16/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	11/17/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
OW-52	12/13/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	10/25/2011[1]	8021B	<0.001	<0.001	<0.001	<0.0015	<0.001
	6/20/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	3/1/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	11/9/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	9/27/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	6/1/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	3/16/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	11/17/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) 10/25/2011 - Quarterly sampling was combined with the Annual Sampling event

8.6.1 OW-50, OW-52
General Chemistry and DRO/GRO Analytical Result Summary

			Parameters										
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)	DRO (mg/L)	GRO (mg/L)
WQCC 20NMAC 6.2.3103			**1.6**	**250.0**	**NE**	**NE**	**10**	**NE**	**600.0**	**6 to 9**	**NE**	**0.2[1]**	**NE**
40 CFR 141.62 MCL (June 8, 2012)			**4.0**	**NE**	**NE**	**1.0**	**10**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
EPA RSL for Tap Water (April 2012)			**0.62**	**NE**	**NE**	**1.6**	**25**	**3.1E-04**	**NE**	**NE**	**NE**	**NE**	**NE**
Well ID	**DATE SAMPLED**	**METHOD**											
OW-50	12/15/2011	300.0/8015B	0.49	25	0.19	<1.0	<1.0	<0.5	140	8.29	1100	<1.0	<0.05
	10/25/2011[2]	300.0/8015B	0.49	26	0.15	NL	NL	<0.5	140	8.46	1100	<1.0	<0.05
	6/20/2011	300.0/8015B	0.53	28	0.22	<0.1	<0.1	<0.5	150	8.67	1100	<1.0	<0.05
	3/1/2011	300.0/8015B	0.49	26	0.2	<0.1	<0.1	<0.5	140	8.3	1000	<1.0	<0.05
	11/9/2010	300.0/8015B	0.51	29	NL	<0.1	<0.1	<0.5	160	8.26	1100	<1.0	<0.05
	9/27/2010	300.0/8015B	0.41	26	NL	<0.1	<0.1	<0.5	140	NA	NA	<1.0	<0.05
	6/1/2010	300.0/8015B	0.53	27	0.22	<0.1	<0.1	<0.5	140	8.35	1000	<1.0	<0.05
	3/16/2010	300.0/8015B	0.53	29	0.22	<0.1	<0.1	<0.5	150	8.34	1000	<1.0	<0.05
	11/17/2009	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<0.05
OW-52	12/13/2011	300.0/8015B	<0.5	27	0.17	<1.0	<1.0	<0.5	130	8.47	1000	<1.0	<0.05
	10/25/2011[2]	300.0/8015B	0.4	20	<0.1	**1.3**	1.3	<0.5	100	8.43	940	<1.0	<0.05
	6/20/2011	300.0/8015B	0.56	24	0.19	<0.1	<0.1	<0.5	140	8.66	1100	<1.0	<0.05
	3/1/2011	300.0/8015B	0.57	25	0.17	<0.1	<0.1	<0.5	130	8.42	990	<1.0	<0.05
	11/9/2010	300.0/8015B	0.54	32	0.17	<0.1	<0.1	<0.5	140	8.27	1000	<1.0	<0.05
	9/27/2010	300.0/8015B	0.52	27	NL	<0.1	<0.1	<0.5	140	NA	NA	<1.0	<0.05
	6/1/2010	300.0/8015B	0.52	28	NL	<0.1	<0.1	<0.5	140	8.25	990	<1.0	<0.05
	3/16/2010	300.0/8015B	0.56	31	0.18	<0.1	<0.1	<0.5	150	8.23	990	<1.0	<0.05
	11/17/2009	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<0.05

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
1) NMED Table 2a. TPH Screening Guidelines for Potable Ground Water (GW-1). (Oct 2006)
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) 10/25/2011 - Quarterly sampling was combined with the Annual Sampling event
Hall Laboratory analysis indicates that there was a constituent detected in the field blank submitted of 0.002mg/L of Toluene on 10-25-11.

8.6.2 OW-50, OW-52

Total Metals Analytical Result Summary

			Parameters												
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Selenium (mg/L)	Silver (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**0.05**	**0.05**	**0.002**	**0.03**	**10**
40 CFR 141.62 MCL (June 8 2012)			**0.01**	**2.0**	**0.005**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**0.05**	**NE**	**0.002**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**0.62**	**11**	**NE**	**0.32**	**0.078**	**0.071**	**6.3E-04**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**													
OW-50	12/15/2011	200.7/200.8	<0.0025	0.07	<0.002	<0.006	<0.006	0.51	<0.005	0.095	<0.0025	<0.005	<0.0002	8.7E-03	<0.01
	10/25/2011[2]	200.7/200.8	<0.0025	0.041	<0.002	<0.006	<0.006	0.022	<0.005	0.082	<0.0025	<0.005	<0.002	7.2E-03	<0.01
	6/20/2011	200.7/200.8	<0.0025	0.046	<0.002	<0.006	<0.006	0.16	<0.005	0.085	<0.0025	<0.005	<0.002	7.1E-03	<0.01
	3/1/2011	200.7/200.8	**0.003**	0.045	<0.002	<0.006	<0.006	0.24	<0.005	0.086	<0.05	<0.005	<0.0002	7.2E-03	<0.01
	11/9/2010	200.7/200.8	**3.1E-03**	0.038	<0.002	<0.006	<0.006	<0.02	<0.005	0.079	5.5E-03	<0.005	<0.0002	NL	0.02
	9/27/2010	6010B	<0.02	0.041	<0.002	<0.006	<0.006	0.15	<0.005	0.032	<0.05	<0.005	<0.0002	0.006	<0.02
	6/1/2010	6010B	<0.02	0.042	<0.002	<0.006	NL	NL	<0.005	NL	<0.05	<0.005	<0.0002	NL	<0.02
	3/16/2010	6010B	<0.02	0.038	<0.002	<0.006	<0.006	<0.05	<0.005	0.079	<0.05	<0.005	<0.0002	6.26E-03	<0.02
	11/17/2009	6010B	<0.02	0.042	<0.002	<0.006	NL	NL	<0.005	NL	<0.05	<0.005	<0.0002	NL	NL
OW-52	12/13/2011	200.7/200.8	<0.0025	0.034	<0.002	6.9E-03	<0.006	0.43	<0.005	0.039	<0.0025	<0.005	<0.0002	0.01	<0.01
	10/25/2011[2]	200.7/200.8	<0.0025	0.025	<0.002	<0.006	<0.006	0.13	<0.005	0.032	<0.0025	<0.005	<0.0002	0.01	<0.01
	6/20/2011	200.7/200.8	<0.0025	0.026	<0.002	<0.006	<0.006	0.011	<0.005	0.036	<0.0025	<0.005	<0.002	0.012	<0.01
	3/1/2011	200.7/200.8	<0.0025	0.027	<0.002	<0.006	<0.006	0.35	<0.005	0.044	<0.05	<0.005	NL	3.6E-03	<0.01
	11/19/2010	200.7/200.8	<0.0025	0.026	<0.002	<0.006	<0.006	0.056	<0.005	0.028	4.6E-03	<0.005	<0.0002	NL	<0.01
	9/27/2010	6010B	<0.02	0.025	<0.002	<0.006	<0.006	0.065	<0.005	0.03	<0.05	<0.005	<0.0002	0.01	<0.02
	6/1/2010	6010B	<0.02	0.024	<0.002	<0.006	NL	NL	<0.005	NL	<0.05	<0.005	<0.0002	NL	NL
	3/16/2010	6010B	<0.02	0.027	<0.002	<0.006	<0.006	0.15	<0.005	0.032	<0.05	<0.005	<0.0002	1.03E-02	<0.02
	11/17/2009	6010B	<0.02	0.027	<0.002	<0.006	NL	NL	<0.005	NL	<0.05	<0.005	<0.0002	NL	NL

DEFINITIONS

NE = Not established

NA = Not analyzed

NL = Not listed on laboratory analysis

Bold and highlighted values represent values above the applicable standards

STANDARDS

WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.

a) Human Health Standards; b) Other standards for Domestic Water

40 CFR 141.62 Detection Limits for Inorganic Contaminants

1. National Primary Drinking Water Regulation (May 2009); Action Level

EPA Regional Screening Level (RSL) Summary Table

NOTES

2) *10/25/2011 - Quarterly sampling was combined with the Annual Sampling event*

Hall Laboratory analysis indicates that there was a constituent detected in the field blank submitted of 0.002mg/L of Toluene ON 10-25-11.

8.6.3 OW-50, OW-52
Dissolved Metals Analytical Result Summary

			Parameters														
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**NE**	**0.05**	**0.05**	**NE**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**0.05**	**NE**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**0.32**	**NE**	**0.078**	**0.071**	**NE**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**															
OW-50	12/15/2011	200.7/200.8	**1.8E-03**	0.04	<0.002	22	<0.006	<0.006	<0.1	<0.005	0.079	<5.0	<0.001	<0.005	220	8.1E-03	<0.01
	10/25/2011[2]	200.7/200.8	**1.9E-03**	0.041	<0.002	22	<0.006	<0.006	<0.02	<0.005	0.082	<1.0	<0.001	<0.005	240	7.4E-03	<0.01
	6/20/2011	200.7/200.8	**2.2E-03**	NL	<0.002	24	<0.006	NL	<0.02	<0.005	0.088	<1.0	1.3E-03	<0.005	250	7.5E-03	0.021
	3/1/2011	200.7/200.8	**2.6E-03**	0.039	<0.002	21	<0.006	<0.006	<0.02	<0.005	0.082	<1.0	<0.05	<0.005	230	6.9E-03	0.081
	11/9/2010	200.7/200.8	NL	0.037	<0.002	NL	<0.006	<0.006	<0.02	<0.005	0.078	<1.0	1.4E-03	<0.005	NL	NL	<0.01
	9/27/2010	6010B	<0.02	0.04	<0.002	21	<0.006	<0.006	<0.02	<0.005	0.081	<1.0	<0.05	<0.005	220	0.006	0.064
	6/1/2010	6010B	<0.02	0.04	<0.002	20	<0.006	<0.006	<0.02	<0.005	0.083	<1.0	<0.05	<0.005	220	NL	<0.05
	3/16/2010	6010B	<0.02	0.036	<0.002	19	<0.006	<0.006	<0.02	<0.005	0.076	<1.0	<0.05	<0.005	210	6.41E-03	<0.05
OW-52	12/13/2011	200.7/200.8	<0.001	0.025	<0.002	4.1	<0.006	<0.006	0.08	<0.005	0.025	1.1	<0.001	<0.005	210	0.01	<0.01
	10/25/2011[2]	200.7/200.8	<0.001	0.025	<0.002	4.2	<0.006	<0.006	0.12	<0.005	0.031	1.1	<0.001	<0.005	240	0.011	<0.01
	6/20/2011	200.7/200.8	<0.001	NL	<0.002	5.2	<0.006	NL	0.12	<0.005	0.037	1.2	1.5E-03	<0.005	240	0.013	0.024
	3/1/2011	200.7/200.8	<0.001	0.36	<0.02	93	<0.006	<0.006	0.064	<0.005	**0.68**	2.3	<0.05	<0.005	490	7.1E-03	<0.01
	11/9/2010	200.7/200.8	NL	0.025	<0.02	4.2	<0.006	<0.006	0.048	<0.005	0.027	1.2	NL	<0.005	240	NL	<0.01
	9/27/2010	6010B	<0.02	0.026	<0.002	4.3	<0.006	<0.006	0.058	<0.005	0.031	1.2	<0.05	<0.005	230	0.009	0.079
	6/1/2010	6010B	<0.02	0.026	<0.002	4.0	<0.006	<0.006	0.058	<0.005	0.032	1.2	<0.05	<0.005	230	9.26E-03	<0.05
	3/16/2010	6010B	<0.02	0.023	<0.002	3.9	<0.006	<0.006	0.034	<0.005	0.028	1.1	<0.05	<0.005	230	9.2E-03	<0.05

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1. National Primary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES:
2) *10/25/2011 - Quarterly sampling was combined with the Annual Sampling event*
Hall Laboratory analysis indicates that there was a constituent detected in the field blank submitted of 0.002mg/L of Toluene on 10-25-11.

8.6.4 OW-50, OW-52
Semi Volatile Organic Compound Analytical Result Summary

			Parameters	
			Benzoic Acid (mg/L)	Bis(2-ethylhexyl)phthalate (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	NE
EPA RSL for Tap Water (April 2012)			58	7.2E-05
Well ID	**DATE SAMPLED**	**METHOD**		
OW-50	12/15/2011	8270C	<0.02	<0.01
	10/25/2011[1]	8270C	<0.02	<0.01
	6/20/2011	8270C	<0.02	<0.01
	3/1/2011	8270C	<0.02	<0.01
	11/9/2010	8270C	<0.02	<0.01
	9/27/2010	8270C	<0.02	<0.01
	6/1/2010	8270C	<0.02	<0.01
	3/16/2010	8270C	0.02	**0.011**
	11/17/2009	8270C	<0.02	<0.01

DEFINITIONS
NE = Not establishes
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) 10/25/2011 - Quarterly sampling was combined with the Annual Sampling event
Hall Laboratory analysis indicates that there was a constituent detected in the field blank submitted of 0.002 mg/L of Toluene on 10-25-11.

8.7 GWM-1, GWM-2, GWM-3
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
Well ID	DATE SAMPLED	METHOD					
GWM-1	12/14/2011	8260B	**8.5E-03**	1.9E-03	**4.2E-03**	0.014	**0.054**
	9/26/2011[3]	8260B	**9.6E-03**	5.2E-03	**5.9E-03**	0.03	**0.051**
	6/15/2011	8260B	**7.4E-03**	2.7E-03	**5.3E-03**	0.026	**0.047**
	2/16/2011	8260B	**9.5E-03**	3.4E-03	**5.4E-03**	0.023	**0.057**
	11/2/2010	8260B	**6.9E-03**	2.3E-03	**3.5E-03**	0.022	**0.062**
	9/16/2010	8260B	**7.5E-03**	4.9E-03	**6.7E-03**	0.03	**0.053**
	7/20/2010	8260B	**0.008**	0.002	**6.8E-03**	0.03	**0.077**
	3/3/2010[1]	8260B	**0.012**	0.005	**0.011**	0.05	**0.078**
	7/27/2009	8260B	**8.9E-03**	0.002	**7.4E-03**	0.034	**0.085**
	7/10/2008	8260B	**0.011**	2.1E-03	**3.9E-03**	0.019	**0.12**
	5/24/2007	8260B	**0.016**	<0.001	<0.001	<0.003	**0.23**
	10/27/2006	8260B	**0.012**	<0.001	<0.001	<0.003	**0.16**
GWM-2[2]	12/14/2011	8021B	<0.001	<0.001	<0.001	<0.001	2.7E-03
	9/26/2011[3]	8021b	<0.001	<0.001	<0.001	<0.0015	2.6E-03
	6/15/2011	8260B	<0.001	<0.001	<0.001	<0.0015	0.003
	2/16/2011	8260B	<0.001	<0.001	<0.001	<0.0015	8.3E-03
	10/4/2010	8260B	<0.001	<0.001	<0.001	<0.003	0.011
	9/16/2010	8260B	<0.001	<0.001	<0.001	<0.003	0.011
	2/28/2010	8260B	<0.001	<0.001	<0.001	<0.0015	0.028
GWM-3[2]	12/14/2011	8021B	<0.001	<0.01	<0.001	<0.002	<0.0025
	9/26/2011[3]	8021b	<0.001	<0.001	<0.001	<0.002	<0.0025
	6/15/2011	8260B	<0.001	<0.001	<0.001	<0.0015	0.002
	2/16/2011	8260B	<0.001	<0.001	<0.001	<0.0015	8.1E-03
	10/4/2010	8260B	<0.001	<0.001	<0.001	<0.003	9.2E-03
	9/16/2010	8260B	<0.001	<0.001	<0.001	<0.003	0.009

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards: b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES:
1) GWM-1 sample schedule is on an annual basis. For this sampling period, technician used the unapproved Facility Work Plan (FWP) at the beginning of 2010. which called for this well to be sampled on a quarterly basis. The FWP was approved on August 25, 2010.
2) GWM-2 and GWM-3 are normally dry wells. During inspection of well, water was present and subsequently well was sampled and purged dry.

8.7.1 GWM-1, GWM-2, GWM-3
General Chemistry and DRO/GRO Analytical Result Summary

			Parameters										
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)	DRO (mg/L)	GRO (mg/L)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6 to 9	NE	0.2[1]	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE	NE	NE
Well ID	**DATE SAMPLED**	**METHOD**											
GWM-1	12/14/2011	300.0/8015B	**1.2**	**1300**	2.5	<1.0	<1.0	<10	54	NA	NA	**2.9**	0.81
	9/26/2011	300.0/8015B	**3.5**	**1300**	1.5	<4.0	<4.0	<2.5	47	NA	NA	**3.9**	0.65
	6/15/2011	300.0/8015B	**2.6**	**1200**	2.6	<2.0	<2.0	<2.5	64	NA	NA	**4.0**	0.53
	2/16/2011	300.0/8015B	**2.8**	**1400**	2.5	**2.1**	2.1	<0.5	47	NA	NA	**5.4**	0.7
	11/2/2010	300.0/8015B	**3.5**	**1300**	NL	<1.0	<1.0	<5.0	26	NA	NA	**6.0**	0.68
	9/16/2010	300.0/8015B	**2.9**	**1400**	NL	<4.0	<4.0	<5.0	48	NA	NA	**7.7**	0.71
	7/20/2010	300.0	**2.9**	**1500**	2.6	<4.0	<4.0	<2.5	57	7.18	6400	NA	NA
	3/3/2010[2]	300.0/8015B	**2.1**	**1600**	2.7	<4.0	<4.0	<0.5	88	NA	NA	**3.9**	0.88
	7/27/2009	300.0	**2.1**	**1600**	NL	<4.0	<4.0	<0.5	73	7.03	6200	NA	NA
	7/10/2008	300.0	**1.7**	**1800**	NL	<2.0	<2.0	<0.5	110	6.92	7400	NA	NA
	5/24/2007	300.0	**1.9**	**1800**	NL	<2.0	<2.0	<0.5	120	NL	NL	NL	NL
	10/26/2006	300.0	**2.0**	**3700**	NL	<2.0	<2.0	<2.5	120	6.87	NA	NA	NA
GWM-2[3]	12/14/2011	300.0/8015B	0.48	**2100**	4	**25**	**25**	<10	**1000**	NA	NA	<1.0	<0.05
	9/26/2011	300.0/8015B	**1.6**	**2200**	4.9	**52**	**52**	<2.5	**1200**	NA	NA	<1.0	<0.05
	6/15/2011	300.0/8015B	**3.1**	**2200**	4.9	**66**	**66**	<2.5	**1100**	NA	NA	<1.0	<0.05
	2/16/2011	300.0/8015B	0.43	**910**	3.3	**2.6**	2.6	<0.5	**660**	NA	NA	<1.0	<0.05
	10/4/2010	300.0/8015B	0.52	**1800**	3.4	<4.0	<4.0	<0.5	**740**	NA	NA	<1.0	<0.05
	9/16/2010	300.0/8015B	0.46	**1400**	NL	<4.0	<4.0	<5.0	**700**	NA	NA	<1.0	<0.05
	2/28/2008	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<0.05
GWM-3[3]	12/14/2011	300.0/8015B	**5.0**	**1400**	2.5	**51**	**51**	<10	**1800**	NA	NA	**1.3**	<0.05
	9/26/2011	300.0/8015B	**5.3**	**1000**	2.5	**130**	**130**	<2.5	**2500**	NA	NA	**2.7**	<0.05
	6/15/2011	300.0/8015B	**5.5**	**610**	2.3	<2.0	<2.0	<2.5	**1900**	NA	NA	**1.1**	0.12
	2/16/2011	300.0/8015B	**4.2**	**1100**	2.1	**61**	**61**	<0.5	**1900**	NA	NA	<1.0	<0.05
	10/4/2010	300.0/8015B	**5.9**	**1800**	2.3	**61**	**61**	<0.5	**1500**	NA	NA	**1.3**	0.12
	9/16/2010	300.0/8015B	**4.7**	**2000**	NL	**66**	**66**	<5.0	**1500**	NA	NA	**3.7**	0.066

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
1) NMED Table 2a. TPH Screening Guidelines for Potable Ground Water (GW-1). (Oct 2006)
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) GWM-1 sample schedule is on an annual basis. For this sampling period, technician used the unapproved Facility Work Plan (FWP) at the beginning of 2010. which called for this well to be sampled on a quarterly basis. The FWP was approved on August 25, 2010.
3) GWM-2 and GWM-3 are normally dry wells. During inspection of wells, water was present and samples were collected.

8.7.2 GWM-1, GWM-2, GWM-3

Total Metals Analytical Result Summary

			Parameters															
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**0.05**	**NE**	**0.002**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**0.05**	**NE**	**0.002**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.50E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**0.078**	**NE**	**6.30E-04**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**																
GWM-1	12/14/2011	200.7/200.8	**0.097**	0.67	<0.002	<10	<0.006	0.029	**15**	**0.023**	2.5	**2.5**	4.0	4.7E-03	1100	<0.002	0.02	0.041
	9/26/2011[3]	200.7/200.8	**0.12**	1.5	<0.002	290	<0.006	<0.006	**17**	<0.005	67	**2.8**	3.2	8.2E-03	1100	<0.0002	0.007	0.025
	6/15/2011	200.7/200.8	**0.14**	**1.5**	<0.002	NL	<0.006	<0.006	**17**	0.01	NL	**2.8**	NL	0.015	NL	<0.0002	8.4E-03	0.026
	2/16/2011	200.7/200.8	**0.16**	0.94	<0.002	310	8.9E-03	8.9E-03	**17**	9.8E-03	71	**3.0**	4.3	0.02	1200	<0.0002	0.015	0.038
	11/2/2010	6010B	**0.14**	**1.4**	<0.002	NL	<0.006	<0.006	**7.9**	9.5E-03	NL	**3.0**	NL	<0.05	NL	<0.0002	0.009	0.025
	9/16/2010	6010B	**0.12**	0.87	<0.002	NL	<0.006	9.8E-03	**15**	0.012	NL	**2.9**	NL	<0.05	NL	<0.0002	0.015	0.023
	7/20/2010	6010B	**0.16**	**1.2**	<0.002	NL	<0.006	0.019	**20**	0.011	NL	**3.0**	NL	<0.05	NL	<0.0002	0.011	0.031
	3/3/2010[2]	6010B	**0.098**	0.42	<0.002	NL	<0.006	7.2E-03	**15**	7.8E-03	NL	**3.0**	NL	<0.05	NL	<0.0002	2.24E-02	0.03
	7/27/2009	6010B	**0.114**	0.53	<0.002	310	<0.006	<0.006	**14**	7.2E-03	78	**3.2**	3.0	<0.001	1300	<0.0002	1.59E-02	0.025
	7/10/2008	6010B	**0.07**	0.45	<0.002	350	<0.006	0.014	**14**	0.01	81	**3.6**	3.3	<0.05	1400	<0.0002	NL	<0.05
	5/24/2007	6010B	**0.081**	0.44	<0.002	360	<0.006	NL	NL	<0.005	87		3.7	<0.05	1300	<0.0002	NL	NL
	10/26/2006	6010B	**0.077**	0.53	<0.002	380	<0.006	NL	NL	NL	93		4.2	NL	1400	<0.0002	NL	NL

DEFINITIONS

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STANDARDS

WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009), Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES

2) Used unapproved Facility Work Plan (FWP) at beginning of year which required quarterly sampling. This well is sampled on an annual basis.
3) 9/26/2011 Quarterly sampling combined with Annual sampling event

8.7.3 GWM-1, GWM-2, GWM-3
Dissolved Metals Analytical Result Summary

			Parameters														
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**0.05**	**NE**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**0.05**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**0.078**	**NE**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**															
GWM-1	12/14/2011	200.7/200.8	**0.088**	0.52	<0.01	280	<0.03	<0.03	**11**	**<0.025**	65	**2.3**	<5.0	6.7E-03	1200	0.02	<0.05
	9/26/2011	200.7/200.8	**0.12**	**1.3**	<0.002	300	<0.006	<0.006	**14**	<0.005	71	**2.7**	<5.0	0.012	1200	8.1E-03	0.028
	6/15/2011	200.7/200.8	**0.1**	**1.4**	<0.01	270	<0.03	<0.03	**14**	<0.025	65	**2.7**	<5.0	0.025	1000	7.5E-03	0.063
	2/16/2011	200.7/200.8	**0.15**	0.95	<0.01	310	<0.03	<0.03	**14**	<0.025	73	**2.9**	6.4	0.014	1200	0.013	<0.05
	11/2/2010	6010B	<0.2	**1.3**	<0.002	330	<0.006	<0.006	**5.2**	9.4E-03	75	**3.0**	2.9	<0.05	1100	0.007	NL
	9/16/2010[4]	6010B	**0.12**	**1.2**	<0.002	310	<0.006	<0.006	**15**	8.6E-03	76	**2.9**	2.8	<0.25	1200	0.01	NL
	7/20/2010[3]	6010B	**0.15**	**1.1**	<0.002	310	<0.006	<0.006	**14**	5.6E-03	70	**2.9**	3.1	<0.05	1200	NL	<0.05
	3/2/2010[2]	6010B	**0.074**	0.38	<0.002	280	<0.006	<0.006	**12**	8.4E-03	57	**2.7**	2.9	<0.05	1200	0.028	0.059
GWM-2[3]	12/14/2011	CATIONS	NA	NA	NA	620	NA	NA	NA	NA	120	NA	4.1	NA	1500	NA	NA
	9/26/2011	CATIONS	NA	NA	NA	620	NA	NA	NA	NA	110	NA	4.2	NA	1600	NA	NA
	6/15/2011	CATIONS	NA	NA	NA	570	NA	NA	NA	NA	120	NA	4.2	NA	1600	NA	NA
	2/16/2011	CATIONS	NA	NA	NA	460	NA	NA	NA	NA	74	NA	3.7	NA	1000	NA	NA
	10/4/2010	CATIONS	NA	NA	NA	420	NA	NA	NA	NA	77	NA	3.0	NA	910	NA	NA
	9/16/2010	CATIONS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GWM-3[3]	12/14/2011	CATIONS	NA	NA	NA	440	NA	NA	NA	NA	79	NA	4.6	NA	1300	NA	NA
	9/26/2011	CATIONS	NA	NA	NA	500	NA	NA	NA	NA	91	NA	5.1	NA	1300	NA	NA
	6/15/2011	CATIONS	NA	NA	NA	470	NA	NA	NA	NA	83	NA	5.7	NA	1200	NA	NA
	2/16/2011	CATIONS	NA	NA	NA	450	NA	NA	NA	NA	81	NA	7.9	NA	1200	NA	NA
	10/4/2010	CATIONS	NA	NA	NA	450	NA	NA	NA	NA	89	NA	7.6	NA	1300	NA	NA
	9/16/2010	CATIONS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009), Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) Used unapproved FWGWMP sampling guidelines for first quarter 2010 which lists this well to be sampled on a quarterly basis. (GWM-1 is on an annual sampling schedule)
3) GWM-2 and GWM-3 are normally dry wells. Water was detected during quarterly inspections.

8.7.4 GWM-1, GWM-2, GWM-3
Volatile and Semi-Volatile Organic Compound Analytical Result Summary

			Parameters									
			1,2,4-Trimethyl benzene (mg/L)	1,3,5-Trimethyl benzene (mg/L)	Naphthalene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	Acetone (mg/L)	Isopropyl benzene (mg/L)	n-Butyl benzene (mg/L)	n-Propyl benzene (mg/L)	2,4-Dimethyl phenol (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	0.03	NE	NE	NE	NE	NE	NE	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.015	0.087	1.4E-04	9.7E-04	0.027	12	NE	0.78	NE	0.27
Well ID	DATE SAMPLED	METHOD										
GWM-1	12/14/2011	8260B	0.004	<0.001	<0.002	**5.2E-03**	<0.004	<0.01	1.3E-03	<0.001	2.2E-03	NL
	9/26/2011	8260B	**0.019**	2.9E-03	**4.4E-03**	**0.028**	<0.004	<0.01	1.9E-03	<0.01	2.7E-03	NL
	6/15/2011	8260B	**0.018**	3.1E-03	**5.5E-03**	**0.024**	6.2E-03	<0.01	1.8E-03	<0.01	2.8E-03	NL
	2/16/2011	8260B	0.008	<0.001	<0.002	**0.01**	<0.004	<0.01	1.4E-03	<0.001	1.8E-03	NL
	11/2/2010	8260B	7.5E-03	<0.001	<0.02	**0.011**	<0.004	<0.01	<0.001	1.6E-03	1.2E-03	NL
	9/16/2010[3]	8260B[4]	0.012	1.9E-03	NA	NA	NA	NA	NA	NA	NA	NA
	7/20/2010[2]	8260B/8270C	0.013	<0.001	**3.5E-03**	**7.2E-03**	<0.004	0.012	1.6E-03	1.9E-03	1.5E-03	0.052
	3/3/2010[1]	8260B	8.1E-03	<0.005	<0.01	<0.02	<0.02	<0.05	<0.005	<0.005	<0.005	NL
	7/27/2009	8260B/8270C	6.4E-03	1.1E-03	**2.4E-03**	**9.7E-03**	<0.004	<0.01	2.6E-03	<0.001	2.0E-04	0.064
	7/10/2008	8260B	4.6E-03	<0.002	<0.002	<0.008	<0.008	<0.02	<0.002	<0.002	<0.002	0.028
	5/24/2007	8260B/8270C	<0.01	<0.01	<0.02	<0.04	<0.04	<0.1	<0.01	<0.01	<0.01	<0.01

DEFINITIONS	STANDARDS
NE = Not established	WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
NA = Not analyzed	a) Human Health Standards; b) Other Standards for Domestic Water
NL = Not listed on laboratory analysis	40 CFR 141.62 Detection Limits for Inorganic Contaminants
Bold and highlighted values represent values above the applicable standards	EPA Regional Screening Level (RSL) Summary Table

NOTES:

1) Used unapproved 2010 Facility Wide Ground Water Monitoring Plan (FWGWMP) for first quarter 2010.
2) Began using approved 2010 FWGWMP (August 25, 2010).
3) Method 8260B volatiles short list only run
4) 9/26/2011 Quarterly sampling combined with Annual sampling event

8.8 NAPIS-1, NAPIS-2, NAPIS-3, KA-3
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1.0	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
Well ID	DATE SAMPLED	METHOD					
NAPIS 1	12/14/2011	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	9/27/2011	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	6/15/2011	8260B	<0.01	<0.01	<0.01	<0.0015	<0.01
	3/2/2011	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	11/2/2010	8260B	<0.01	<0.01	<0.01	<0.003	<0.0015
	9/15/2010	8260B	<0.01	<0.01	<0.01	<0.002	<0.0025
	6/8/2010	8021B	<0.01	<0.01	<0.01	<0.002	<0.0025
	3/8/2010	8021B	<0.01	<0.01	<0.01	<0.002	<0.0025
	11/23/2009	8260B	<0.001	1.6E-03	<0.001	<0.002	<0.0025
	8/11/2009	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	5/28/2009	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	3/24/2009	8260B	<0.001	0.001	<0.001	<0.002	<0.0025
	11/10/2008	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	9/30/2008	8260B	<0.001	<0.001	<0.001	<0.002	NA
	7/9/2008	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	4/11/2008	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
NAPIS 2	12/14/2011	8021B	**0.022**	<0.005	**8.9E-03**	<0.01	**0.33**
	9/27/2011	8021B	**0.035**	<0.005	<0.005	<0.01	**0.33**
	6/15/2011	8260B	**0.027**	<0.005	**0.018**	<0.0075	**0.28**
	3/2/2011	8021B	**0.04**	<0.001	**0.014**	<0.01	**0.34**
	11/2/2010	8260B	**0.015**	<0.005	<0.001	<0.002	**0.27**
	9/15/2010	8260B	**0.066**	<0.001	**8.3E-03**	<0.0015	**0.23**
	6/10/2010	8021B	**0.14**	<0.005	**9.6E-03**	<0.001	**0.23**
	3/8/2010	8260B	**0.83**	1.4E-03	**0.016**	2.1E-03	**0.25**
	11/23/2009	8260B	**0.032**	0.001	**9.3E-03**	<0.002	**0.094**
	8/11/2009	8260B	**0.057**	<0.001	**0.022**	<0.002	**0.089**
	5/28/2009	8260B	**0.028**	<0.005	**5.3E-03**	<0.01	**0.13**
	3/24/2009	8260B	**0.019**	1.1E-03	**8.1E-03**	<0.002	**0.09**
	11/10/2008	8260B	**0.025**	<0.001	**0.011**	<0.002	**0.18**
	9/30/2008	8260B	**0.016**	<0.001	**1.6E-03**	4.1E-03	NA
	7/9/2008	8260B	**0.013**	<0.001	**0.011**	5.6E-03	**0.2**
	4/11/2008	8260B	**0.91**	0.019	**0.051**	0.12	**0.32**
NAPIS 3	12/14/2011	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	9/27/2011	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	6/15/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	3/2/2011	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	11/2/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.0015
	9/15/2010	8021B	**0.001**	<0.001	<0.001	<0.002	<0.0025
	6/10/2010	8260B	**0.2**	<0.001	**0.012**	<0.002	**0.08**
	3/8/2010	8260B	**0.072**	<0.001	0.001	<0.002	<0.0025
	11/23/2009	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	8/31/2009	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	6/15/2009	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	3/25/2009	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	11/10/2008	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025

8.8 NAPIS-1, NAPIS-2, NAPIS-3, KA-3
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1.0	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
Well ID	DATE SAMPLED	METHOD					
KA 3	12/14/2011	8021B	**0.024**	<0.001	**4.5E-03**	<0.002	**0.057**
	9/27/2011	8021B	**0.064**	<0.001	**0.011**	<0.002	**0.099**
	6/15/2011	8260B	<0.001	<0.001	<0.001	<0.0015	**0.077**
	3/2/2011	8021B	<0.005	<0.005	<0.005	<0.01	**0.088**
	11/2/2010	8260B	**0.23**	<0.001	**0.014**	<0.03	**0.1**
	9/15/2010	8260B	**0.52**	<0.001	**0.031**	<0.03	**0.11**
	6/10/2010	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	3/8/2010	8021B	<0.01	<0.01	<0.01	<0.01	<0.01
	11/23/2009	8260B	<0.001	<0.001	<0.001	<0.002	**0.077**
	8/31/2009	8260B	<0.001	<0.001	<0.001	<0.002	**0.17**
	5/28/2009	8260B	**0.0033**	0.0012	<0.001	<0.002	**0.13**
	3/25/2009	8260B	<0.001	<0.001	<0.001	<0.002	**0.11**
	7/9/2008	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	11/10/2008	8260B	<0.001	<0.001	<0.001	<0.002	**0.13**
	9/30/2008[1]	8260B	NA	NA	NA	NA	NA

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) *Water level too shallow to sample.*

8.8 NAPIS-1, NAPIS-2, NAPIS-3, KA-3
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1.0	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
Well ID	**DATE SAMPLED**	**METHOD**					
NAPIS 1	12/14/2011	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	9/27/2011	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	6/15/2011	8260B	<0.01	<0.01	<0.01	<0.0015	<0.01
	3/2/2011	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	11/2/2010	8260B	<0.01	<0.01	<0.01	<0.003	<0.0015
	9/15/2010	8260B	<0.01	<0.01	<0.01	<0.002	<0.0025
	6/8/2010	8021B	<0.01	<0.01	<0.01	<0.002	<0.0025
	3/8/2010	8021B	<0.01	<0.01	<0.01	<0.002	<0.0025
	11/23/2009	8260B	<0.001	1.6E-03	<0.001	<0.002	<0.0025
	8/11/2009	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	5/28/2009	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	3/24/2009	8260B	<0.001	0.001	<0.001	<0.002	<0.0025
	11/10/2008	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	9/30/2008	8260B	<0.001	<0.001	<0.001	<0.002	NA
	7/9/2008	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	4/11/2008	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
NAPIS 2	12/14/2011	8021B	**0.022**	<0.005	**8.9E-03**	<0.01	**0.33**
	9/27/2011	8021B	**0.035**	<0.005	<0.005	<0.01	**0.33**
	6/15/2011	8260B	**0.027**	<0.005	**0.018**	<0.0075	**0.28**
	3/2/2011	8021B	**0.04**	<0.001	**0.014**	<0.01	**0.34**
	11/2/2010	8260B	**0.015**	<0.005	<0.001	<0.002	**0.27**
	9/15/2010	8260B	**0.066**	<0.001	**8.3E-03**	<0.0015	**0.23**
	6/10/2010	8021B	**0.14**	<0.005	**9.6E-03**	<0.001	**0.23**
	3/8/2010	8260B	**0.83**	1.4E-03	**0.016**	2.1E-03	**0.25**
	11/23/2009	8260B	**0.032**	0.001	**9.3E-03**	<0.002	**0.094**
	8/11/2009	8260B	**0.057**	<0.001	**0.022**	<0.002	**0.089**
	5/28/2009	8260B	**0.028**	<0.005	**5.3E-03**	<0.01	**0.13**
	3/24/2009	8260B	**0.019**	1.1E-03	**8.1E-03**	<0.002	**0.09**
	11/10/2008	8260B	**0.025**	<0.001	**0.011**	<0.002	**0.18**
	9/30/2008	8260B	**0.016**	<0.001	**1.6E-03**	4.1E-03	NA
	7/9/2008	8260B	**0.013**	<0.001	**0.011**	5.6E-03	**0.2**
	4/11/2008	8260B	**0.91**	0.019	**0.051**	0.12	**0.32**
NAPIS 3	12/14/2011	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	9/27/2011	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	6/15/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	3/2/2011	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	11/2/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.0015
	9/15/2010	8021B	**0.001**	<0.001	<0.001	<0.002	<0.0025
	6/10/2010	8260B	**0.2**	<0.001	**0.012**	<0.002	**0.08**
	3/8/2010	8260B	**0.072**	<0.001	0.001	<0.002	<0.0025
	11/23/2009	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	8/31/2009	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	6/15/2009	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	3/25/2009	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	11/10/2008	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025

8.8 NAPIS-1, NAPIS-2, NAPIS-3, KA-3
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1.0	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
Well ID	DATE SAMPLED	METHOD					
KA 3	12/14/2011	8021B	**0.024**	<0.001	**4.5E-03**	<0.002	**0.057**
	9/27/2011	8021B	**0.064**	<0.001	**0.011**	<0.002	**0.099**
	6/15/2011	8260B	<0.001	<0.001	<0.001	<0.0015	**0.077**
	3/2/2011	8021B	<0.005	<0.005	<0.005	<0.01	**0.088**
	11/2/2010	8260B	**0.23**	<0.001	**0.014**	<0.03	**0.1**
	9/15/2010	8260B	**0.52**	<0.001	**0.031**	<0.03	**0.11**
	6/10/2010	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	3/8/2010	8021B	<0.01	<0.01	<0.01	<0.01	<0.01
	11/23/2009	8260B	<0.001	<0.001	<0.001	<0.002	**0.077**
	8/31/2009	8260B	<0.001	<0.001	<0.001	<0.002	**0.17**
	5/28/2009	8260B	**0.0033**	0.0012	<0.001	<0.002	**0.13**
	3/25/2009	8260B	<0.001	<0.001	<0.001	<0.002	**0.11**
	7/9/2008	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	11/10/2008	8260B	<0.001	<0.001	<0.001	<0.002	**0.13**
	9/30/2008[1]	8260B	NA	NA	NA	NA	NA

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) *Water level too shallow to sample.*

8.8.1 NAPIS-1, NAPIS-2, NAPIS-3, KA-3
General Chemistry and DRO/GRO Analytical Result Summary

			Parameters										
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)	DRO (mg/L)	GRO (mg/L)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6 TO 9	NE	0.2[1]	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE	NE	NE
Well ID	**DATE SAMPLED**	**METHOD**											
NAPIS 1	12/14/2011	300.0	**0.67**	150	2.0	**4.7**	4.7	<10	82	NA	NA	<1.0	<0.05
	9/27/2011	300.0	**1.1**	180	2.2	**58**	**58**	<2.5	110	NA	NA	<1.0	<0.05
	6/15/2011	300.0	0.52	140	1.8	<0.1	6.2	<0.5	78	NA	NA	<1.0	0.11
	3/2/2011	300.0	0.42	180	2.1	**9.5**	9.5	<0.5	92	NA	NA	<1.0	<0.05
	11/2/2010	300.0	**0.96**	200	NL	<2.0	6.9	<0.5	98	NA	NA	<1.0	<0.05
	9/15/2010	300.0	0.5	189	NL	**11.2**	**11.2**	**0.019**	65	NA	NA	<1.0	<0.05
	6/8/2010	300.0	**0.73**	170	2.2	**4.0**	4	<0.5	56	7.86	1800	<1.0	<0.05
	3/8/2010	300.0	**0.75**	130	1.7	**2.0**	2	<0.5	52	NA	NA	<1.0	<0.05
	11/23/2009	300.0	**1.4**	170	NL	**1.8**	1.8	<0.5	100	7.39	2000	<1.0	<0.05
	8/11/2009	300.0	**1.2**	160	NL	0.54	0.54	<0.5	93	7.67	1800	<1.0	<0.05
	5/28/2009	300.0	**1.2**	150	NL	0.31	0.31	<0.5	71	7.82	1900	<1.0	<0.05
	3/24/2009	300.0	**0.69**	120	NL	<1.0	<1.0	<0.5	38	7.69	2000	<1.0	<0.05
	11/10/2008	300.0	**0.73**	160	NL	<0.1	1.6	<0.5	63	7.3	1900	<1.0	<0.05
	9/30/2008	300.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<0.05
	7/9/2008	300.0	**1.4**	180	NL	<1.0	<1.0	<0.5	98	7.27	1900	<1.0	<0.05
	4/11/2008	300.0	**0.79**	170	NL	0.55	0.55	<0.5	<0.5	7.26	2000	<1.0	<0.05
NAPIS 2	1/30/2012[4]	300.0	**1.1**	**420**	1.4	<1.0	<1.0	<2.5	<2.5	7.12	2200	NA	NA
	12/14/2011[3]	300.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**3.4**	0.61
	9/27/2011	300.0	**1.8**	**270**	1.2	**80**	**80**	<2.5	6.00	NA	NA	**3.1**	0.69
	6/15/2011	300.0	**1.4**	**380**	<2.0	<0.5	<2.0	<2.5	3.30	NA	NA	**1.8**	0.97
	3/2/2011	300.0	**1.3**	**360**	1.3	<1.0	<1.0	<2.5	3.70	NA	NA	**2.8**	1.3
	11/2/2010	300.0	**1.7**	230	NL	<1.0	<1.0	<0.5	7.80	NA	NA	**5.1**	0.57
	9/15/2010	300.0	**1.3**	220	NL	<0.5	<0.5	**0.01**	6.00	NA	NA	**5.3**	1
	6/10/2010	300.0	**1.2**	**340**	1.2	<1.0	<1.0	<2.5	8.70	7.8	1800	**6.3**	1.3
	3/8/2010	300.0	**1.4**	**320**	1.0	<1.0	<1.0	<0.05	11.00	NA	NA	**3.8**	1
	11/23/2009	300.0	**1.6**	220	NL	<1.0	<1.0	<0.05	13	7.16	1500	**2.7**	0.78
	8/11/2009	300.0	**1.7**	**250**	NL	<1.0	<1.0	<0.05	17	7.56	1500	**2.9**	0.62
	5/28/2009	300.0	**1.7**	210	NL	0.16	0.16	<0.05	22	7.51	1400	**3.4**	0.53
	3/24/2009	300.0	**1.5**	240	NL	<1.0	<1.0	<0.05	23	7.47	1800	**4.3**	0.37
	11/10/2008	300.0	**1.4**	200	NL	<1.0	<1.0	<0.05	32	7.21	1600	**4.0**	0.59
	9/30/2008	300.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**3.9**	0.48
	7/9/2008	300.0	**1.1**	**270**	NL	<1.0	<1.0	<0.5	33	7.18	2000	**2.4**	0.74
	4/11/2008	300.0	**0.92**	**360**	NL	<1.0	<1.0	<0.5	42	7	2100	**1.5**	2.2

8.8.1 NAPIS-1, NAPIS-2, NAPIS-3, KA-3
General Chemistry and DRO/GRO Analytical Result Summary

			Parameters										
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)	DRO (mg/L)	GRO (mg/L)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6 TO 9	NE	0.2[1]	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE	NE	NE
Well ID	DATE SAMPLED	METHOD											
NAPIS 3	12/14/2011	300.0	0.29	1100	4.5	19	19	<10	420	NA	NA	<1.0	<0.05
	9/27/2011	300.0	<0.5	1000	5.1	49	49	<2.5	400	NA	NA	<1.0	<0.05
	6/15/2011	300.0	1.5	530	2.3	<0.5	3.5	<2.5	170	NA	NA	<1.0	<0.05
	3/2/2011	300.0	0.44	1100	4.7	14	14	<0.05	420	NA	NA	<1.0	<0.05
	11/2/2010	300.0	0.48	1100	NL	18	18	<0.5	430	NA	NA	<1.0	<0.05
	9/15/2010	300.0	NL	1040	NL	24.1	24.1	0.023	290	NA	NA	<1.0	<0.05
	6/10/2010	300.0	1.5	260	1.1	<1.0	<1.0	<0.5	39	7.84	1600	1.8	0.89
	3/8/2010	300.0	0.46	1000	4.4	17	17	<0.5	400	NA	NA	<1.0	<0.5
	11/23/2009	300.0	0.49	1100	NL	15	15	<0.5	370	7.91	4400	<1.0	<0.05
	8/31/2009	300.0	0.47	1000	NL	14	14	<0.5	<10	8.07	4000	<1.0	<0.05
	6/15/2009	300.0	0.46	1200	NL	18	18	<0.5	330	8.23	4200	<1.0	<0.05
	3/25/2009	300.0	0.43	1200	NL	<1.0	14	<0.5	340	8.11	5200	<1.0	<0.05
	11/10/2008	300.0	1.1	1100	NL	<1.0	2.6	<0.5	310	8.05	4300	<1.0	<0.05
	9/30/2008[2]	300.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/9/2008	300.0	0.46	1100	NL	9.1	9.1	<0.5	270	8.29	4200	<1.0	<0.05
KA 3	12/14/2011	300.0	1.3	260	1.1	<1.0	<1.0	<0.5	38	NA	NA	<1.0	0.15
	9/27/2011	300.0	1.5	290	1.3	48	48	<2.5	48	NA	NA	2.1	0.35
	6/15/2011	300.0	0.51	970	4.5	<0.5	18	<0.5	370	NA	NA	<1.0	<0.25
	3/2/2011	300.0	1.2	600	2.4	4.3	4.3	<0.5	150	NA	NA	<1.0	<0.25
	11/2/2010	300.0	1.7	260	NL	<1.0	<1.0	<5.0	38	NA	NA	1.7	0.68
	9/15/2010	300.0	1.4	277	NL	<0.5	<0.5	0.013	37	NA	NA	3.0	1.9
	6/10/2010	300.0	0.38	1100	4.7	17	17	<0.05	390	8.21	3600	<1.0	<0.05
	3/8/2010	300.0	1.6	410	1.5	5.5	5.5	<0.05	90	NA	NA	<1.0	0.47
	11/23/2009	300.0	1.3	610	NL	3.2	3.2	<0.05	120	7.31	2900	<1.0	0.19
	8/31/2009	300.0	2.4	230	NL	<2.0	<2.0	<0.05	50	7.58	1500	1.4	0.52
	5/28/2009	300.0	1.6	260	NL	0.22	0.22	<0.05	66	7.71	1700	<1.0	0.32
	3/25/2009	300.0	1.5	340	NL	<1.0	0.9	<0.05	76	7.64	2400	<1.0	0.18
	11/10/2008	300.0	0.46	590	NL	2.0	11	<0.05	140	7.34	2700	<1.0	0.15
	9/30/2008[2]	300.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

8.8.1 NAPIS-1, NAPIS-2, NAPIS-3, KA-3

General Chemistry and DRO/GRO Analytical Result Summary

			Parameters										
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)	DRO (mg/L)	GRO (mg/L)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6 TO 9	NE	0.2[1]	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE	NE	NE
Well ID	DATE SAMPLED	METHOD											

DEFINITIONS

NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analyses
BOLD values represent values above the applicable standard

STANDARDS

WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
1) NMED Table 2a, TPH Screening Guidelines for Potable Ground Water (GW-1). (Oct 2006)
40 CFR 141.62 Detection limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES

2) *Water level too shallow for collect samples.*
3) *12/14/11 - General Chemistry parameters missed this quarter. Notified NMED and instructed to re-sample for general chemistry parameters only.*
4) *Resampled for General Chemistry parameters only.*

8.8.2 NAPIS-1, NAPIS-2, NAPIS-3, KA-3
Total Metals Analytical Result Summary

			Parameters										
			Arsenic (mg/L)	Barium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Selenium (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**0.05**	**0.002**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**0.05**	**0.002**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**NE**	**0.62**	**11**	**NE**	**0.32**	**0.078**	**6.3E-04**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**											
NAPIS 1	12/14/2011	200.7/200.8	<0.0025	0.19	<0.006	<0.006	**2.9**	<0.005	0.12	3.3E-03	<0.0002	0.019	0.017
	9/27/2011	200.7/200.8	<0.0025	0.13	<0.006	<0.006	0.59	<0.005	0.092	6.7E-03	<0.0002	**0.046**	<0.01
	6/15/2011	200.7/200.8	**0.004**	0.19	<0.006	<0.006	**2.2**	<0.005	0.058	0.01	<0.0002	0.013	0.012
	3/2/2011	200.7/200.8	<0.0025	0.17	<0.006	<0.006	**1.0**	<0.005	0.035	<0.05	NL	0.021	<0.01
	11/2/2010	6010B	<0.02	0.26	6.2E-03	<0.006	**6.4**	<0.005	0.16	<0.05	<0.0002	**0.045**	0.027
	9/15/2010	6010B	<0.02	0.19	<0.006	<0.006	0.56	<0.005	0.044	<0.05	<0.0002	0.018	<0.02
	6/8/2010	6010B	<0.02	0.18	<0.006	NL	NL	<0.005	NL	<0.05	<0.0002	NL	NL
	3/8/2010	6020A	<0.001	0.133	1.06E-03	2.64E-03	0.548	<0.001	1.47E-02	<0.001	<0.0001	**0.273**	4.85E-03
	11/23/2009	6010B	<0.02	0.2	7.7E-03	NL	NL	<0.005	NL	<0.05	<0.0002	NL	NL
	8/11/2009	6010B	<0.02	0.11	<0.006	NL	NL	<0.005	NL	<0.05	<0.0002	NL	NL
	5/28/2009	6010B	<0.02	0.091	<0.006	NL	NL	<0.005	NL	<0.05	<0.0002	NL	NL
	3/24/2009	6010B	<0.02	0.1	<0.006	NL	NL	<0.005	NL	<0.05	<0.0002	NL	NL
	10/14/2008	6010B	<0.02	0.17	<0.01	NL	NL	<0.005	NL	<0.02	<0.0002	NL	NL
NAPIS 2	12/14/2011	200.7/200.8	**9.9E-03**	**1.7**	<0.006	<0.006	**4.1**	<0.005	**1.4**	<0.0025	<0.0002	<0.0025	0.011
	9/27/2011	200.7/200.8	**0.012**	**1.7**	<0.006	<0.006	**4.2**	<0.005	**1.3**	3.4E-03	<0.0002	<0.0025	0.016
	6/15/2011	200.7/200.8	**0.012**	**2.1**	<0.006	<0.006	**5.4**	<0.005	**1.5**	6.3E-03	<0.0002	<0.0025	<0.01
	3/2/2011	200.7/200.8	**0.011**	**2.4**	<0.006	7.5E-03	**5.4**	<0.005	**1.3**	<0.05	NL	<0.0025	<0.01
	11/2/2010	6010B	<0.02	**1.2**	<0.006	<0.006	**4.2**	<0.005	**1.2**	<0.05	<0.0002	NL	<0.02
	9/15/2010	6010B	<0.02	**1.4**	<0.006	<0.006	**4.3**	<0.005	**1.1**	<0.05	<0.0002	<0.001	<0.02
	6/10/2010	6010B	<0.02	**1.7**	<0.006	NL	NL	<0.005	NL	<0.05	<0.0002	NL	NL
	3/8/2010	6020A	**4.57E-03**	**2.07**	1.05E-03	2.46E-03	**4.71**	1.38E-03	**1.25**	<0.001	<0.0001	<0.001	7.07E-03
	11/23/2009	6010B	<0.02	**1.1**	<0.006	NL	NL	<0.005	NL	<0.05	<0.0002	NL	NL
	8/11/2009	6010B	<0.02	0.94	<0.006	NL	NL	<0.005	NL	<0.05	<0.0002	NL	NL
	5/28/2009	6010B	<0.02	0.65	<0.006	NL	NL	<0.005	NL	<0.05	<0.0002	NL	NL
NAPIS 3	12/14/2011	200.7/200.8	**4.4E-03**	0.16	0.019	<0.006	**6.0**	8.1E-03	0.11	0.011	<0.0002	**0.041**	0.23
	9/27/2011	200.7/200.8	**7.2E-03**	0.27	0.044	0.012	**2.0**	0.014	**0.21**	0.2	<0.0002	**0.041**	0.51
	6/15/2011	200.7/200.8	**0.007**	0.2	<0.006	<0.006	0.72	<0.005	**1.0**	0.012	<0.0002	0.013	<0.01
	3/2/2011	200.7/200.8	<0.0025	0.078	<0.006	<0.006	0.49	<0.005	0.017	<0.05	NL	**0.044**	0.014
	11/2/2010	6010B	<0.02	0.096	7.5E-03	0.012	**2.6**	0.011	0.12	<0.05	<0.0002	**0.032**	0.59
	9/15/2010	6010B	<0.02	0.11	**0.098**	0.014	**3.9**	0.012	0.15	<0.05	<0.0002	**0.035**	0.36
	6/10/2010	6010B	<0.02	0.54	<0.006	NL	NL	<0.005	NL	<0.05	<0.0002	NL	NL
	3/8/2010	6020A	**1.58E-03**	9.79E-02	3.96E-03	3.19E-03	0.338	1.23E-03	0.0176	3.73E-03	<0.0002	**3.19E-02**	9.41E-03

8.8.2 NAPIS-1, NAPIS-2, NAPIS-3, KA-3
Total Metals Analytical Result Summary

			Parameters										
			Arsenic (mg/L)	Barium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Selenium (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**0.05**	**0.002**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**0.05**	**0.002**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**NE**	**0.62**	**11**	**NE**	**0.32**	**0.078**	**6.3E-04**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**											
NAPIS 3	11/23/2009	6010B	<0.02	0.15	7.2E-03	NL	NL	<0.005	NL	<0.05	<0.0002	NL	NL
	8/31/2009	6010B	<0.02	0.092	<0.01	NL	NL	<0.005	NL	<0.02	<0.0002	NL	NL
	6/15/2009	6010B	<0.02	0.14	<0.01	NL	NL	<0.005	NL	<0.02	<0.0002	NL	NL
	3/25/2009	6010B	<0.02	0.13	<0.01	NL	NL	<0.005	NL	<0.05	<0.0002	NL	NL
KA 3	12/14/2011	200.7/200.8	**3.8E-03**	0.34	<0.006	<0.006	**1.1**	<0.005	**1.1**	<0.0025	<0.0002	4.5E-03	0.013
	9/27/2011	200.7/200.8	**6.3E-03**	0.3	<0.006	<0.006	**2.2**	<0.005	**1.1**	0.003	<0.0002	5.8E-03	0.024
	6/15/2011	200.7/200.8	**8.9E-03**	0.22	0.028	<0.006	**9.4**	0.014	0.16	0.03	<0.0002	**0.035**	0.32
	3/2/2011	200.7/200.8	**6.3E-03**	0.44	<0.006	<0.006	0.64	<0.005	**1.4**	<0.05	NL	0.015	<0.01
	11/2/2010	6010B	<0.02	0.6	<0.006	<0.006	**1.2**	<0.005	**1.4**	<0.05	<0.0002	NL	<0.02
	9/15/2010	6010B	<0.02	0.47	**0.096**	<0.006	**1.6**	<0.005	**1.3**	<0.05	<0.0002	0.003	<0.02
	6/10/2010	6010B	<0.02	0.17	6.4E-03	NL	NL	<0.005	NL	<0.05	<0.0002	NL	<0.02
	3/8/2010	6020A	**0.011**	0.335	1.4E-03	1.14E-02	**2.35**	3.03E-03	**2.1**	<0.001	<0.0001	6.52E-03	2.11E-02
	11/23/2009	6010B	<0.02	0.55	<0.006	NL	NL	<0.005	NL	<0.05	<0.0002	NL	NL
	8/31/2009	6010B	<0.02	0.22	<0.01	NL	NL	<0.005	NL	<0.02	<0.0002	NL	NL
	5/28/2009	6010B	<0.02	0.29	<0.006	NL	NL	<0.005	NL	<0.05	<0.0002	NL	NL
	3/25/2009	6010B	<0.02	0.22	<0.006	NL	NL	5.50E-03	NL	<0.05	<0.0002	NL	NL

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.8.3 NAPIS-1, NAPIS-2, NAPIS-3, KA-3
Dissolved Metals Analytical Result Summary

			Parameters													
			Arsenic (mg/L)	Barium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**0.05**	**NE**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**0.05**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**0.078**	**NE**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**														
NAPIS 1	12/14/2011	200.7	**1.7E-03**	0.12	84	<0.006	<0.006	0.27	<0.005	15	6.8E-03	<5.0	3.9E-03	380	0.021	<0.01
	9/27/2011	200.7	**2.9E-03**	0.12	71	<0.006	<0.006	<0.02	<0.005	13	0.056	2.0	9.2E-03	400	**0.032**	0.011
	6/15/2011	200.7/200.8	**4.7E-03**	0.14	83	<0.006	<0.006	<0.020	<0.005	15	2.3E-03	<1.0	0.017	340	0.016	0.028
	3/2/2011	200.7/200.8	**1.3E-03**	0.15	97	<0.006	<0.006	0.032	<0.005	18	<0.002	1.5	<0.05	380	0.017	<0.01
	11/2/2010	6010B	<0.1	0.13	75	<0.006	<0.006	0.057	<0.005	14	0.016	<5.0	<0.25	420	**0.034**	NL
	9/15/2010	6010B	<0.02	0.18	100	<0.006	<0.006	0.29	6.4E-03	18	6.6E-03	<1.0	<0.05	370	0.011	NL
	6/8/2010	6010B	<0.2	0.13	72	<0.006	NL	NL	<0.005	13	NL	<1.0	<0.05	370	NL	NL
	3/8/2010	6020A	**1.08E-03**	0.139	65.5	<0.001	2.1E-03	<0.01	<0.001	11.5	<0.001	0.829	1.24E-04	322	2.79E-02	2.58E-02
	11/23/2009[2]	6010B	NL	0.2	58	7.7E-03	NL	NL	<0.005	13	NL	3.7	NL	390	NL	NL
	8/11/2009[2]	6010B	NL	0.11	56	<0.006	NL	NL	<0.005	11	NL	1.7	NL	380	NL	NL
	5/28/2009[2]	6010B	NL	0.091	57	<0.006	NL	NL	<0.005	11	NL	<1.0	NL	390	NL	NL
	3/24/2009[2]	6010B	NL	0.1	67	<0.006	NL	NL	<0.005	12	NL	<1.0	NL	340	NL	NL
	11/10/2008[2]	6010B	<0.02	0.13	78	<0.006	NL	NL	<0.005	14	NL	1.2	<0.25	390	NL	NL
	9/30/2008[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/9/2008[2]	6010B	NL	NL	70	NL	NL	NL	NL	12	NL	2.1	NL	430	NL	NL
	4/11/2008[2]	6010B	NL	NL	72	NL	NL	NL	NL	13	NL	1.5	NL	370	NL	NL
NAPIS 2	12/14/2011	200.7	**8.9E-03**	**1.8**	NL	<0.006	<0.006	**3.2**	<0.005	NL	**1.3**	NL	2.8E-03	NL	<0.001	<0.01
	9/27/2011	200.7	**0.011**	**1.4**	79	<0.006	<0.006	**2.2**	<0.005	15	**1.2**	<1.0	0.005	330	<0.001	0.015
	6/15/2011	200.7/200.8	**0.012**	**1.7**	85	<0.006	<0.006	**3.2**	<0.005	17	**1.3**	<1.0	9.5E-03	310	<0.001	0.041
	3/2/2011	200.7/200.8	**0.013**	0.055	44	<0.006	<0.006	**4.8**	<0.005	7.6	<0.002	5.8	<0.05	380	<0.001	<0.01
	11/2/2010	6010B	<0.1	**1.4**	73	<0.006	<0.006	**2.9**	<0.005	14	**1.2**	<1.0	<0.05	320	NL	NL
	9/15/2010	6010B	<0.02	**1.5**	69	<0.006	<0.006	**3.7**	<0.005	13	**1.0**	<1.0	<0.05	310	<0.001	NL
	6/10/2010	6010B	<0.02	**1.7**	80	<0.006	NL	NL	<0.005	16	NL	<1.0	<0.05	320	NL	NL
	3/8/2010	6020A	**4.73E-03**	**1.73**	85	<0.001	<0.001	**3.82**	<0.001	15.7	**1.06**	0.278	<0.001	319	<0.001	5.3E-02
	11/23/2009[2]	6010B	NL	**1.1**	56	<0.006	NL	NL	<0.005	11	NL	<1.0	NL	350	NL	NL
	8/11/2009[2]	6010B	NL	0.94	57	<0.006	NL	NL	<0.005	11	NL	<1.0	NL	300	NL	NL
	5/28/2009[2]	6010B	NL	0.65	51	<0.006	NL	NL	<0.005	9.9	NL	<1.0	NL	290	NL	NL
	3/24/2009[2]	6010B	NL	0.76	53	<0.006	NL	NL	<0.005	10	NL	<1.0	NL	280	NL	NL
	11/10/2008[2]	6010B	<0.02	0.42	65	<0.006	NL	NL	6.5E-03	9.7	NL	<1.0	<0.05	330	NL	NL
	9/30/2008[2]	6010B	NL	NL	70	NL	NL	NL	NL	13	NL	<1.0	NL	360	NL	NL
	4/11/2008[2]	6010B	NL	NL	110	NL	NL	NL	NL	19	NL	1.3	NL	380	NL	NL
NAPIS 3	12/14/2011	200.7	**3.7E-03**	0.052	41	<0.006	<0.006	0.12	<0.005	6.9	4.7E-03	<5.0	0.013	960	**0.04**	0.018
	9/27/2011	200.7	**6.4E-03**	0.058	38	<0.006	<0.006	0.14	<0.005	6.2	3.5E-03	4.3	0.025	1000	**0.038**	0.018
	6/15/2011	200.7/200.8	**8.5E-03**	0.17	98	<0.006	<0.006	0.057	<0.005	17	**0.92**	1.4	0.019	490	0.013	0.27

8.8.3 NAPIS-1, NAPIS-2, NAPIS-3, KA-3
Dissolved Metals Analytical Result Summary

			Parameters													
			Arsenic (mg/L)	Barium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**0.05**	**NE**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**0.05**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**0.078**	**NE**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**														
NAPIS 3	3/2/2011	200.7/200.8	<0.001	0.057	42	<0.006	<0.006	<0.02	<0.005	7.6	<0.002	5.7	<0.05	970	**0.039**	<0.01
	11/2/2010	6010B	<0.02	0.081	42	<0.006	<0.006	0.025	<0.005	7	0.01	4.2	<0.05	990	**0.035**	NL
	9/15/2010	6010B	<0.02	0.066	39	<0.006	<0.006	0.021	<0.005	6.3	0.0021	3.9	<0.05	910	**0.032**	NL
	6/10/2010	6010B	<0.02	0.62	87	<0.006	NL	NL	<0.005	15	NL	<1.0	<0.05	260	NL	NL
	3/8/2010	6020A	**3.12E-03**	6.41E-02	41.5	2.71E-03	2.22E-03	<0.01	<0.001	6.8	1.38E-03	4.49	3.64E-03	835	2.96E-02	0.034
	11/23/2009[2]	6010B	NL	0.15	46	7.2E-03	NL	NL	<0.005	8.8	NL	5.4	NL	930	NL	NL
	8/11/2009[2]	6010B	NL	0.092	39	<0.01	NL	NL	<0.005	6.4	NL	4.0	NL	870	NL	NL
	6/15/2009[2]	6010B	NL	0.14	49	<0.01	NL	NL	<0.005	6.8	NL	4.2	NL	840	NL	NL
	3/24/2009[2]	6010B	NL	0.13	47	<0.006	NL	NL	<0.005	6.5	NL	3.9	NL	880	NL	NL
	11/10/2008[2]	6010B	<0.02	0.13	41	<0.006	NL	NL	<0.005	6.6	NL	4.4	<0.5	960	NL	NL
	9/30/2008[3]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/9/2008[2]	6010B	NL	NL	65	NL	NL	NL	NL	7.8	NL	4.1	NL	910	NL	NL
KA 3	12/14/2011	200.7	**3.4E-03**	0.31	72	<0.006	<0.006	0.14	<0.005	12	**0.95**	<1.0	2.1E-03	330	4.2E-03	<0.01
	9/27/2011	200.7	**0.006**	0.2	75	<0.006	<0.006	0.083	<0.005	13	**0.89**	1.2	5.7E-03	380	6.7E-03	0.018
	6/15/2011	200.7/200.8	**0.01**	0.063	39	<0.006	<0.006	<0.02	<0.005	6.7	2.6E-03	3.8	0.042	940	**0.034**	0.044
	3/2/2011	200.7/200.8	**6.2E-03**	0.024	4	<0.006	<0.006	0.11	<0.005	<1.0	0.04	1.6	<0.05	200	0.01	<0.01
	11/2/2010	6010B	<0.1	0.62	81	<0.006	<0.006	0.32	<0.005	14	**1.4**	<1.0	<0.05	330	NL	NL
	9/15/2010	6010B	<0.02	0.47	68	<0.006	<0.006	0.56	<0.005	11	**1.2**	<1.0	<0.05	260	0.001	NL
	6/10/2010	6010B	<0.02	0.078	38	<0.006	NL	NL	<0.005	6.5	NL	4.1	<0.05	NL	NL	NL
	3/8/2010	6020A	**9.76E-03**	0.344	96.2	<0.001	4.28E-03	**1.55**	<0.001	15.6	**1.86**	1.2	1.02E-03	385	6.96E-03	0.0382
	11/23/2009[2]	6010B	NL	0.55	100	<0.006	NL	NL	<0.005	19	NL	2.0	NL	480	NL	NL
	8/11/2009[2]	6010B	NL	0.22	53	<0.01	NL	NL	<0.005	8.9	NL	0.73	NL	330	NL	NL
	5/28/2009[2]	6010B	NL	0.29	71	<0.006	NL	NL	<0.005	11	NL	<1.0	NL	330	NL	NL
	3/25/2009[2]	6010B	NL	0.22	67	<0.006	NL	NL	<0.005	10	NL	<1.0	NL	360	NL	NL
	11/10/2008	6010B	<0.02	0.2	65	<0.006	NL	NL	9.5E-03	11	NL	1.8	<0.5	570	NL	NL

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009), Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) 2009 Method 6010B Total Recoverable Metals Analysis run
3) Water level too shallow to collect samples.

8.8.4 NAPIS-1, NAPIS-2, NAPIS-3, KA-3
Volatile and Semi-Volatile Organic Compound Analytical Result Summary

			Parameters														
			Acenaphthene (mg/L)	Aniline (mg/L)	Benz (a)anthracene (mg/L)	Bis(2-ethylhexyl) phthalate (mg/L)	Fluorene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	2-Methyl phenol (mg/L)	Naphthalene (mg/L)	Phenanthrene (mg/L)	1,1-Dichloro ethane (mg/L)	Isopropyl benzene (mg/L)	n-Butyl benzene (mg/L)	n-Propyl benzene (mg/L)	sec-Butyl benzene (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	0.025	NE	NE	NE	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	2.4E-03	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.4	0.012	2.9E-05	7.1E-05	0.22	9.7E-04	0.027	NE	1.4E-04	NE	1.5E-03	NE	0.78	NE	NE
Well ID	DATE SAMPLED	METHOD															
NAPIS 1	1/30/2012[2]	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	12/14/2011[1]	8270C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/27/2011	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	6/15/2011	8270C/8260B	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NL	<0.001	<0.001	<0.001	<0.001
	3/2/2011	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	NL	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	11/2/2010	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	NL	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	9/15/2010	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	NL	<0.01	<0.01	<0.1	<0.01	NA	NA	NA	NA	NA
	6/8/2010	8310	<0.0025	NL	NL	NL	<0.0008	<0.002	<0.002	NL	<0.002	<0.0006	NA	NA	NA	NA	NA
	3/8/2010	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	NL	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	11/23/2009	8310	NL	NL	<0.00007	NL	<0.0008	<0.002	<0.002	NL	<0.002	<0.006	NA	NA	NA	NA	NA
	8/11/2009	8310	NL	NL	<0.00007	NL	<0.0008	<0.002	<0.002	NL	<0.002	<0.006	NA	NA	NA	NA	NA
	5/28/2009	8310	NL	NL	<0.00007	NL	<0.0008	<0.002	<0.002	NL	<0.002	<0.006	NA	NA	NA	NA	NA
	3/24/2009	8310	NL	NL	<0.00007	NL	<0.0008	<0.002	<0.002	NL	<0.002	<0.006	NA	NA	NA	NA	NA
NAPIS 2	12/14/2011	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	**0.01**	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	9/27/2011	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	**0.012**	<0.01	<0.01	**0.011**	<0.01	NA	NA	NA	NA	NA
	6/15/2011	8270C/8260B	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	**0.005**	<0.005	<0.005	<0.005	<0.005
	3/2/2011	8270C	<0.01	<0.01	<0.01	0.01	0.012	NL	<0.01	<0.01	**0.015**	<0.01	NA	NA	NA	NA	NA
	11/2/2010	8270C	0.01	<0.01	<0.01	<0.01	0.011	NL	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	9/15/2010	8270C	<0.01	<0.01	<0.01	<0.01	<0.05	NL	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	6/10/2010	8310	<0.0025	NL	<0.00007	NL	0.011	**0.033**	<0.002	NL	**0.089**	0.005	NA	NA	NA	NA	NA
	3/8/2010	8270C/8260B	<0.05	<0.05	<0.05	<0.05	<0.05	NL	<0.05	<0.05	**3.6E-03**	<0.05	**2.8E-03**	2.8E-03	1.4E-03	4.2E-03	0.002
	11/23/2009	8310	NL	NL	<0.00007	NL	0.009	<0.002	<0.002	NL	**0.046**	1.7E-03	NA	NA	NA	NA	NA
	8/11/2009	8310	NL	NL	<0.00007	NL	7.3E-03	<0.002	<0.002	NL	<0.002	3.7E-03	NA	NA	NA	NA	NA
	5/28/2009	8310	NL	NL	<0.00007	NL	<0.0008	**4.2E-03**	2.3E-03	NL	**0.03**	<0.006	NA	NA	NA	NA	NA
	3/24/2009	8310	NL	NL	<0.00014	NL	<0.0016	<0.004	<0.004	NL	<0.004	<0.00012	NA	NA	NA	NA	NA
	11/10/2008	8310	<0.005	NL	<0.00007	NL	9.9E-04	<0.002	<0.002	NL	<0.002	<0.006	NA	NA	NA	NA	NA
NAPIS 3	12/14/2011	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	9/27/2011	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	6/15/2011	8270C/8260B	<0.01	<0.01	<0.01	<0.01	<0.01	<0.004	<0.01	<0.01	<0.01	<0.01	NL	<0.001	<0.001	<0.001	<0.001
	3/2/2011	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	NL	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	11/2/2010	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	NL	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	9/15/2010	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	NL	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	6/10/2010	8310	<0.005	NL	NL	NL	4.9E-03	**0.05**	<0.002	NL	**0.045**	4.5E-03	NA	NA	NA	NA	NA
	3/8/2010	8270C/8260B	<0.01	<0.01	<0.01	<0.01	<0.01	NL	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	11/23/2009	8310	NL	NL	<0.00007	NL	<0.0008	<0.002	<0.002	NL	<0.002	<0.006	NA	NA	NA	NA	NA
	8/31/2009	8310	NL	NL	<0.00007	NL	<0.0008	<0.002	<0.002	NL	<0.002	<0.006	NA	NA	NA	NA	NA
	6/15/2009	8310	NL	NL	<0.00007	NL	<0.0008	<0.002	<0.002	NL	<0.002	<0.006	NA	NA	NA	NA	NA
	3/25/2009	8310	NL	NL	<0.00007	NL	<0.0008	<0.002	<0.002	NL	<0.002	<0.006	NA	NA	NA	NA	NA

8.8.4 NAPIS-1, NAPIS-2, NAPIS-3, KA-3
Volatile and Semi-Volatile Organic Compound Analytical Result Summary

			Parameters														
			Acenaphthene (mg/L)	Aniline (mg/L)	Benz (a)anthracene (mg/L)	Bis(2-ethylhexyl) phthalate (mg/L)	Fluorene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	2-Methyl phenol (mg/L)	Naphthalene (mg/L)	Phenanthrene (mg/L)	1,1-Dichloro ethane (mg/L)	Isopropyl benzene (mg/L)	n-Butyl benzene (mg/L)	n-Propyl benzene (mg/L)	sec-Butyl benzene (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	0.025	NE	NE	NE	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	2.4E-03	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.4	0.012	2.9E-05	7.1E-05	0.22	9.7E-04	0.027	NE	1.4E-04	NE	1.5E-03	NE	0.78	NE	NE
Well ID	**DATE SAMPLED**	**METHOD**															
KA-3	12/14/2011	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	**0.035**	<0.01	<0.01	**0.019**	<0.01	NA	NA	NA	NA	NA
	9/27/2011	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	6/15/2011	8270C/8260B	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0.04	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001
	3/2/2011	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	NL	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	11/2/2010	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	NL	<0.01	<0.01	**0.013**	<0.01	NA	NA	NA	NA	NA
	9/15/2010	8270C/8260B	<0.01	<0.01	<0.01	<0.01	<0.01	NL	<0.01	<0.01	**0.011**	<0.01	NA	NA	NA	NA	NA
	6/10/2010	8310	<0.005	NL	<0.00007	NL	8.0E-04	<0.002	<0.002	4.5E-03	<0.002	<0.0006	NA	NA	NA	NA	NA
	3/8/2010	8270C/8260B	<0.01	<0.01	<0.01	<0.01	<0.01	NL	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA
	11/23/2009	8310	NL	NL	<0.00007	NL	2.9E-03	**0.022**	<0.002	NL	**0.033**	2.5E-03	NA	NA	NA	NA	NA
	8/31/2009	8310	NL	NL	<0.00007	NL	<0.0008	<0.002	<0.002	NL	<0.002	<0.006	NA	NA	NA	NA	NA
	5/28/2009	8310	NL	NL	<0.00007	NL	<0.0008	<0.002	<0.002	NL	**0.047**	<0.006	NA	NA	NA	NA	NA
	3/25/2009	8310	NL	NL	<0.00007	NL	<0.0008	<0.002	<0.002	NL	<0.002	<0.0006	NA	NA	NA	NA	NA

DEFINITIONS
NE = Not establishes
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) 8270C analysis was not run. Sample container broke in transit. Notified NMED and was instructed to resample for 8270C analysis only.
2) Resampled for 8270C parameters only.

8.9 BOILER WATER TO EP-2 (BW to EP-2)
General Chemistry Analytical Result Summary

			Parameters								
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)
WQCC 20NMAC 6.2.3103			**1.6**	**250.0**	**NE**	**NE**	**10**	**NE**	**600.0**	**6.6 - 8.6[1]**	**NE**
40 CFR 141.62 MCL (June 8, 2012)			**4.0**	**NE**	**NE**	**1**	**10**	**NE**	**NE**	**NE**	**NE**
EPA RSL for Tap Water (April 2012)			**0.62**	**NE**	**NE**	**1.6**	**25**	**3.1E-04**	**NE**	**NE**	**NE**
SAMPLE ID	**DATE SAMPLED**	**METHOD**									
BW to EP-2	11/1/2011	300.0	**0.9**	56	<0.5	<1.0	<1.0	<2.5	**1800**	NA	NA
	5/23/2011	300.0	**0.75**	69	0.2	<0.01	0.32	<0.5	**1600**	NA	NA
	11/16/2010	300.0	<0.2	**53000**	<5.0	<200	<200	<25	**1200**	NA	NA
	6/28/2010	300.0	0.27	71	<0.1	<0.1	<0.1	<0.5	500	7.89	1600
	4/20/2010	300.0	**0.64**	68	0.24	<0.1	0.31	<0.5	**1400**	NA	NA
	10/27/2009	300.0	0.39	37	1.3	0.12	0.12	<0.5	**630**	8.35	1900
	5/6/2009	300.0	0.9	45	0.24	<1.0	0.65	<0.5	**1500**	8.01	4200
	6/17/2008	300.0	1.3	6.7	NL	<0.1	<1.0	<0.5	**2600**	7.9	6500

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
1) 20 NMAC 6.2.2101 General Requirements
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.9.1 BOILER WATER TO EP-2 (BW to EP-2)

Total Recoverable Metals Analytical Result Summary

			Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	NE	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			NE	NE	NE	NE
SAMPLE ID	**DATE SAMPLED**	**METHOD**				
BW to EP-2	11/1/2011	200.7	3.9	1.9	380	1100
	5/23/2011	200.7	3.7	<1.0	2.8	1000
	11/16/2010	6010B[1]	1600	250	130	26000
	6/28/2010	6010B[1]	1.7	<1.0	2.1	380
	4/20/2010	6010B[1]	2.5	<1.0	15	970
	10/27/2009	6010B[1]	0.8	<0.5	4.6	480
	5/6/2009	6010B[1]	1.1	<0.5	4.9	1200
	6/17/2008	6010B[1]	1.9	<0.5	15	1900

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
1) 20 NMAC 6.2.2101 General Requirements
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) Method 6010B Total Recoverable Metals analysis run

8.10 EVAPORATION PONDS (EP-1 thru EP-12B)
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1.0	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
SAMPLE ID	DATE SAMPLED	METHOD					
EP-1	11/1/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/16/2010[2]	8260B	<0.001	<0.001	<0.001	7.8E-03	<0.0015
	8/2/2010[1]	8260B	<0.001	7.7E-03	<0.001	<0.0015	<0.001
	4/20/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	6/17/2009	8260B	<0.001	0.024	**5.2E-03**	0.044	<0.001
	12/2/2008	8260B	**8.3E-03**	0.089	**0.033**	**0.26**	<0.001
	9/19/2008	8260B	**3.3E-03**	5.8E-03	**2.6E-03**	0.02	<0.001
	6/17/2008	8260B	<0.001	5.6E-03	**1.6E-03**	0.012	<0.001
	3/11/2008	8260B	**0.19**	0.47	**8.7E-03**	**0.54**	5.9E-03
	11/29/2007	8260B	**0.064**	0.23	**0.048**	**0.31**	<0.001
EP-2	11/1/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/16/2010[2]	8260B	<0.001	0.003	**1.9E-03**	0.015	<0.0015
	8/2/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	4/20/2010[1]	8260B	<0.001	1.3E-03	<0.001	4.3E-03	<0.001
	6/17/2009	8260B	<0.001	0.015	<0.001	0.037	<0.001
	12/2/2008	8260B	**1.8E-03**	0.02	**7.2E-03**	0.057	<0.001
	9/19/2008	8260B	<0.001	1.1E-03	<0.001	4.4E-03	<0.01
	6/17/2008	8260B	<0.001	<0.001	<0.001	<0.0015	<0.01
	3/11/2008	8260B	**3.8E-03**	0.011	**2.1E-03**	0.014	<0.01
	11/29/2007	8260B	**0.021**	0.079	**0.02**	0.13	<0.01
EP-3	11/1/2011	8260B	<0.01	<0.01	<0.01	<0.01	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/16/2010[2]	8260B	<0.001	1.2E-03	<0.001	5.7E-03	<0.0015
	8/2/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	4/20/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	6/17/2009	8260B	<0.001	<0.001	<0.001	1.7E-03	<0.001
	12/2/2008	8260B	**1.1E-03**	0.012	**4.3E-03**	0.034	<0.001
	9/19/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	6/17/2008	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	3/11/2008	8260B	<0.001	1.9E-03	<0.001	0.004	<0.001
	11/29/2007	8260B	<0.01	0.025	<0.01	0.038	<0.01
EP-4	11/1/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/16/2010[2]	8260B	<0.001	<0.001	<0.001	<0.003	<0.0015
	8/2/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	4/20/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	6/17/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	12/2/2008	8260B	<0.001	0.008	**2.9E-03**	0.022	<0.001
	9/19/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	6/17/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	3/11/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/29/2007	8260B	<0.01	0.011	<0.01	<0.015	<0.01

8.10 EVAPORATION PONDS (EP-1 thru EP-12B)

BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1.0	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
SAMPLE ID	DATE SAMPLED	METHOD					
EP-5	11/1/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/16/2010[2]	8260B	<0.001	<0.001	<0.001	<0.003	<0.001
	8/2/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	4/20/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	6/17/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	12/2/2008	8260B	<0.001	2.6E-03	0.001	7.2E-03	<0.001
	9/19/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	6/17/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	3/11/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/29/2007	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
EP-6	11/1/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/16/2010[2]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	8/2/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	4/20/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	6/17/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	12/2/2008	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	9/19/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	6/17/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	3/11/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/29/2007	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
EP-7	11/1/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/16/2010[2]	8260B	<0.001	<0.001	<0.001	<0.003	<0.0015
	8/2/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	4/20/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	6/17/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	12/2/2008	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	9/19/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	6/17/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	3/11/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/29/2007	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
EP-8	11/1/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/16/2010[2]	8260B	<0.001	<0.001	<0.001	<0.003	<0.0015
	8/2/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	4/20/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	6/17/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	12/2/2008	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	9/19/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	6/17/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	3/11/2008	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/29/2007	8260B	<0.01	<0.01	<0.01	<0.015	<0.01

8.10 EVAPORATION PONDS (EP-1 thru EP-12B)

BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1.0	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
SAMPLE ID	DATE SAMPLED	METHOD					
EP-9	11/1/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/16/2010[2]	8260B	<0.001	<0.001	<0.001	<0.003	<0.0015
	4/20/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
EP-11	11/1/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/16/2010[2]	8260B	<0.001	<0.001	<0.001	<0.003	<0.0015
	4/20/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
EP-12A	11/1/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/16/2010[2]	8260B	<0.001	<0.001	<0.001	<0.003	<0.0015
	4/20/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
EP-12B	11/1/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.01	<0.015	<0.01
	11/16/2010[2]	8260B	<0.001	<0.001	<0.001	<0.003	<0.0015
	4/20/2010[1]	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) Used the unapproved Facility Wide Ground Water Monitoring Plan (FWGWMP) sampling guidelines for the first quarter of 2010 which included the addition of evaporation ponds 9a, 11, 12A and 12B.
2) Used approved FWGWMP sampling guidelines beginning in the third quarter 2010. (approved August 25, 2010).

8.10.1 EVAPORATION PONDS (EP-1 thru EP-12B)
General Chemistry Analytical Result Summary

			Parameters								
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6.6 to 8.6[1]	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE
SAMPLE ID	DATE SAMPLED	METHOD									
EP-1	11/1/2011	300.0	240	3000	1.3	<10	<10	<2.5	1200	8.71	12000
	5/23/2011	300.0	590	200	1.4	<1.0	3.2	<5.0	980	5.49	6200
	11/16/2010[3]	300.0	350	140	1.2	4.8	4.8	<2.5	1000	7.4	4300
	8/2/2010[2]	300.0	99	310	<2.0	<4.0	<4.0	<10	870	7.68	3700
	4/20/2010[2]	300.0	340	330	<5.0	<1.0	<1.0	<5.0	1500	8.36	5400
	6/17/2009	300.0	86	820	NL	<1.0	<1.0	<5.0	580	7.73	4400
	12/2/2008	300.0	110	360	NL	<1.0	<1.0	7.2	780	7.76	4400
	9/9/2008	300.0	99	150	NL	<1.0	<1.0	<5.0	7700	7.82	4500
	6/17/2008	300.0	120	120	NL	<1.0	<1.0	15	1100	7.57	4600
	3/11/2008	300.0	560	540	NL	<1.0	<1.0	<2.5	980	3.81	4900
EP-2	11/1/2011	300.0	46	2700	1.5	<20	<20	<5.0	1700	8.35	15000
	5/23/2011	300.0	65	3700	1.3	<20	<20	<25	990	7.84	18000
	11/16/2010[3]	300.0	41	3500	1.8	<10	<10	<2.5	970	7.38	14000
	8/2/2010[2]	300.0	43	1600	<1.0	<4.0	<4.0	<2.5	970	7.91	6400
	4/20/2010[2]	300.0	170	1100	2.3	<2.0	<0.5	<2.5	1200	7.56	5800
	6/17/2009	300.0	52	3500	NL	<2.1	<0.6	<2.5	1000	8.13	13000
	12/2/2008	300.0	37	1800	NL	<2.2	<0.7	<2.5	1000	7.8	8500
	9/9/2008	300.0	48	2800	NL	<1.0	<1.0	<2.5	960	7.97	10000
	6/17/2008	300.0	63	2900	NL	<1.0	<1.0	<2.5	1300	7.9	11000
	3/11/2008	300.0	63	2200	NL	<1.0	<1.0	<2.5	970	6.81	8400
EP-3	11/1/2011	300.0	43	6400	1.2	<20	<20	<2.5	1600	8.24	17000
	5/23/2011	300.0	54	3700	1.4	<5.0	<1.0	<5.0	1100	8.02	19000
	11/16/2010[3]	300.0	11	5100	1.4	<200	<200	<2.5	1000	7.66	16000
	8/2/2010[2]	300.0	41	2800	1.2	<10	<10	<5.0	1100	7.76	9000
	4/20/2010[2]	300.0	63	8400	<10	<40	<40	<2.5	1100	8.11	32000
	6/17/2009	300.0	48	3600	NL	<4.0	<4.0	<2.5	1100	8.13	14000
	12/2/2008	300.0	26	1800	NL	<2.0	<0.5	<2.5	980	7.86	8500
	9/9/2008	300.0	51	2800	NL	<1.0	<1.0	<5.0	1100	7.94	10000

8.10.1 EVAPORATION PONDS (EP-1 thru EP-12B)
General Chemistry Analytical Result Summary

			Parameters								
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6.6 to 8.6[1]	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE
SAMPLE ID	DATE SAMPLED	METHOD									
EP-3	6/17/2008	300.0	44	3700	NL	<1.0	<1.0	<2.5	1400	7.91	13000
	3/11/2008	300.0	41	2700	NL	<1.0	<1.0	<2.5	1000	7.86	9800
EP-4	11/1/2011	300.0	39	4300	<2.0	<20	<20	<2.5	1600	7.76	18000
	5/23/2011	300.0	35	5300	<2.0	<5.0	<1.0	<5.0	1100	8.1	24000
	11/16/2010[3]	300.0	22	4500	2	<20	<20	<2.5	1100	7.81	18000
	8/2/2010[2]	300.0	35	2500	1.3	<10	<10	<2.5	1100	7.89	8700
	4/20/2010[2]	300.0	67	8000	<2.0	<40	<40	<2.5	1000	8.05	26000
	6/17/2009	300.0	46	3400	NL	<4.0	<4.0	<2.5	1200	8.12	13000
	12/2/2008	300.0	27	2000	NL	<2.0	<0.5	<2.5	1000	7.89	9100
	9/9/2008	300.0	49	2900	NL	<1.0	<1.0	<5.0	1100	7.9	11000
	6/17/2008	300.0	34	4500	NL	<1.0	<1.0	<2.5	1500	7.94	15000
	3/11/2008	300.0	32	2800	NL	<1.0	<1.0	<2.5	1000	8.06	10000
EP-5	11/1/2011	300.0	26	4300	1.5	<20	<20	<2.5	1600	7.74	21000
	5/23/2011	300.0	27	6700	2.3	<5.0	<1.0	<10	1200	8.06	26000
	11/16/2010[3]	300.0	20	4200	2.1	<20	<20	<2.5	1200	7.86	18000
	8/2/2010[2]	300.0	39	4800	2	<10	<10	<2.5	1300	7.97	20000
	4/20/2010[2]	300.0	53	12000	<10	<40	<40	<2.5	1100	8.04	40000
	6/17/2009	300.0	32	4400	NL	<4.0	<4.0	<2.5	1400	8.07	17000
	12/2/2008	300.0	29	2900	NL	<2.0	<0.5	<2.5	1200	7.82	14000
	9/9/2008	300.0	33	3000	NL	<1.0	<1.0	<5.0	890	7.93	10000
	6/17/2008	300.0	26	5400	NL	<1.0	<1.0	<2.5	1800	7.86	17000
	3/11/2008	300.0	41	2900	NL	<1.0	<1.0	<2.5	1100	7.82	10000
EP-6	11/1/2011	300.0	24	6900	2.1	<20	<20	<2.5	2300	7.94	26000
	5/23/2011	300.0	18	6500	2.1	<20	<20	<2.5	1300	7.83	23000
	11/16/2010[3]	300.0	25	6300	2.4	<20	<20	<2.5	1500	774	21000
	8/2/2010[2]	300.0	21	7400	2.1	<40	<40	<2.5	1500	8.33	27000
	4/20/2010[2]	300.0	29	4000	<10	<2.0	<2.0	<10	1100	7.66	8400
	6/17/2009	300.0	18	5100	NL	<4.0	<4.0	<10	1800	8.07	16000
	12/2/2008	300.0	28	5500	NL	<2.0	<0.5	<10	7600	7.7	19000
	9/9/2008	300.0	26	4900	NL	<4.0	<4.0	<5.0	1900	7.83	16000

8.10.1 EVAPORATION PONDS (EP-1 thru EP-12B)
General Chemistry Analytical Result Summary

			Parameters								
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6.6 to 8.6[1]	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE
SAMPLE ID	DATE SAMPLED	METHOD									
EP-6	6/17/2008	300.0	**29**	**6600**	NL	<2.0	<0.5	<5.0	**2600**	7.64	25000
	3/11/2008	300.0	**35**	**4100**	NL	<4.0	<4.0	<5.0	**1600**	7.7	13000
EP-7	11/1/2011	300.0	**22**	**46000**	13	<40	<40	<5.0	**8100**	7.82	120000
	5/23/2011	300.0	**27**	**28000**	16	<100	<100	<2.5	**8400**	7.79	120000
	11/16/2010[3]	300.0	**35**	**35000**	20	<200	<200	<10	**8400**	7.85	84000
	8/2/2010[2]	300.0	**18**	**62000**	27	<200	<200	<10	**11000**	7.41	180000
	4/20/2010[2]	300.0	**16**	**27000**	54	<200	<50	<10	**6900**	7.31	150000
	6/17/2009	300.0	**20**	**39000**	NL	<10	<10	<10	**10000**	7.59	130000
	12/2/2008	300.0	**35**	**42000**	NL	<40	<40	<10	**8300**	7.55	140000
	9/9/2008	300.0	**25**	**38000**	NL	<4.0	<4.0	<5.0	**8500**	7.52	110000
	6/17/2008	300.0	**29**	**64000**	NL	<2.0	<0.5	<5.0	**15000**	7.34	180000
	3/11/2008	300.0	**22**	**22000**	NL	<4.0	<4.0	<5.0	**5600**	7.61	68000
EP-8	11/1/2011	300.0	**27**	**27000**	9.9	<20	<20	<2.5	**3600**	7.92	66000
	5/23/2011	300.0	**43**	**170000**	75	<100	<100	<5.0	**18000**	6.83	370000
	11/16/2010[3]	300.0	**44**	**81000**	57	<200	<200	<10	**12000**	7.14	190000
	8/2/2010[2]	300.0	**43**	**110000**	78	<100	<100	<10	**22000**	**6.21**	300000
	4/20/2010[2]	300.0	**46**	**49000**	54	<200	<200	<10	**6900**	7.31	150000
	6/17/2009	300.0	**57**	**180000**	NL	<10	<10	<10	**23000**	6.73	310000
	12/2/2008	300.0	**31**	**46000**	NL	<40	<40	<10	**8600**	7.39	170000
	9/9/2008	300.0	**26**	**17000**	NL	<20	<20	<5.0	**3400**	7.75	51000
	6/17/2008	300.0	**94**	**160000**	NL	<10	<10	<5.0	**20000**	**6.28**	420000
	3/11/2008	300.0	**25**	**3000**	NL	<40	<40	<5.0	**6100**	7.47	94000
EP-9[2]	11/1/2011	300.0	**20**	**76000**	24	<100	<100	<10	**9400**	7.58	210000
	5/23/2011	300.0	**19**	**57000**	19	<200	<200	<10	**7100**	7.57	190000
	11/16/2010[3]	300.0	**21**	**76000**	32	<200	<200	<10	**8700**	7.31	200000
	4/20/2010[2]	300.0	**20**	**38000**	14	<200	<200	<10	**5000**	7.58	120000
EP-11[2]	11/1/2011	300.0	**29**	**5700**	1.2	<20	<20	<5.0	**1800**	7.83	19000
	5/23/2011	300.0	**23**	**16000**	6.2	<40	<40	<2.5	**3900**	7.85	62000
	11/16/2010[3]	300.0	**28**	**14000**	5.9	<40	<40	<5.0	**3300**	7.86	47000

8.10.1 EVAPORATION PONDS (EP-1 thru EP-12B)
General Chemistry Analytical Result Summary

			Parameters								
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6.6 to 8.6[1]	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE
SAMPLE ID	DATE SAMPLED	METHOD									
EP-11[2]	4/20/2010[2]	300.0	**18**	**17000**	6.9	<100	<100	<10	**4400**	7.73	62000
EP-12A[2]	11/1/2011	300.0	**36**	**5400**	1.2	<20	<20	<2.5	**1500**	8.05	18000
	5/23/2011	300.0	**28**	**6400**	2.5	<5.0	<1.0	<5.0	**1400**	8.08	26000
	11/16/2010[3]	300.0	**21**	**11000**	4.5	<40	<40	<10	**3100**	8.07	39000
	4/20/2010[2]	300.0	**29**	**6400**	<20	<20	<20	<25	**1300**	7.89	20000
EP-12B[2]	11/1/2011	300.0	**39**	**3600**	5.3	<20	<20	<2.5	**1500**	8.12	18000
	5/23/2011	300.0	**37**	**4800**	1.9	<5.0	<1.0	<5.0	**1100**	8.07	22000
	11/16/2010[3]	300.0	**22**	**6100**	3	<20	<20	<5.0	**1700**	7.74	22000
	4/20/2010[2]	300.0	**80**	**5000**	<1.0	<5.0	<5.0	<25	**950**	8.06	9400

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
1) NMAC 20.6.2.2101A General Requirements
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) Used the unapproved Facility Wide Ground Water Monitoring Plan (FWGWMP) sampling guidelines for the first quarter of 2010 which included the addition of evaporation ponds 9a, 11, 12A and 12B.
3) Used approved FWGWMP sampling guidelines beginning in the third quarter 2010. (approved August 25, 2010).

8.10.2 EVAPORATION PONDS (EP-1 thru EP-12B)
BOD/COD/E-COLI Analytical Result Summary

			Parameters			
			BOD (mg/L)	COD (mg/L)	E-Coli (CFU/100ml)	Total Coliform (CFU/100ml)
WQCC 20NMAC 6.2.3103			<30[1]	<125[1]	< 500 organisms per 100 ml	
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			NE	NE	MCL[6]	
SAMPLE ID	DATE SAMPLED	METHOD				
EP-1	11/2/2011	SM5210B/9223B	960	2250	>2419.6	NL
	5/24/2011	SM5210B/9223B	440	1340	1986.3	NL
	11/17/2010	SM9223B/3014	1400	3200	<10	NL
	8/2-3/2010	SM5210B/E410.4/3014	290	346	>2419.6	NL
	4/21/2010[2]	SM5210B/E410.4/3014	1080	2210	>2419.6	>2419.6
	6/17/2009	SM5210B/E410.4/3014	179	344	Present	Present
	12/2/2008	SM5210B/E410.4/3014	ND	ND	>60000	NL
	9/9/2008	SM5210B/E410.4/3014	299	3000	58	NL
	6/17/2008	SM5210B/E410.4/3014	327	1230	ND	ND
	3/11/2008	SM5210B/E410.4/3014	556	965	Absent	NL
EP-2	11/2/2011	SM5210B/9223B	530	1560	>2419.6	NL
	5/24/2011	SM5210B/9223B	230	737	648.8	NL
	11/17/2010	SM9223B/3014	550	1020	1553.1	NL
	8/2-3/2010	SM5210B/E410.4/3014	64	172	>2419.6	NL
	4/21/2010	SM5210B/E410.4/3014	1100	2060	>2419.6	>2419.6
	6/17/2009	SM5210B/E410.4/3014	83.6	192	Present	Present
	12/2/2008	SM5210B/E410.4/3014	ND	ND	>6000	NL
	9/9/2008	SM5210B/E410.4/3014	122	2500	300	NL
	6/17/2008	SM5210B/E410.4/3014	110	790	ND	ND
	3/11/2008	SM5210B/E410.4/3014	0.71	871	Absent	NL
EP-3	11/2/2011	SM5210B/9223B	140	608	>2419.6	NL
	5/24/2011	SM5210B/9223B	190	574	1.0	NL
	11/17/2010	SM9223B/3014	120	560	40.8	NL
	8/2-3/2010	SM5210B/E410.4/3014	36	238	>2419.6	NL
	4/21/2010[2]	SM5210B/E410.4/3014	200	771	100.6	>2419.6
	6/17/2009	SM5210B/E410.4/3014	69.2	204	Present	Present
	12/2/2008	SM5210B/E410.4/3014	ND	ND	>6000	NL
	9/9/2008	SM5210B/E410.4/3014	73	950	300	NL
	6/17/2008	SM5210B/E410.4/3014	9639	691	ND	ND
	3/11/2008	SM5210B/E410.4/3014	323	871	Present	NL
EP-4	11/2/2011	SM5210B/9223B	62	478	547.5	NL
	5/24/2011	SM5210B/9223B	190	639	4.1	NL
	11/17/2020	SM9223B/3014	140	440	12	NL
	8/2-3/2010	SM5210B/E410.4/3014	35	204	>2419.6	NL
	4/21/2010[2]	SM5210B/E410.4/3014	281	683	<1.0	>2419.6
	6/17/2009	SM5210B/E410.4/3014	71.1	222	Present	Present
	12/2/2008	SM5210B/E410.4/3014	ND	ND	2900	NL
	9/9/2008	SM5210B/E410.4/3014	68	850	54.5	NL
	6/17/2008	SM5210B/E410.4/3014	103	110	ND	ND
	3/11/2008	SM5210B/E410.4/3014	275	663	Present	NL
EP-5	11/2/2011	SM5210B/9223B	29	302	5.2	NL
	5/24/2011	SM5210B/9223B	150	413	1.0	NL
	11/17/2010	SM9223B/3014	76	320	4.1	NL
	8/2-3/2010	SM5210B/E410.4/3014	40	208	1960.8	NL
	4/21/2010[2]	SM5210B/E410.4/3014	123	782	2.0	>2419.6

8.10.2 EVAPORATION PONDS (EP-1 thru EP-12B)
BOD/COD/E-COLI Analytical Result Summary

			Parameters			
			BOD (mg/L)	COD (mg/L)	E-Coli (CFU/100ml)	Total Coliform (CFU/100ml)
WQCC 20NMAC 6.2.3103			<30[1]	<125[1]	< 500 organisms per 100 ml	
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			NE	NE	MCL[6]	
SAMPLE ID	DATE SAMPLED	METHOD				
EP-5	6/17/2009	SM5210B/E410.4/3014	**41.9**	**210**	Absent	**Present**
	12/2/2008	SM5210B/E410.4/3014	ND	ND	**630**	NL
	9/9/2008	SM5210B/E410.4/3014	**59**	**667**	54.5	NL
	6/17/2008	SM5210B/E410.4/3014	<128	**575**	ND	ND
	3/11/2008	SM5210B/E410.4/3014	**178**	**506**	Present	
EP-6	11/2/2011	SM5210B/9223B	7.3	**252**	47.3	NL
	5/24/2011	SM5210B/9223B	**71**	**473**	<1.0	NL
	11/17/2010	SM9223B/3014	<1200	**168**	8.6	NL
	8/2-3/2010	SM5210B/E410.4	15	**172**	**1892**	NL
	4/21/2010[2]	SM5210B/E410.5	**54.8**	**290**	1.0	**>2419.6**
	6/17/2009	SM5210B/E410.4	<60	**126**	Absent	**Present**
	12/2/2008	SM5210B/E410.4	ND	ND	17.3	NL
	9/9/2008	SM5210B/E410.4	**47**	**949**	90.9	NL
	6/17/2008	SM5210B/E410.4	<128	**723**	ND	ND
	3/11/2008	SM5210B/E410.4	**126**	**847**	**Present**	NL
EP-7	11/2/2011	SM5210B/9223B	15	**1240**	<1.0	NL
	5/24/2011	SM5210B/9223B	27	**918**	<1.0	NL
	11/17/2010	SM9223B/3014	**380**	**920**	<1.0	NL
	8/2-3/2010	SM5210B/E410.4/3014	5	**870**	<1.0	NL
	4/21/2010[2]	SM5210B/E410.4/3014	<60.0	**1010**	<1.0	96
	6/17/2009	SM5210B/E410.4/3014	<60	**720**	Absent	**Present**
	12/2/2008	SM5210B/E410.4/3014	ND	ND	<1.0	NL
	9/9/2008	SM5210B/E410.4/3014	**47.8**	**3330**	24.9	NL
	6/17/2008	SM5210B/E410.4/3014	**17.7**	**4340**	ND	ND
	3/11/2008	SM5210B/E410.4/3014	**15.7**	**2118**	Absent	NL
EP-8	11/2/2011	SM5210B/9223B	9.0	**512**	32.3	NL
	5/24/2011	SM5210B/9223B	**46**	**3140**	<1.0	NL
	11/17/2010	SM9223B/3014	**400**	**1720**	<1.0	NL
	8/2-3/2010	SM5210B/E410.4/3014	5	**2520**	<1.0	<1
	4/21/2010[2]	SM5210B/E410.4/3014	14.3	**776**	<1.0	2
	6/17/2009	SM5210B/E410.4/3014	<60.0	**2160**	Absent	**Present**
	12/2/2008	SM5210B/E410.4/3014	ND	ND	<1.0	NL
	9/9/2008	SM5210B/E410.4/3014	<16.0	**3080**	102	NL
	6/17/2008	SM5210B/E410.4/3014	8.2	**16100**	ND	ND
	3/11/2008	SM5210B/E410.4/3014	17.4	**1770**	Absent	NL
EP-9	11/2/2011	SM5210B/9223B	9.0	**1870**	<1.0	NL
	5/24/2011	SM5210B/9223B	**43**	**1640**	<1.0	
	11/17/2010	SM9223B/3014	**350**	**1240**	<1.0	NL
	4/21/2010[2]	SM5210B/E410.4/3014	<60.0	**760**	<1.0	85.5
EP-11	11/2/2011	SM5210B/9223B	**40**	**486**	461.1	NL
	5/24/2011	SM5210B/9223B	**52**	**711**	<1.0	NL
	11/17/2010	SM9223B/3014	**350**	**460**	4.1	NL
	4/21/2010	SM5210B/E410.4/3014	<60.0	**492**	<1.0	71.9
EP-12A	11/2/2011	SM5210B/9223B	**85**	**515**	**>2419.6**	NL
	5/24/2011	SM5210B/9223B	**130**	**582**	1.0	NL
	11/17/2010	SM9223B/3014	**330**	**300**	64.4	NL
	4/21/2010	SM5210B/E410.4/3014	**87.3**	**675**	47.6	**>2419.6**

8.10.2 EVAPORATION PONDS (EP-1 thru EP-12B)

BOD/COD/E-COLI Analytical Result Summary

			Parameters			
			BOD (mg/L)	COD (mg/L)	E-Coli (CFU/100ml)	Total Coliform (CFU/100ml)
WQCC 20NMAC 6.2.3103			<30[1]	<125[1]	< 500 organisms per 100 ml	
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			NE	NE	MCL[6]	
SAMPLE ID	DATE SAMPLED	METHOD				
EP-12B	11/2/2011	SM5210B/9223B	**130**	**618**	**>2419.6**	NL
	5/24/2011	SM5210B/9223B	**170**	**450**	3.0	NL
	11/17/2010	SM9223B/3014	**350**	**280**	12	NL
	4/21/2010[2]	SM5210B/E410.4/3014	**342**	**1070**	**1540.2**	**>2419.6**

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
ND = No data available
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/L TDS Concentrations or Less.
[1] 20 NMAC 6.2.2101 General Requirements
EPA Regional Screening Level (RSL) Summary Table
[6] Fecal coliform positive or e-coli positive triggers repeat samples if any repeat sample is total coliform positive.
A routine sample that is total coliform positive and fecal coliform negative or e-coli negative triggers repeat samples if any repeat sample is fecal coliform positive or e-coli positive.

NOTES
2) Used the unapproved Facility Wide Ground Water Monitoring Plan (FWGWMP) sampling guidelines for the first quarter of 2010 which included the addition of evaporation ponds 9a, 11, 12A and 12B.

8.10.3 EVAPORATION PONDS (EP-1 thru EP-12B)

Total Metals Analytical Result Summary

			Parameters															
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			0.1	1.0	0.01	NE	0.05	1.0	1.0	0.05	NE	0.2	NE	0.05	NE	0.002	0.03	10
40 CFR 141.62 MCL (June 8, 2012)			0.01	2.0	0.005	NE	0.1	1.3[1]	NE	0.015[1]	NE	NE	NE	0.05	NE	0.002	0.03	NE
EPA RSL for Tap Water (April 2012)			4.5E-05	2.9	6.9E-03	NE	NE	0.62	11	NE	NE	0.32	NE	0.078	NE	6.3E-04	0.047	4.7
SAMPLE ID	DATE SAMPLED	METHOD																
EP-1	11/1/2011	200.7/200.8	**7.7E-03**	0.18	<0.002	NL	0.013	0.021	**7.3**	<0.005	NL	0.14	NL	6.7E-04	NL	**4.5E-03**	<0.0025	0.43
	5/23/2011	200.7/200.8	**0.014**	0.077	<0.002	17	**0.055**	0.013	**20**	<0.005	8.2	**0.36**	97	<0.05	900	**1.5E-03**	<0.0025	0.23
	11/16/2010	6010B	<0.1	<0.1	<0.01	NL	**0.39**	<0.03	**14**	<0.025	NL	0.19	NL	<0.25	NL	**6.7E-04**	<0.02	0.89
	8/2/2010	6010B	<0.5	<0.5	<0.05	NL	<0.15	<0.15	**15**	<0.13	NL	**0.43**	NL	<1.3	NL	**1.6E-03**	NL	1.3
	4/20/2010[2]	6010B	<0.1	0.27	<0.01	45	<0.03	<0.03	**36**	<0.025	12	**0.24**	72	<0.25	1400	<0.0002	5.81E-03	0.49
	6/17/2009	6010B	**0.008**	0.01	<0.01	43.5	<0.05	<0.01	**5.6**	<0.05	12.5	**0.2**	55.8	0.015	830	<0.001	<0.001	0.28
	12/2/2008	6010B	<0.02	0.098	NL	43	<0.01	<0.02	**7.6**	<0.005	16	**0.27**	92	0.041	590	<0.0002	<0.001	0.36
	9/9/2008	6010B	<0.02	0.076	<0.002	45	<0.006	<0.006	NL	<0.005	14	**0.22**	62	<0.05	460	<0.0002	<0.001	0.12
EP-2	11/1/2011	200.7/200.8	**8.3E-03**	0.059	<0.002	NL	0.008	<0.006	**3.9**	<0.005	NL	0.11	NL	6.2E-03	NL	**0.0015**	<0.005	0.12
	5/23/2011	200.7/200.8	**0.014**	0.024	<0.002	68	0.024	<0.006	**2.6**	<0.005	70	**0.33**	120	<0.05	2500	<0.0002	<0.0025	0.037
	11/16/2010	200.7/200.8	<0.1	<0.11	<0.01	NL	**0.051**	<0.03	**7.9**	<0.025	NL	**0.41**	NL	<0.25	NL	4.5E-04	<0.001	0.59
	8/2/2010	6010B	<0.2	<0.2	<0.02	NL	<0.06	<0.06	**2.4**	<0.05	NL	**0.23**	NL	<0.5	NL	<0.0002	<0.001	<0.5
	4/20/2010[2]	6010B	<0.1	<0.1	<0.01	91	<0.03	<0.03	**17**	<0.025	26	**0.31**	93	<0.25	1400	**7.7E-04**	8.3E-03	<0.25
	6/17/2009	6010B	**0.011**	<0.1	<0.01	336	<0.05	<0.01	**2.33**	<0.05	75.3	0.17	63.2	0.011	2300	<0.001	0.002	0.08
	12/2/2008	6010B	<0.02	0.061	NL	170	<0.01	<0.02	**2.7**	<0.005	56	0.19	75	0.022	1500	<0.0002	<0.001	0.089
	9/9/2008	6010B	<0.02	0.1	NL	340	<0.006	<0.006	NL	<0.005	84	**0.21**	52	<0.25	1900	**0.1**	2.07E-03	0.089
EP-3	11/1/2011	200.7/200.8	**7.6E-03**	0.061	<0.002	NL	6.9E-03	<0.006	**2.6**	<0.005	NL	0.12	NL	6.5E-03	NL	5.5E-04	<0.005	0.06
	5/23/2011	200.7/200.8	**0.015**	0.034	<0.002	94	0.023	<0.006	**2.0**	<0.005	86	**0.33**	130	<0.05	2600	<0.0002	<0.0025	0.033
	11/16/2010	6010B	<0.1	<0.1	<0.01	NL	<0.03	<0.03	0.65	<0.025	NL	0.19	NL	<0.25	NL	<0.0002	<0.001	<0.1
	8/2/2010	6010B	<0.2	<0.2	<0.02	NL	<0.06	<0.06	**3.0**	<0.05	NL	**0.38**	NL	<0.5	NL	<0.0002	<0.001	<0.5
	4/20/2010[2]	6010B	<0.1	<0.1	<0.01	600	<0.03	<0.03	**1.6**	<0.025	140	**0.39**	170	<0.25	5000	<0.0002	3.26E-03	<0.25
	6/17/2009	6010B	**0.013**	<0.1	<0.01	377	<0.05	<0.01	**1.75**	<0.05	89.5	**0.22**	79.9	0.013	2600	<0.001	0.003	0.07
	12/2/2008	6010B	**0.024**	0.052	NL	140	<0.01	<0.02	**1.8**	<0.005	52	**0.2**	78	0.026	1700	<0.0002	<0.001	<0.03
	9/9/2008	6010B	<0.02	0.11	NL	340	<0.006	<0.006	NL	<0.005	87	**0.21**	54	<0.25	2000	<0.0002	2.37E-03	0.47
EP-4	11/1/2011	200.7/200.8	**8.7E-03**	0.077	<0.002	NL	.<0.006	<0.006	**1.2**	<0.005	NL	**0.21**	NL	7.8E-03	NL	2.2E-04	<0.005	0.024
	5/23/2011	200.7/200.8	**0.012**	0.065	<0.002	200	0.024	<0.006	0.41	<0.005	130	**0.3**	140	<0.05	3600	<0.0002	<0.0025	0.018
	11/16/2010	6010B	<0.1	<0.1	<0.01	NL	<0.03	<0.03	0.5	<0.025	NL	0.17	NL	<0.25	NL	<0.0002	<0.001	<0.1
	8/2/2010	6010B	<0.2	<0.2	<0.02	NL	<0.06	<0.06	0.76	<0.05	NL	**0.31**	NL	<0.5	NL	<0.0002	<.001	<0.5
	4/20/2010[2]	6010B	<0.1	0.086	<0.002	590	<0.006	<0.006	**2.0**	<0.005	140	**0.37**	180	<0.05	5100	<0.0002	3.27E-03	<0.05
	6/17/2009	6010B	**0.012**	<0.1	<0.01	357	<0.05	<0.01	**1.35**	<0.05	85.2	**0.22**	82.5	0.013	2440	<0.001	0.002	0.08
	12/2/2008	6010B	<0.02	0.057	NL	160	<0.01	<0.02	**1.4**	<0.005	59	**0.2**	81	0.025	1700	<0.0002	<0.001	<0.1
	9/9/2008	6010B	<0.02	0.13	NL	320	<0.006	<0.006	NL	<0.005	87	**0.23**	54	<0.25	2000	<0.0002	1.87E-03	0.021

8.10.3 EVAPORATION PONDS (EP-1 thru EP-12B)

Total Metals Analytical Result Summary

			Parameters															
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			0.1	1.0	0.01	NE	0.05	1.0	1.0	0.05	NE	0.2	NE	0.05	NE	0.002	0.03	10
40 CFR 141.62 MCL (June 8, 2012)			0.01	2.0	0.005	NE	0.1	1.3[1]	NE	0.015[1]	NE	NE	NE	0.05	NE	0.002	0.03	NE
EPA RSL for Tap Water (April 2012)			4.5E-05	2.9	6.9E-03	NE	NE	0.62	11	NE	NE	0.32	NE	0.078	NE	6.3E-04	0.047	4.7
SAMPLE ID	DATE SAMPLED	METHOD																
EP-5	11/1/2011	200.7/200.8	**0.011**	0.094	<0.002	NL	8.5E-03	<0.006	0.39	<0.005	NL	**0.27**	NL	6.9E-03	NL	.<0.0002	<0.005	0.01
	5/23/2011	200.7/200.8	**0.018**	0.083	<0.002	220	0.022	<0.006	0.14	<0.005	130	0.19	140	<0.05	4100	<0.0002	<0.0025	0.015
	11/16/2010	6010B	<0.1	<0.1	<0.02	NL	0.043	<0.03	0.68	<0.025	NL	**0.22**	NL	<0.25	NL	<0.0002	<0.001	<0.1
	8/2/2010	6010B	<0.2	<0.2	<0.02	NL	<0.06	<0.06	<0.5	<0.05	NL	0.069	NL	<0.5	NL	<0.002	<0.001	<0.5
	4/20/2010[2]	6010B	<0.1	0.11	<0.01	790	<0.03	<0.03	**1.1**	<0.025	180	**0.45**	180	<0.25	6500	<0.0002	5.71E-03	<0.05
	6/17/2009	6010B	**0.013**	<0.1	<0.01	460	<0.05	<0.01	0.5	<0.05	116	**0.27**	92.9	0.009	2990	<0.001	0.002	0.02
	12/2/2008	6010B	<0.02	0.084	NL	270	<0.01	<0.02	0.9	<0.005	82	**0.26**	88	0.024	2200	<0.0002	0.001	<0.03
	9/9/2008	6010B	<0.02	0.14	<0.002	220	<0.006	<0.006	NL	<0.005	82	0.17	70	<0.25	2000	<0.0002	1.42E-03	<0.02
EP-6	11/1/2011	200.7/200.8	**0.017**	0.11	<0.002	NL	0.015	<0.006	0.15	<0.005	NL	**0.21**	NL	8.9E-03	NL	<0.0002	<0.005	<0.01
	5/23/2011	200.7/200.8	**0.02**	0.12	<0.002	230	0.019	<0.006	0.17	<0.005	110	0.14	98	<0.05	3300	<0.0002	<0.005	0.01
	11/16/2010	6010B	<0.1	0.14	<0.01	NL	0.04	<0.03	<0.03	<0.025	NL	**0.33**	NL	<0.25	NL	<0.0002	0.001	<0.1
	8/2/2010	6010B	<0.2	<0.2	<0.02	NL	<0.06	<0.06	<0.5	<0.05	NL	**4.8**	NL	<0.5	NL	<0.0002	<0.001	<0.5
	4/20/2010[2]	6010B	<0.02	0.064	<0.002	310	<0.006	<0.006	0.67	<0.005	0.89	**0.4**	71	<0.05	2800	<0.0002	1.85E-03	<0.05
	6/17/2009	6010B	**0.015**	<0.1	<0.01	450	<0.05	<0.01	0.2	<0.05	131	**0.31**	94.3	0.005	3380	<0.001	0.002	<0.01
	12/2/2008	6010B	**0.024**	0.12	NL	370	<0.01	<0.02	0.3	<0.005	130	**0.48**	160	<0.02	3700	<0.0002	0.002	<0.03
	9/9/2008	6010B	<0.02	0.11	<0.002	330	<0.006	<0.006	NL	<0.005	130	**0.46**	130	<0.25	3300	<0.0002	1.25E-03	<0.02
EP-7	11/1/2011	200.7/200.8	**0.049**	0.098	<0.01	NL	<0.03	<0.03	0.39	<0.025	NL	**0.83**	NL	0.03	NL	<0.0002	<0.02	<0.05
	5/23/2011	200.7/200.8	**0.079**	0.13	<0.01	1000	<0.03	<0.03	0.16	<0.025	730	**2.5**	680	<0.25	20000	<0.0002	<0.01	<0.05
	1/16/2010	6010B	<0.2	<0.2	<0.02	NL	<0.06	<0.06	0.83	<0.05	NL	**3.3**	NL	<0.5	NL	<0.0002	0.003	<0.2
	8/2/2010	6010B	<1.0	<1.0	<0.1	NL	<0.3	<0.3	<2.5	<0.25	NL	**3.9**	NL	<2.5	NL	<0.0002	NL	<2.5
	4/20/2010[2]	6010B	**0.1**	<0.2	<0.01	930	<0.03	<0.03	0.28	<0.025	620	**2.7**	660	<0.25	15000	<0.0002	2.25E-03	<0.25
	6/17/2009	6010B	**0.055**	0.1	<0.01	1300	<0.05	0.03	0.14	0.08	944	**4.44**	401	0.033	27300	<0.001	0.003	<0.02
	12/2/2008	6010B	<0.01	0.14	<0.02	820	<0.05	<0.1	<0.5	<0.25	1000	**1.8**	1500	<0.1	28000	<0.0002	0.002	<0.15
	9/9/2008	6010B	<0.20	0.11	<0.02	730	<0.006	<0.006	NL	<0.05	960	**5.8**	1100	<0.5	28000	<0.0002	1.03E-03	<0.02
EP-8	11/1/2011	200.7/200.8	**0.047**	0.13	<0.002	NL	0.017	<0.006	0.17	<0.005	NL	**1.5**	NL	0.026	NL	.<0.0002	<0.005	0.012
	5/23/2011	200.7/200.8	**0.42**	0.23	<0.01	740	<0.03	<0.06	0.41	<0.025	3300	**20**	4300	<0.25	58000	<0.0002	<0.0025	0.1
	11/16/2010	6010B	<0.4	<0.4	<0.04	NL	<0.12	<0.12	<1.0	<0.025	NL	<1.0	NL	<1.0	NL	<0.0002	0.003	<0.4
	8/2/2010	6010B	<1.0	<1.0	<0.1	NL	<0.3	<0.3	<2.5	<0.25	NL	**24**	NL	<2.5	NL	<0.0002	NL	<2.5
	4/20/2010[2]	6010B	**0.17**	0.13	<0.01	680	<0.03	<0.03	0.62	<0.025	1500	**9.6**	2000	<0.25	27000	<0.0002	2.27E-03	<0.25
	6/17/2009	6010B	**0.384**	0.2	<0.01	1120	<0.05	0.27	0.3	<0.05	4050	**28**	2130	**0.224**	67500	<0.001	0.004	0.13
	12/2/2008	6010B	**0.13**	0.15	<0.01	830	<0.05	<0.1	<0.5	<0.025	1400	**5.5**	2300	<0.1	33000	<0.001	0.002	<0.15
	9/9/2008	6010B	<0.1	0.12	<0.01	530	<0.03	<0.03	NL	<0.025	43	**2.4**	800	<0.25	9500	<0.001	1.48E-03	<0.01
EP-9[2]	11/1/2011	200.7/200.8	**0.087**	0.2	<0.01	NL	<0.03	<0.03	0.037	<0.025	NL	**1.9**	NL	**0.051**	NL	<0.0002	<0.02	<0.05
	5/23/2011	200.7/200.8	**0.1**	0.2	<0.01	1200	<0.03	<0.03	0.18	<0.025	970	**7.4**	990	<0.25	33000	<0.0002	<0.01	<0.05
	11/16/2010	6010B	<0.4	<0.4	<0.04	NL	<0.12	<0.12	<1.0	<0.1	NL	**6.7**	NL	<1.0	NL	<0.0002	0.003	<0.4
	4/20/2010[2]	6010B	<0.1	0.14	<0.01	890	<0.03	<0.03	0.62	<0.025	790	**29**	870	<0.25	24000	<0.0002	2.20E-03	<0.25

8.10.3 EVAPORATION PONDS (EP-1 thru EP-12B)

Total Metals Analytical Result Summary

			Parameters															
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**0.05**	**NE**	**0.002**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**0.05**	**NE**	**0.002**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**0.078**	**NE**	**6.3E-04**	**0.047**	**4.7**
SAMPLE ID	**DATE SAMPLED**	**METHOD**																
EP-11[2]	11/1/2011	200.7/200.8	**8.3E-03**	0.071	<0.002	NL	<0.006	<0.006	**1.2**	<0.005	NL	0.19	NL	8.4E-03	NL	<0.0002	<0.005	0.021
	5/23/2011	200.7/200.8	**0.061**	0.085	<0.01	540	<0.03	<0.03	0.22	<0.025	340	**0.9**	290	<0.25	9600	<0.0002	<0.01	<0.05
	11/16/2010	6010B	<0.1	0.14	<0.01	NL	**0.35**	<0.03	**1.3**	<0.025	NL	**0.88**	NL	<0.25	NL	<0.0002	0.002	<0.1
	4/20/2010[2]	6010B	<0.1	<0.1	<0.01	710	<0.03	<0.03	0.42	<0.025	420	**1.6**	360	<0.25	9900	<0.0002	1.97E-03	<0.25
EP-12A[2]	11/1/2011	200.7/200.8	**8.5E-03**	0.065	<0.002	NL	6.7E-03	<0.006	**1.9**	<0.005	NL	0.14	NL	6.3E-03	NL	3.5E-04	<0.005	0.04
	5/23/2011	200.7/200.8	**0.024**	0.061	<0.002	200	0.02	<0.006	0.22	<0.005	120	**0.32**	120	<0.05	3400	<0.0002	<0.0025	0.016
	11/16/2010	6010B	<0.1	<0.1	<0.01	NL	<0.03	<0.03	**1.1**	<0.025	NL	**0.4**	NL	<0.25	NL	<0.0002	0.002	<0.1
	4/20/2010[2]	6010B	<0.1	<0.1	<0.01	350	<0.03	<0.03	0.92	<0.025	110	**0.28**	130	<0.25	3900	<0.0002	1.75E-03	<0.25
EP-12B[2]	11/1/2011	200.7/200.8	**7.6E-03**	0.063	<0.002	NL	7.3E-03	<0.006	**2.4**	<0.005	NL	0.13	NL	0.006	NL	5.5E-04	<0.005	0.059
	5/23/2011	200.7/200.8	**0.016**	0.05	<0.002	170	0.022	<0.006	0.59	<0.005	110	**0.29**	130	<0.05	3100	<0.0002	<0.0025	0.02
	11/16/2010	6010B	<0.1	<0.1	<0.01	NL	<0.03	<0.03	0.84	<0.025	NL	0.15	NL	<0.25	NL	<0.0002	<0.001	<0.25
	4/20/2010[2]	6010B	<0.1	<0.1	<0.01	320	<0.03	<0.03	**4.2**	<0.025	83	**0.35**	150	<0.25	3100	<0.0002	2.91E-03	<0.25

DEFINITIONS

NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis

Bold and highlighted values represent values above the applicable standards

STANDARDS

WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Secondary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES

2) Used the unapproved Facility Wide Ground Water Monitoring Plan (FWGWMP) sampling guidelines for the first quarter of 2010 which included the addition of evaporation ponds 9a, 11, 12A and 12B.

8.10.4 EVAPORATION PONDS (EP-1 thru EP-12B)

Dissolved Metals Analytical Result Summary

			Parameters														
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**NE**	**0.05**	**0.05**	**NE**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**0.05**	**NE**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**0.32**	**NE**	**0.078**	**0.071**	**NE**	**0.047**	**4.7**
SAMPLE ID	**DATE SAMPLED**	**METHOD**															
EP-1	11/1/2011	200.7/200.8	**4.7E-03**	0.012	<0.002	22	<0.006	<0.006	**1.0**	<0.005	0.12	680	0.015	<0.005	1400	<0.002	0.059
	5/23/2011	200.7/200.8	<0.01	0.014	<0.01	5.5	0.047	<0.03	**15**	<0.025	**0.34**	110	<0.25	<0.025	910	<0.005	0.13
	11/16/2010	6010B	<0.1	<0.1	<0.1	12	<0.03	<0.03	**4.3**	<0.025	0.15	72	<0.25	<0.025	580	<0.001	<0.25
	8/2/2010	6010B	<0.02	0.072	<0.002	NL	0.013	<0.006	**2.5**	<0.005	**0.36**	NL	<0.05	<0.025	NL	<0.001	0.096
	4/20/2010[2]	6010B	<0.02	0.085	<0.002	31	0.019	9.1E-03	**29**	<0.005	**0.24**	70	**0.066**	<0.005	1500	4.42E-03	0.28
EP-2	11/1/2011	200.7/200.8	**5.8E-03**	0.042	<0.002	140	6.5E-03	<0.006	**1.1**	<0.005	0.11	640	5.7E-03	<0.005	1900	<0.002	0.044
	5/23/2011	200.7/200.8	**0.014**	0.026	<0.01	55	<0.03	<0.03	**1.7**	<0.025	**0.33**	140	<0.25	<0.025	2600	<0.005	<0.05
	11/16/2010	6010B	<0.1	<0.1	<0.01	150	<0.03	<0.03	0.71	<0.025	0.18	65	<0.25	<0.025	2100	<0.001	<0.25
	8/2/2010	6010B	<0.1	<0.1	<0.01	NL	<0.03	<0.03	**2.2**	<0.025	**0.27**	NL	<0.25	<0.025	NL	<0.001	<0.25
	4/20/2010[2]	6010B	<0.02	0.057	<0.002	130	0.013	<0.006	**9.7**	<0.005	**0.34**	100	<0.25	<0.005	1700	0.0046	0.12
EP-3	11/1/2011	200.7/200.8	**6.6E-03**	0.053	<0.002	210	<0.006	<0.006	**1.3**	<0.005	0.12	570	5.6E-03	<0.005	2100	<0.005	0.03
	5/23/2011	200.7/200.8	**0.014**	0.033	<0.002	92	0.024	<0.006	**1.5**	<0.005	**0.34**	150	<0.05	<0.005	3100	<0.005	0.033
	11/16/2010	6010B	<0.1	<0.1	<0.01	160	<0.03	<0.03	0.24	<0.025	0.15	71	<0.25	<0.025	2300	<0.001	<0.25
	8/2/2010	6010B	<0.1	0.12	<0.002	NL	9.3E-03	<0.006	**1.8**	<0.005	**0.37**	NL	<0.05	<0.005	NL	<0.001	<0.05
	4/20/2010[2]	6010B	<0.1	<0.1	<0.01	590	<0.03	<0.03	0.88	<0.025	**0.42**	170	<0.25	<0.005	5100	2.58E-03	<0.25
EP-4	11/1/2011	200.7/200.8	**8.6E-03**	0.073	<0.002	210	<0.006	<0.006	0.78	<0.005	**0.2**	570	8.4E-03	<0.005	2300	<0.005	0.022
	5/23/2011	200.7/200.8	**0.017**	0.067	<0.002	210	0.024	<0.006	0.19	<0.005	**0.33**	160	<0.05	<0.005	3800	<0.005	0.019
	11/16/2010	6010B	<0.1	<0.1	<0.01	210	<0.03	<0.03	0.22	<0.025	0.14	85	<0.25	<0.025	2600	<0.001	<0.25
	8/2/2010	6010B	<0.1	<0.1	<0.01	NL	<0.03	<0.03	1.0	<0.025	**0.33**	NL	<0.25	<0.025	NL	0.002	<0.25
	4/20/2010[2]	6010B	<0.1	<0.1	<0.01	590	<0.03	<0.03	0.95	<0.025	**0.41**	170	<0.25	<0.005	4800	2.92E-03	<0.25
EP-5	11/1/2011	200.7/200.8	**9.8E-03**	0.085	<0.002	220	0.007	<0.006	0.3	<0.005	**0.24**	490	7.5E-03	<0.005	2900	<0.005	<0.1
	5/23/2011	200.7/200.8	**0.018**	0.086	<0.002	240	0.023	<0.006	0.049	<0.005	**0.21**	150	<0.05	<0.005	4000	<0.005	0.015
	11/16/2010	6010B	<0.1	<0.1	<0.01	210	0.031	<0.03	0.37	<0.025	0.19	91	<0.25	<0.025	2600	<0.001	<0.25
	8/2/2010	6010B	<0.1	<0.1	<0.01	NL	<0.03	<0.03	0.42	<0.025	**0.3**	NL	<0.25	<0.025	NL	0.003	<0.25
	4/20/2010[2]	6010B	<0.1	0.12	<0.01	780	<0.03	<0.03	0.71	<0.025	**0.49**	180	<0.25	<0.005	6400	2.71E-03	<0.25
EP-6	11/1/2011	200.7/200.8	**0.02**	0.11	<0.002	230	0.014	<0.006	0.076	<0.005	0.19	250	0.011	<0.005	4400	<0.01	0.011
	5/23/2011	200.7/200.8	**0.016**	0.11	<0.01	200	<0.03	<0.03	0.13	<0.025	0.13	96	<0.25	<0.025	3200	<0.005	<0.05
	11/16/2010	6010B	<0.1	0.12	<0.01	240	<0.03	<0.03	0.18	<0.025	**0.3**	110	<0.25	<0.025	3400	0.001	<0.25
	8/2/2010	6010B	<0.1	<0.1	<0.01	NL	<0.03	<0.03	0.033	<0.025	0.045	NL	<0.25	<0.025	NL	0.002	<0.25
	4/20/2010[2]	6010B	<0.02	0.068	<0.002	320	<0.006	<0.006	0.38	<0.005	**0.43**	72	<0.05	<0.005	2700	1.69E-03	0.5
EP-7	11/1/2011	200.7/200.8	<0.05	0.09	<0.01	750	<0.03	<0.03	<0.1	<0.025	**0.6**	930	<0.05	<0.025	18000	<0.05	<0.05
	5/23/2011	200.7/200.8	**0.068**	0.13	<0.01	1000	<0.03	<0.03	<0.1	<0.025	**1.9**	850	<0.25	<0.025	20000	<0.01	<0.05
	11/16/2010	6010B	<0.2	<0.2	<0.02	870	<0.06	<0.06	0.19	<0.05	**2.3**	790	<0.5	<0.05	19000	0.003	<0 .5
	8/2/2010	6010B	<0.4	<0.4	<0.04	NL	<0.12	<0.12	<0.2	<0.1	**3.4**	NL	<1.0	<0.1	NL	0.003	<1.0
	4/20/2010[2]	6010B	<0.1	<0.1	<0.01	880	<0.03	<0.03	<0.1	<0.025	**2.5**	640	<0.25	<0.025	15000	2.28E-03	<0.25

8.10.4 EVAPORATION PONDS (EP-1 thru EP-12B)

Dissolved Metals Analytical Result Summary

			Parameters														
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**NE**	**0.05**	**0.05**	**NE**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**0.05**	**NE**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**0.32**	**NE**	**0.078**	**0.071**	**NE**	**0.047**	**4.7**
SAMPLE ID	**DATE SAMPLED**	**METHOD**															
EP-8	11/1/2011	200.7/200.8	**0.05**	0.13	<0.01	300	<0.03	<0.03	<0.1	<0.025	**1.1**	680	0.03	<0.025	10000	<0.02	<0.05
	5/23/2011	200.7/200.8	**0.38**	0.25	<0.02	1000	<0.06	<0.06	<0.1	<0.05	**20**	4400	<0.5	<0.05	64000	<0.05	<0.1
	11/16/2010	6010B	<0.4	<0.4	<0.04	760	<0.12	<0.12	0.11	<0.1	**9.1**	2900	<1.0	<0.1	33000	0.003	1.0
	8/2/2010	6010B	**0.77**	<0.4	<0.04	NL	<0.12	<0.12	<0.2	<0.1	**22**	NL	<1.0	<0.1	NL	0.001	1.0
	4/20/2010[2]	6010B	<0.2	<0.2	<0.02	720	<0.06	<0.06	0.26	<0.05	**10**	2100	<0.05	<0.05	27000	1.66E-03	<0.5
EP-9[2]	11/1/2011	200.7/200.8	**0.089**	0.2	<0.01	1400	<0.03	<0.03	<0.1	<0.025	**1.3**	1300	**0.057**	<0.025	38000	<0.05	<0.05
	5/23/2011	200.7/200.8	**0.083**	0.21	<0.01	1300	<0.03	<0.03	<0.1	<0.025	**6.8**	1100	<0.25	<0.025	31000	<0.02	<0.05
	11/16/2010	6010B	<0.4	<0.4	<0.04	1400	<0.12	<0.12	<0.4	<0.1	**5.3**	1400	<1.0	<0.1	37000	0.003	<1.0
	4/20/2010[2]	6010B	<0.2	0.14	<0.01	860	<0.03	<0.03	0.17	<0.025	**2.6**	840	<0.25	<0.025	23000	2.21E-03	<0.25
EP-11[2]	11/1/2011	200.7/200.8	**0.008**	0.068	<0.002	230	<0.006	<0.006	0.89	<0.005	0.19	620	7.9E-03	<0.005	2600	<0.005	0.015
	5/23/2011	200.7/200.8	**0.055**	0.087	<0.01	520	<0.03	<0.03	0.066	<0.025	**0.89**	330	<0.25	<0.025	9700	<0.01	<0.05
	11/16/2010	6010B	<0.1	0.12	<0.01	410	<0.03	<0.03	0.48	<0.025	**0.64**	280	<0.25	<0.025	7400	0.002	<0.25
	4/20/2010[2]	6010B	<0.1	<0.1	<0.01	690	<0.03	<0.03	0.15	<0.025	**1.6**	360	<0.25	<0.025	9900	2.11E-03	<0.25
EP-12A[2]	11/1/2011	200.7/200.8	**7.2E-03**	0.058	<0.002	230	<0.006	<0.006	1.0	<0.005	0.13	630	5.9E-03	<0.005	2400	<0.005	0.022
	5/23/2011	200.7/200.8	**0.025**	0.063	<0.002	190	0.021	<0.006	0.098	<0.005	**0.31**	140	<0.05	<0.005	4200	<0.005	0.017
	11/16/2010	6010B	<0.1	<0.1	<0.01	320	<0.03	<0.03	0.4	<0.025	**0.27**	210	<0.25	<0.025	6200	0.002	<0.25
	4/20/2010[2]	6010B	<0.2	0.074	<0.002	370	<0.006	<0.006	0.55	<0.005	**0.28**	130	<0.05	<0.005	3600	1.66E-03	<0.05
EP-12B[2]	11/1/2011	200.7/200.8	**6.5E-03**	0.055	<0.002	220	<0.006	<0.006	0.98	<0.005	0.12	610	5.8E-03	<0.005	2300	<0.005	0.024
	5/23/2011	200.7/200.8	**0.015**	0.05	<0.002	150	0.022	<0.006	0.27	<0.005	**0.27**	140	<0.05	<0.005	3100	<0.005	0.019
	11/16/2010	6010B	<0.1	<0.1	<0.01	180	<0.03	<0.03	0.84	<0.025	0.15	110	<0.25	<0.025	3400	<0.001	<0.25
	4/20/2010[2]	6010B	<0.2	0.064	<0.002	330	<0.006	<0.006	**1.8**	<0.005	**0.35**	150	<0.05	<0.005	3100	2.97E-03	<0.05

DEFINITIONS

NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis

Bold and highlighted values represent values above the applicable standards

STANDARDS

WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Secondary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES:

2) Used the unapproved Facility Wide Ground Water Monitoring Plan (FWGWMP) sampling guidelines for the first quarter of 2010 which included the addition of evaporation ponds 9a, 11, 12A and 12B.

8.10.5 EVAPORATION PONDS (EP-1 thru EP-12B)

Volatile Organic Compound Analytical Result Summary

			Parameters										
			1,2,4-Trimethyl benzene (mg/L)	1,3,5-Trimethyl benzene (mg/L)	Naphthalene (mg/L)	Acetone (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	2-Butanone (mg/L)	Carbon disulfide (mg/L)	Chloroform (mg/L)	Chloromethane (mg/L)	n-Butyl benzene (mg/L)
WQCC 20NMAC 6.2.3103			**NE**	**NE**	**0.03**	**NE**	**NE**	**NE**	**NE**	**NE**	**0.01**	**NE**	**NE**
40 CFR 141.62 MCL (June 8, 2012)			**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
EPA RSL for Tap Water (April 2012)			**0.015**	**0.087**	**1.4E-04**	**12**	**9.7E-04**	**0.027**	**NE**	**0.72**	**1.9E-04**	**0.19**	**0.78**
SAMPLE ID	**DATE SAMPLED**	**METHOD**											
EP-1	11/1/2011	8260B	<0.01	<0.01	<0.02	1.4	<0.04	<0.04	0.18	<0.1	<0.01	<0.03	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.02	1.8	<0.04	<0.04	0.2	<0.1	<0.01	<0.03	<0.01
	8/2/2010	8260B	**0.016**	<0.005	**0.016**	0.73	**0.044**	**0.07**	0.086	<0.05	<0.005	<0.005	<0.005
	4/20/2010	8260B	5.5E-03	1.8E-03	**0.011**	1.7	**0.027**	**0.045**	0.1	<0.01	<0.01	<0.01	<0.01
	6/17/2009	8260B	**0.023**	7.4E-03	**0.012**	0.46	**0.054**	**0.054**	<0.05	<0.05	<0.005	<0.005	<0.005
	12/2/2008	8260B	**0.13**	0.046	**0.074**	1.0	**0.14**	**0.22**	0.094	<0.05	<0.005	<0.005	0.021
	9/9/2008	8260B	**0.027**	9.5E-03	**0.033**	1.6	**0.062**	**0.088**	0.15	0.039	<0.001	<0.001	8.7E-03
	6/17/2008	8260B	**0.017**	4.4E-03	**0.031**	1.6	**0.072**	**0.3**	0.19	0.011	<0.005	<0.005	5.5E-03
	3/11/2008	8260B	**0.038**	**0.11**	**0.2**	1.4	**0.28**	**0.39**	0.16	<0.05	<0.005	<0.005	0.046
EP-2	11/1/2011	8260B	<0.01	<0.01	<0.02	0.51	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	0.12	<0.01	<0.03	<0.01
	8/2/2010	8260B	<0.005	<0.0058	<0.01	0.27	<0.02	<0.02	<0.05	<0.05	<0.005	<0.005	<0.005
	4/20/2010	8260B	4.6E-03	1.4E-03	**0.01**	0.15	**0.032**	**0.052**	<0.01	0.021	<0.01	<0.01	<0.01
	6/17/2009	8260B	**0.026**	8.5E-03	**0.012**	0.56	**0.078**	**0.078**	0.05	0.057	<0.005	<0.005	5.4E-03
	12/2/2008	8260B	**0.028**	9.7E-03	**0.016**	0.65	**0.037**	**0.053**	0.072	0.026	<0.005	<0.005	4.1E-03
	9/9/2008	8260B	0.0064	2.1E-03	**6.4E-03**	0.36	**0.016**	0.023	0.035	0.025	<0.001	<0.001	2.5E-03
	6/17/2008	8260B	0.015	<0.01	**0.014**	0.64	**0.033**	**0.05**	0.08	<0.001	<0.001	<0.001	0.009
	3/11/2008	8260B	0.012	3.2E-03	**0.02**	1.7	**0.034**	**0.049**	0.12	0.018	<0.001	<0.001	1.4E-03
EP-3	11/1/2011	8260B	<0.01	<0.01	<0.02	0.11	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	5/23/2011	8206B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	0.13	<0.01	<0.03	<0.01
	8/2/2010	8260B	<0.005	<0.005	<0.1	0.22	<0.02	<0.02	<0.05	<0.05	<0.005	<0.005	<0.005
	4/20/2010	8260B	<0.001	<0.001	**2.3E-03**	0.21	**7.6E-03**	0.012	0.014	0.043	<0.001	<0.001	<0.001
	6/17/2009	8260B	1.8E-03	<0.01	<0.01	0.047	**6.3E-03**	0.0061	<0.01	<0.01	<0.001	<0.001	<0.001
	12/2/2008	8260B	**0.018**	6.5E-03	**0.011**	0.67	**0.024**	**0.035**	0.064	0.028	<0.001	<0.001	2.4E-03
	9/9/2008	8260B	<0.01	<0.01	<0.02	0.11	<0.04	<0.04	<1.0	<1.0	<0.1	<0.1	<0.1
	6/17/2008	8260B	0.002	<0.01	**0.003**	0.16	**0.015**	0.023	0.018	0.01	<0.1	<0.1	<0.1
	3/11/2008	8260B	0.0043	0.001	**8.7E-03**	0.92	**0.02**	**0.028**	0.064	0.045	<0.001	<0.001	<0.001
EP-4	11/1/2011	8260B	<0.01	<0.01	<0.02	0.11	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.02	0.12	<0.04	<0.04	<0.1	0.14	<0.01	<0.03	<0.01
	8/2/2010	8260B	<0.001	<0.001	<0.002	0.1	<0.004	<0.004	0.011	<0.01	<0.001	<0.001	<0.001
	4/20/2010	8260B	<0.001	<0.001	<0.002	0.19	**0.005**	7.3E-03	0.014	0.041	<0.001	<0.001	<0.001
	6/17/2009	8260B	<0.001	<0.001	<0.02	0.04	<0.04	<0.04	<0.01	<0.01	<0.001	<0.001	<0.001
	12/2/2008	8260B	0.013	4.8E-03	**7.5E-03**	0.6	**0.014**	0.021	0.043	0.034	<0.001	<0.001	2.3E-03
	9/9/2008	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	<0.1	<0.01	<0.01	<0.01
	6/17/2008	8260B	<0.01	<0.01	<0.02	0.059	<0.04	<0.04	<0.1	0.05	<0.01	<0.01	<0.01
	3/11/2008	8260B	2.8E-03	<0.01	**6.6E-03**	0.8	**0.015**	0.022	0.042	0.063	<0.001	<0.001	<0.001

8.10.5 EVAPORATION PONDS (EP-1 thru EP-12B)

Volatile Organic Compound Analytical Result Summary

			Parameters										
			1,2,4-Trimethyl benzene (mg/L)	1,3,5-Trimethyl benzene (mg/L)	Naphthalene (mg/L)	Acetone (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	2-Butanone (mg/L)	Carbon disulfide (mg/L)	Chloroform (mg/L)	Chloromethane (mg/L)	n-Butyl benzene (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	0.03	NE	NE	NE	NE	NE	0.01	NE	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.015	0.087	1.4E-04	12	9.7E-04	0.027	NE	0.72	1.9E-04	0.19	0.78
SAMPLE ID	DATE SAMPLED	METHOD											
EP-5	11/1/2011	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	0.15	<0.01	<0.03	<0.01
	8/2/2010	8260B	<0.001	<0.001	<0.002	0.045	<0.004	<0.004	<0.1	<0.1	<0.01	<0.01	<0.01
	4/20/2010	8260B	<0.001	<0.001	<0.002	0.13	<0.004	4.6E-03	0.011	0.047	<0.001	<0.001	<0.001
	6/17/2009	8260B	<0.001	<0.001	<0.02	0.031	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001
	12/2/2008	8260B	**0.048**	0.019	**2.5E-03**	0.2	**6.1E-03**	8.9E-03	0.016	0.015	<0.01	<0.01	1.1E-03
	9/9/2008	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	<0.1	<0.01	<0.01	<0.01
	6/17/2008	8260B	<0.01	<0.01	<0.02	0.046	<0.04	<0.04	<0.1	0.033	<0.01	<0.01	<0.01
	3/11/2008	8260B	1.5E-03	<0.001	**3.7E-03**	0.19	**0.011**	0.017	0.023	0.097	<0.01	<0.01	<0.01
EP-6	11/1/2011	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	8/2/2010	8260B	<0.001	<0.001	<0.002	0.02	<0.004	<0.004	<0.1	<0.1	<0.01	<0.01	<0.01
	4/20/2010	8260B	<0.001	<0.001	<0.002	0.044	<0.004	<0.004	<0.1	<0.1	<0.001	<0.001	<0.001
	6/17/2009	8260B	<0.001	<0.001	<0.002	<0.01	<0.004	<0.004	<0.1	<0.1	<0.001	<0.001	<0.001
	12/2/2008	8260B	0.001	<0.001	<0.002	<0.01	<0.04	<0.04	<0.1	<0.1	<0.01	<0.01	<0.01
	9/9/2008	8260B	<0.001	<0.001	<0.002	<0.1	<0.04	<0.04	<0.1	<0.1	<0.01	<0.01	<0.01
	6/17/2008	8260B	<0.001	<0.001	<0.002	<0.1	<0.04	<0.04	<0.1	<0.1	<0.01	<0.01	<0.01
	3/11/2008	8260B	0.002	<0.001	**0.004**	0.64	**0.015**	0.02	0.032	0.04	<0.01	<0.01	<0.01
EP-7	11/1/2011	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	8/2/2010	8260B	<0.001	<0.001	<0.002	0.061	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001
	4/20/2010	8260B	<0.001	<0.001	<0.002	0.023	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001
	6/17/2009	8260B	1.1E-03	<0.001	<0.02	0.034	<0.04	<0.04	<0.01	<0.01	<0.001	<0.001	<0.001
	12/2/2008	8260B	1.3E-03	<0.001	<0.02	0.017	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
	9/9/2008	8260B	<0.01	<0.01	<0.02	<0.02	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
	6/17/2008	8260B	1.2E-03	<0.001	<0.02	0.049	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
	3/11/2008	8260B	<0.001	<0.001	<0.02	0.034	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
EP-8	11/1/2011	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	<0.1	<0.1	<0.03	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	8/2/2010	8260B	<0.001	<0.001	<0.002	0.066	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001
	4/20/2010	8260B	<0.001	<0.001	<0.002	0.038	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001
	6/17/2009	8260B	<0.001	<0.001	<0.002	0.099	<0.004	<0.004	<0.01	<0.01	<0.001	1.4E-03	<0.001
	12/2/2008	8260B	<0.001	<0.001	<0.002	<0.1	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001
	9/9/2008	8260B	<0.001	<0.001	<0.002	<0.1	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001
	6/17/2008	8260B	1.1E-03	<0.001	<0.002	0.12	<0.004	<0.004	0.014	<0.01	1.4E-03	<0.001	<0.001
	3/11/2008	8260B	<0.001	<0.001	<0.002	0.024	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.001

8.10.5 EVAPORATION PONDS (EP-1 thru EP-12B)

Volatile Organic Compound Analytical Result Summary

			Parameters										
			1,2,4-Trimethyl benzene (mg/L)	1,3,5-Trimethyl benzene (mg/L)	Naphthalene (mg/L)	Acetone (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	2-Butanone (mg/L)	Carbon disulfide (mg/L)	Chloroform (mg/L)	Chloromethane (mg/L)	n-Butyl benzene (mg/L)
WQCC 20NMAC 6.2.3103			**NE**	**NE**	**0.03**	**NE**	**NE**	**NE**	**NE**	**NE**	**0.01**	**NE**	**NE**
40 CFR 141.62 MCL (June 8, 2012)			**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
EPA RSL for Tap Water (April 2012)			**0.015**	**0.087**	**1.4E-04**	**12**	**9.7E-04**	**0.027**	**NE**	**0.72**	**1.9E-04**	**0.19**	**0.78**
SAMPLE ID	**DATE SAMPLED**	**METHOD**											
EP-9[1]	11/1/2011	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	4/20/2010	8260B	<0.001	<0.001	<0.002	0.015	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001
EP-11[1]	11/1/2011	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.03	<0.1	<0.01	<0.03	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	4/20/2010	8260B	<0.001	<0.001	<0.002	0.039	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001
EP-12A[1]	11/1/2011	8260B	<0.01	<0.01	<0.02	0.16	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.02	<0.1	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	4/20/2011	8260B	<0.001	<0.001	<0.002	0.13	<0.004	<0.004	0.011	0.034	<0.001	<0.001	<0.001
EP-12B[1]	11/1/2011	8260B	<0.01	<0.01	<0.02	0.16	<0.04	<0.04	<0.1	<0.1	<0.01	<0.03	<0.01
	5/23/2011	8260B	<0.01	<0.01	<0.02	0.18	<0.04	<0.04	<0.1	0.17	<0.01	<0.03	<0.01
	4/20/2011	8260B	1.6E-03	<0.001	**3.4E-03**	0.3	**0.012**	0.019	0.025	0.035	<0.001	<0.001	<0.001

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis

Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table (Nov 2011)

NOTES:

1) Unapproved monitoring schedule was used at the beginning of 2010 which included the addition of evaporation ponds 9, 11, 12A and 12B.

11/16/10- EP-1 thru EP-12B - Method 8260B Short List analyticals run. No values entered for this date.

8.10.6 EVAPORATION PONDS (EP-1 thru EP-12B)
Semi Volatile Organic Compound Analytical Result Summary

			Parameters															
			Aniline (mg/L)	Benzoic acid (mg/L)	Benzyl alcohol (mg/L)	Bis(2-ethyl hexyl)phthalate (mg/L)	Carbazole (mg/L)	2,4-Dimethyl phenol (mg/L)	Fluorene (mg/L)	2-Methyl naphthalene (mg/L)	2-Methyl phenol (mg/L)	3+4-Methyl phenol (mg/L)	Naphthalene (mg/L)	2-Nitrophenol (mg/L)	Phenanthrene (mg/L)	Phenol (mg/L)	Pyrene (mg/L)	Pyridine (mg/L)
WQCC 20NMAC 6.2.3103			**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**0.03**	**NE**	**NE**	**0.005**	**NE**	**NE**
40 CFR 141.62 MCL (June 8, 2012)			**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
EPA RSL for Tap Water (April 2012)			**0.012**	**58**	**1.5**	**7.2E-05**	**NE**	**0.27**	**0.22**	**0.027**	**NE**	**NE**	**1.4E-04**	**NE**	**NE**	**4.5**	**0.087**	**0.015**
SAMPLE ID	**SAMPLE DATE**	**METHOD**																
EP-1	11/1/2011	8270C	**0.82**	<0.1	<0.05	<0.05	<0.05	**0.43**	<0.05	<0.05	2.5	5.0	<0.05	<0.05	<0.05	**9.7**	<0.5	<0.05
	5/23/2011	8270C	**0.42**	<0.1	<0.05	<0.05	<0.05	0.26	<0.05	<0.05	2.0	3.6	<0.05	<0.05	<0.05	**6.4**	<0.5	<0.05
	11/16/2010	8270C	**0.6**	<0.02	<0.01	<0.01	0.017	**0.36**	0.017	**0.18**	2.1	4.2	**0.025**	<0.1	0.11	**8.5**	0.012	<0.01
	4/20/2010[1]	8270C	<0.05	<0.1	<0.05	<0.05	<0.05	0.063	<0.05	**0.075**	<0.05	<0.05	<0.05	<0.05	0.11	**0.091**	<0.05	<0.05
EP-2	11/1/2011	8270C	**0.25**	<0.1	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	1.1	2.0	<0.05	,0.05	<0.05	**3.6**	<0.05	<0.05
	5/23/2011	8270C	**0.27**	<0.02	0.02	**0.013**	<0.01	0.18	<0.01	<0.01	1.2	2.5	<0.01	<0.01	<0.01	**2.7**	<0.01	<0.01
	11/16/2010	8270C	**0.48**	<0.02	0.011	<0.05	0.01	0.24	<0.05	**0.089**	1.5	2.1	**0.027**	<0.01	0.014	**3.3**	<0.01	0.011
	4/20/2010[1]	8270C	<0.05	0.16	<0.05	<0.05	<0.05	0.06	<0.05	**0.075**	0.88	1.4	<0.05	0.073	0.1	**2.8**	<0.05	<0.05
EP-3	11/1/2011	8270C	**0.21**	<0.1	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	1.1	1.5	<0.05	.<0.05	<0.5	**2.9**	<0.05	<0.05
	5/23/2011	8270C	**0.083**	<0.02	<0.01	<0.01	<0.01	0.092	<0.01	<0.01	0.63	1.6	<0.01	<0.01	<0.01	**1.6**	<0.01	<0.01
	11/16/2010	8270C	**0.26**	<0.02	<0.01	<0.01	<0.01	0.14	<0.05	0.026	0.91	1.9	<0.01	<0.01	<0.01	**2.4**	<0.01	<0.01
	4/20/2010[1]	8270C	**0.22**	<0.1	<0.05	<0.05	<0.05	0.094	<0.05	<0.05	0.77	1.2	<0.05	<0.05	<0.05	**2.8**	<0.05	<0.05
EP-4	11/1/2011	8270C	**0.067**	<0.1	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	0.64	0.84	<0.05	<0.05	<0.05	**1.1**	<0.05	<0.05
	5/23/2011	8270C	**0.22**	<0.02	<0.01	<0.01	<0.01	**0.28**	<0.01	<0.01	1.2	2.8	<0.01	<0.01	<0.01	**2.3**	<0.01	<0.01
	11/16/2010	8270C	**0.21**	<0.02	<0.01	**0.015**	<0.01	0.11	<0.05	<0.01	0.55	1.3	<0.01	<0.01	<0.01	**1.6**	<0.01	<0.01
	4/20/2010[1]	8270C	**0.18**	<0.1	<0.05	<0.05	<0.05	0.073	<0.05	<0.05	0.62	0.96	<0.05	<0.05	<0.05	**2.1**	<0.05	<0.05
EP-5	11/1/2011	8270C	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	0.089	<0.05	<0.05	<0.05	**0.052**	<0.05	<0.05
	5/23/2011	8270C	**0.11**	<0.02	<0.01	<0.01	<0.01	0.22	<0.01	<0.01	1.1	2.6	<0.01	<0.01	<0.01	**1.8**	<0.01	<0.01
	11/16/2010	8270C	**0.12**	<0.1	<0.05	<005	<0.05	0.09	<0.05	<0.05	0.6	1.1	<0.05	<0.05	<0.05	**1.2**	<0.05	<0.05
	4/20/2010[1]	8270C	**0.17**	<0.1	<0.05	<0.05	<0.05	0.074	<0.05	<0.05	0.64	1.0	<0.05	<0.05	<0.05	**2.2**	<0.05	<0.05
EP-6	11/1/2011	8270C	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	5/23/2011	8270C	**0.069**	<0.02	<0.01	**0.019**	<0.01	0.11	<0.01	<0.01	0.56	1.1	<0.01	<0.01	<0.01	**1.3**	<0.01	<0.01
	11/16/2010	8270C	<0.01	<0.02	<0.01	**0.011**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	**0.032**	<0.01	<0.01
	4/20/2010[1]	8270C	**0.081**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.3	0.44	<0.05	<0.05	<0.05	**0.38**	<0.05	<0.05
EP-7	11/1/2011	8270C	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.018	<0.01	<0.01	<0.01	**0.04**	<0.01	<0.01
	5/23/2011	8270C	<0.01	<0.02	<0.01	**0.019**	<0.01	<0.01	<0.01	<0.01	<0.01	0.045	<0.01	<0.01	<0.01	**0.17**	<0.01	<0.01
	11/16/2010	8270C	<0.01	<0.02	<0.01	**0.011**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	4/20/2010[1]	8270C	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
EP-8	11/1/2011	8270C	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	**9.7**	<0.01	<0.01
	5/23/2011	8270C	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	11/16/2010	8270C	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	4/20/2010[1]	8270C	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
EP-9	11/1/2011	8270C	<0.02	<0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	5/23/2011	8270C	<0.02	<0.04	<0.02	**0.022**	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	11/16/2010	8270C	<0.01	<0.02	<0.01	**0.013**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	4/20/2010[1]	8270C	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

8.10.6 EVAPORATION PONDS (EP-1 thru EP-12B)
Semi Volatile Organic Compound Analytical Result Summary

			Parameters															
			Aniline (mg/L)	Benzoic acid (mg/L)	Benzyl alcohol (mg/L)	Bis(2-ethyl hexyl)phthalate (mg/L)	Carbazole (mg/L)	2,4-Dimethyl phenol (mg/L)	Fluorene (mg/L)	2-Methyl naphthalene (mg/L)	2-Methyl phenol (mg/L)	3+4-Methyl phenol (mg/L)	Naphthalene (mg/L)	2-Nitrophenol (mg/L)	Phenanthrene (mg/L)	Phenol (mg/L)	Pyrene (mg/L)	Pyridine (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	0.03	NE	NE	0.005	NE	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.012	58	1.5	7.2E-05	NE	0.27	0.22	0.027	NE	NE	1.4E-04	NE	NE	4.5	0.087	0.015
SAMPLE ID	SAMPLE DATE	METHOD																
EP-11	11/1/2011	8270C	**0.067**	<0.1	<0.05	<0.05	<0.05	0.055	<0.05	<0.05	0.46	0.75	<0.05	<0.05	<0.05	**1.3**	<0.05	<0.05
	5/23/2011	8270C	<0.01	<0.02	<0.01	**0.017**	<0.01	0.065	<0.01	<0.01	0.42	1.1	<0.01	<0.01	<0.01	**2.1**	<0.01	<0.01
	11/16/2010	8270C	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	4/20/2010[1]	8270C	<0.01	<0.02	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05
EP-12A	11/1/2011	8270C	**0.16**	<0.1	<0.05	<0.05	<0.05	0.15	<0.05	<0.05	0.94	1.3	<0.05	<0.05	<0.05	**2.7**	<0.05	<0.05
	5/23/2011	8270C	**0.14**	<0.02	<0.01	<0.01	<0.01	0.19	<0.01	<0.01	1.2	2.7	<0.01	<0.01	<0.01	**3.6**	<0.01	<0.01
	11/16/2010	8270C	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	4/20/2010[1]	8270C	**0.067**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	0.17	<0.05	<0.05	<0.05	**0.016**	<0.05	<0.05
EP-12B	11/1/2010	8270C	**0.023**	<0.02	<0.01	<0.01	<0.01	0.021	<0.01	<0.01	0.13	0.19	<0.01	<0.01	<0.01	**0.34**	<0.01	<0.01
	5/23/2011	8270C	**0.15**	<0.02	<0.01	<0.01	<0.01	0.19	<0.01	<0.01	1.1	2.1	<0.01	<0.01	<0.01	**2.1**	<0.01	<0.01
	11/16/2010	8270C	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.066	0.078	<0.01	<0.01	<0.01	**0.2**	<0.01	<0.01
	4/20/2010[1]	8270C	<0.05	<0.1	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	0.92	1.2	<0.05	<0.05	<0.05	**2.7**	<0.05	<0.05

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detectio Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) Used the unapproved Facility Wide Ground Water Monitoring Plan (FWGWMP) sampling guidelines for the first quarter of 2010 which included the addition of evaporation ponds 9a, 11, 12A and 12B.

8.11 BW-1C, BW-2A, BW-2B, BW-2C, BW-3B, BW-3C
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			**0.01**	**0.75**	**0.75**	**0.62**	**NE**
40 CFR 141.62 MCL (June 8, 2012)			**0.005**	**1**	**0.7**	**10**	**NE**
EPA RSL for Tap Water (April 2012)			**3.9E-04**	**0.86**	**1.3E-03**	**0.19**	**0.012**
WELL ID	**DATE SAMPLED**	**METHOD**					
BW-1C	10/28/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/20/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/6/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/31/2008	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	12/31/2007	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	10/27/2006	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
BW-2A	10/28/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/20/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/6/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/30/2008	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	12/31/2007	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	10/27/2006	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
BW-2B	10/28/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/20/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/6/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/30/2008	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	12/31/2007	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	10/27/2006	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
BW-2C	10/28/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/20/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/6/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/30/2008	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	12/31/2007	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	10/27/2006	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
BW-3B	10/28/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/20/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/6/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/31/2008	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	12/31/2007	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	10/27/2006	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
BW-3C	10/28/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/20/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/6/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	8/1/2008	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	12/31/2007	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	10/27/2006	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.11.1 BW-1C, BW-2A, BW-2B, BW-2C, BW-3B, BW-3C
General Chemistry Analytical Result Summary

			Parameters								
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6 to 9	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1.0	10	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE
Well ID	DATE SAMPLED	METHOD									
BW-1C	10/28/2011	300.0	**2.6**	33	<0.1	**1.7**	1.7	<0.5	260	NA	NA
	7/20/2010	300.0	**2.7**	37	0.11	<1.0	<1.0	<0.5	290	8.66	1400
	8/3/2009	300.0	**2.5**	42	0.12	<0.1	<0.1	<0.5	280	8.65	1300
	7/31/2008	300.0	**2.4**	35	<0.1	<1.0	<1.0	<0.5	260	8.68	1400
	12/31/2007	300.0	**2.6**	35	NL	<1.0	<1.0	<0.5	270	8.5	1400
	10/27/2006	300.0	**2.7**	36	NL	<0.5	<0.5	<0.5	NL	8.39	1400
BW-2A	10/28/2011	300.0	**1.1**	37	0.36	<1.0	<1.0	**0.58**	7.0	NA	NA
	7/20/2010	300.0	**1.2**	42	0.43	<1.0	<1.0	**0.68**	7.1	8.09	1300
	8/3/2009	300.0	**1.2**	45	0.42	<0.1	<0.1	**1**	7.2	8.13	1300
	7/30/2008	300.0	**1.1**	40	0.43	<1.0	<1.0	**0.75**	7.3	7.87	1400
	12/31/2007	300.0	**1.3**	42	NL	<1.0	<1.0	**0.7**	7.7	7.76	1400
	10/27/2006	300.0	**1.3**	NL	NL	<0.5	<0.5	**0.64**	7.5	8.27	1400
BW-2B	10/28/2011	300.0	**1.6**	27	0.75	<1.0	<1.0	<0.5	140	NA	NA
	7/20/2010	300.0	**1.8**	32	0.82	<1.0	<1.0	<0.5	160	8.17	2200
	8/3/2009	300.0	**1.7**	36	0.86	<0.1	<0.1	<0.5	160	8.07	2200
	7/30/2008	300.0	**1.6**	30	1.1	<1.0	<1.0	<0.5	150	7.76	2200
	12/31/2007	300.0	**1.8**	30	NL	<1.0	<1.0	<0.5	150	7.77	2400
	10/27/2006	300.0	**1.9**	31	NL	<0.5	<0.5	<0.5	140	8.1	1400
BW-2C	10/28/2011	300.0	**2**	43	<0.1	<1.0	<1.0	<0.5	280	NA	NA
	7/20/2010	300.0	**2.1**	62	0.12	<1.0	<1.0	<0.5	310	8.73	1400
	8/3/2009	300.0	**1.9**	52	0.14	<0.1	0.13	<0.5	280	8.88	1300
	7/30/2008	300.0	**1.9**	44	0.14	<1.0	<1.0	<0.5	270	8.83	1400
	12/31/2007	300.0	**2.3**	45	NL	<1.0	<1.0	<0.5	290	8.73	1400
	10/27/2006	300.0	**2.4**	42	NL	<0.5	<0.5	<0.5	270	8.52	1300
BW-3B	10/28/2011	300.0	**1.3**	28	0.31	<1.0	<1.0	**0.84**	48	NA	NA
	7/20/2010	300.0	**1.4**	33	0.42	<0.01	<0.01	**1.1**	54	8.37	1500
	8/3/2009	300.0	**1.5**	41	0.45	<0.1	0.27	**1.4**	69	8.23	1500
	7/31/2008	300.0	**1.4**	34	0.42	<1.0	<1.0	**1.1**	55	7.95	1500
	12/31/2007	300.0	**1.6**	35	NL	<1.0	<1.0	**1.1**	51	7.93	1600

8.11.1 BW-1C, BW-2A, BW-2B, BW-2C, BW-3B, BW-3C
General Chemistry Analytical Result Summary

			Parameters								
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6 to 9	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1.0	10	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE
Well ID	**DATE SAMPLED**	**METHOD**									
BW-3B	10/27/2006	300.0	**1.7**	33	NL	<0.5	<0.5	**1.1**	250	8.5	1600
BW-3C	10/28/2011	300.0	**1.4**	35	<0.1	<1.0	<1.0	<0.5	320	NA	NA
	7/20/2010	300.0	**1.4**	41	0.12	<0.1	0.12	<0.5	380	8.57	1500
	8/3/2009	300.0	**1.4**	43	0.14	<0.1	0.21	<0.5	320	8.65	1500
	8/1/2008	300.0	**1.5**	34	<1.0	<2.0	<2.0	<5.0	240	8.63	1500
	12/31/2007	300.0	**1.8**	38	NL	<1.0	<1.0	<0.5	300	8.59	1500
	10/27/2006	300.0	**1.9**	37	NL	<0.5	<0.5	<0.5	280	8.39	1400

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.11.2 BW-1C, BW-2A, BW-2B, BW-2C, BW-3B, BW-3C
Total Metals Analytical Result Summary

			Parameters															
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**0.05**	**NE**	**0.002**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**0.05**	**NE**	**0.002**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**0.078**	**NE**	**6.3E-04**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**																
BW-1C	10/28/2011	200.7/200.8	<0.0025	0.018	<0.002	NL	0.031	<0.006	0.1	<0.005	NL	7.7E-03	NL	<0.0025	NL	<0.0002	4.3E-03	<0.01
	7/20/2010	6010B	<0.02	<0.02	<0.002	NL	<0.006	<0.006	<0.05	<0.005	NL	8.3E-03	NL	<0.05	NL	<0.0002	0.003	<0.02
	7/6/2009	6010B	<0.02	<0.02	<0.002	NL	<0.006	<0.006	<0.05	<0.005	<1.0	2.7E-03	<1.0	<0.05	NL	<0.0002	0.002	<0.05
	7/31/2008	6010B	<0.02	0.016	<0.002	NL	<0.006	<0.006	<0.05	<0.005	0.62	0.013	<1.0	<0.05	310	<0.0002	1.15E-03	<0.02
	12/31/2007	6010B	<0.02	0.023	<0.002	3.6	<0.006	<0.006	<0.05	<0.005	0.74	0.01	<1.0	<0.05	360	<0.0002	<0.1	<0.02
	10/28/2006	6010B	<0.02	<0.2	<0.002	3.4	<0.006	<0.006	<0.05	<0.005	<1.0	NL	<1.0	<0.05	NL	<0.0002	<0.1	<0.02
BW-2A	10/28/2011	200.7/200.8	**7.2E-03**	0.16	<0.002	NL	<0.006	<0.006	0.87	<0.005	NL	0.19	NL	<0.0025	NL	<0.0002	<0.0025	<0.01
	7/20/2010	6010B	<0.02	0.13	<0.002	NL	<0.006	<0.006	0.36	<0.005	NL	0.12	NL	<0.05	NL	<0.0002	<0.001	<0.02
	7/6/2009	6010B	<0.02	0.15	<0.002	NL	<0.006	<0.006	0.5	<0.005	3.4	0.15	<1.0	<0.05	NL	<0.0002	<0.001	<0.05
	7/30/2008	6010B	<0.02	0.14	<0.002	8.6	<0.006	<0.006	0.37	<0.005	3.2	0.14	<1.0	<0.05	320	<0.0002	<0.001	<0.02
	12/31/2007	6010B	<0.02	0.18	<0.002	11	<0.006	<0.006	0.7	<0.005	3.9	**0.22**	<1.0	<0.05	380	<0.0002	<0.1	<0.02
	10/28/2006	6010B	<0.02	0.15	<0.002	10	<0.006	<0.006	<0.05	<0.005	NL	NL	<1.0	<0.05	NL	<0.0002	<0.1	<0.02
BW-2B	10/28/2011	200.7/200.8	<0.0025	0.056	<0.002	NL	<0.006	<0.006	0.57	<0.005	NL	**0.26**	NL	<0.0025	NL	<0.0002	0.015	<0.01
	7/20/2010	6010B	<0.02	0.047	<0.002	NL	<0.006	<0.006	0.16	<0.005	NL	**0.22**	NL	<0.05	NL	<0.0002	0.012	<0.02
	7/6/2009	6010B	<0.02	0.099	<0.002	NL	<0.006	<0.006	**1.8**	<0.005	4.1	**0.47**	1.8	<0.05	NL	<0.0002	0.013	<0.02
	7/31/2008	6010B	<0.02	0.041	<0.002	13	<0.006	<0.006	0.064	<0.005	3.0	0.16	<1.0	<0.05	570	<0.0002	1.15E-02	<0.02
	12/31/2007	6010B	<0.02	0.07	<0.002	16	<0.006	<0.006	0.62	<0.005	3.6	**0.29**	1.6	<0.05	640	<0.0002	<0.1	<0.02
BW-2C	10/28/2011	200.7/200.8	<0.0025	0.021	<0.002	NL	8.5E-03	<0.006	0.28	<0.005	NL	0.023	NL	<0.0025	NL	<0.0002	4.3E-03	<0.01
	7/20/2010	6010B	<0.02	0.024	<0.002	NL	0.017	<0.006	0.74	<0.005	NL	0.033	NL	<0.05	NL	<0.0002	0.006	<0.02
	7/6/2009	6010B	<0.02	0.078	<0.002	NL	<0.006	<0.006	0.85	<0.005	1.5	**0.2**	1.1	<0.05	NL	<0.0002	0.005	<0.05
	7/30/2008	6010B	<0.02	0.13	<0.002	24	<0.006	<0.006	**1.3**	<0.005	2.0	**0.43**	1.1	<0.05	300	<0.0002	7.26E-03	<0.02
	12/31/2007	6010B	<0.02	0.026	<0.002	2.9	<0.006	<0.006	0.16	<0.005	0.68	0.024	<1.0	<0.05	340	<0.0002	<0.1	<0.02
	10/28/2006	6010B	<0.02	0.031	<0.002	5.6	<0.006	<0.006	<0.05	<0.005	<1.0	NL	<1.0	<0.05	NL	<0.0002	<0.1	<0.02
BW-3B	10/28/2011	200.7/200.8	**4.9E-03**	0.093	<0.002	NL	7.5E-03	<0.006	0.82	<0.005	NL	0.086	NL	<0.0025	NL	<0.0002	<0.0025	<0.01
	7/20/2010	6010B	<0.02	0.079	<0.002	NL	<0.006	<0.006	0.45	<0.005	NL	0.074	NL	<0.05	NL	<0.0002	<0.001	<0.02
	7/6/2009	6010B	<0.02	0.098	<0.002	NL	<0.006	<0.006	0.62	<0.005	2.6	0.11	<1.0	<0.05	NL	<0.0002	<0.001	<0.05
	7/31/2008	6010B	<0.02	0.11	<0.002	8.3	<0.006	<0.006	0.43	<0.005	2.6	0.12	<1.0	<0.05	370	<0.0002	<0.001	<0.02
	12/31/2007	6010B	<0.02	0.099	<0.002	9.0	<0.006	<0.006	0.64	<0.005	2.9	0.13	<1.0	<0.05	430	<0.0002	<0.1	<0.02
	10/28/2006	6010B	<0.02	0.11	<0.002	9.0	<0.006	<0.006	<0.05	<0.005	NL	NL	<1.0	<0.05	NL	<0.0002	<0.1	<0.02
BW-3C	10/28/2011	200.7/200.8	<0.0025	0.036	<0.002	NL	0.007	<0.006	0.16	<0.005	NL	0.018	NL	<0.0025	NL	<0.0002	<0.0025	<0.01
	7/20/2010	6010B	<0.02	0.042	<0.002	NL	6.8E-03	<0.006	0.83	<0.005	NL	0.021	NL	<0.05	NL	<0.0002	<0.001	<0.02
	7/6/2009	6010B	<0.02	0.054	<0.002	NL	<0.006	<0.006	0.19	<0.005	<1.0	0.02	<1.0	<0.05	NL	<0.0002	0.001	<0.02
	8/1/2008	6010B	<0.02	0.27	<0.002	28	7.8E-03	<0.006	**3.0**	<0.005	2.2	**0.41**	1.6	<0.05	350	<0.0002	2.51E-03	0.032
	12/31/2007	6010B	<0.02	0.068	<0.002	4.2	<0.006	<0.006	0.14	<0.005	0.81	0.015	1.1	<0.05	360	<0.0002	<0.1	<0.02
	10/28/2006	6010B	<0.02	0.059	<0.002	6.0	<0.006	<0.006	<0.05	<0.005	NL	NL	<1.0	<0.05	NL	<0.0002	<0.1	<0.02

8.11.2 BW-1C, BW-2A, BW-2B, BW-2C, BW-3B, BW-3C

Total Metals Analytical Result Summary

			Parameters															
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**0.05**	**NE**	**0.002**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**0.05**	**NE**	**0.002**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**0.078**	**NE**	**6.3E-04**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**																

DEFINITIONS

NE = Not established

NA = Not analyzed

NL = Not listed on laboratory analysis

Bold and highlighted values represent values above the applicable standards

STANDARDS

WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.

a) Human Health Standards; b) Other standards for Domestic Water

40 CFR 141.62 Detection Limits for Inorganic Contaminants

1) National Primary Drinking Water Regulation (May 2009); Action Level

EPA Regional Screening Level (RSL) Summary Table

NOTES:

8.11.3 BW-1C, BW-2A, BW-2B, BW-2C, BW-3B, BW-3C
Dissolved Metals Analytical Result Summary

			Parameters														
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**0.05**	**NE**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**0.05**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.50E-05**	**2.9**	**6.90E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**0.078**	**NE**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**															
BW-1C	10/28/2011	200.7/200.8	<0.001	0.016	<0.002	3.2	<0.006	<0.006	<0.02	<0.005	<1.0	<0.002	<1.0	<0.001	330	4.3E-03	0.026
	7/20/2010	6010B	<0.02	<0.02	<0.002	3.2	<0.006	<0.006	<0.02	<0.005	<1.0	9.4E-03	<1.0	<0.05	310	0.003	<0.05
	7/6/2009[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/1/2008[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/31/2007[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/28/2006[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BW-2A	10/28/2011	200.7/200.8	**6.5E-03**	0.13	<0.002	9.1	<0.006	<0.006	0.28	<0.005	3.3	0.12	<1.0	<0.001	350	<0.001	0.021
	7/20/2010	6010B	<0.02	0.14	<0.002	9.6	<0.006	<0.006	0.29	<0.005	3.5	0.14	<1.0	<0.05	340	<0.001	<0.05
	7/6/2009[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/1/2008[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/31/2007[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/28/2006[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BW-2B	10/28/2011	200.7/200.8	<0.001	0.051	<0.002	13	<0.006	<0.006	0.26	<0.005	3.1	0.25	1.3	1.3E-03	570	0.016	0.026
	7/20/2010	6010B	<0.02	0.047	<0.002	14	<0.006	<0.006	0.14	<0.005	3.1	0.22	1.23	1.2	580	0.012	<0.05
	7/6/2009[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/1/2008[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/31/2007[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/28/2006[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BW-2C	10/28/2011	200.7/200.8	<0.001	0.015	<0.002	2.2	<0.006	<0.006	<0.02	<0.005	1.0	<0.002	<1.0	<0.001	320	4.4E-03	0.015
	7/20/2010	6010B	<0.02	<0.02	<0.002	4.9	<0.006	<0.006	0.028	<0.005	1.3	4.5E-03	<1.0	<0.05	330	0.006	<0.05
	7/6/2009[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/1/2008[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/31/2007[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/28/2006[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BW-3B	10/28/2011	200.7/200.8	**4.9E-03**	0.11	<0.002	8.4	<0.006	<0.006	0.97	<0.005	3.0	0.12	<1.0	<0.001	400	<0.001	0.035
	7/20/2010	6010B	<0.02	0.076	<0.002	8.5	<0.006	<0.006	0.21	<0.005	2.6	0.083	<1.0	<0.05	390	<0.001	0.054
	7/6/2009[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/1/2008[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/31/2007[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/28/2006[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

8.11.3 BW-1C, BW-2A, BW-2B, BW-2C, BW-3B, BW-3C
Dissolved Metals Analytical Result Summary

			Parameters														
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**0.05**	**NE**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**0.05**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.50E-05**	**2.9**	**6.90E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**0.078**	**NE**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**															
BW-3C	10/28/2011	200.7/200.8	**1.7E-03**	0.034	<0.002	3.8	<0.006	<0.006	<0.02	<0.005	<1.0	0.014	<1.0	<0.001	380	1.3E-03	0.066
	7/20/2010	6010B	<0.02	0.035	<0.002	3.8	<0.006	<0.006	0.073	<0.005	<1.0	0.013	<1.0	<0.05	370	0.001	<0.05
	7/6/2009[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/1/2008[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/31/2007[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/28/2006[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

DEFINITIONS
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NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1. National Secondary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) Analysis 6010B run as Total Recoverable Metals only.

8.11.4 BW-3B, BW-3C

Semi Volatile Organic Compound Analytical Result Summary

			Parameters
			Bis(2-ethylhexyl)phthalate (mg/L)
WQCC 20NMAC 6.2.3103			NE
40 CFR 141.62 MCL (June 8, 2012)			NE
EPA RSL for Tap Water (April 2012)			7.1E-05
Well ID	**DATE SAMPLED**	**METHOD**	
BW-3B	10/28/2011	8270C	<0.01
	7/20/2010	8270C/8260	<0.01
	7/6/2009	8270C/8260	**0.01**
BW-3C	10/28/2011	8270C	**0.014**

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STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.12 EP-2 INLET
BTEX, DRO/GRO, TDS Analytical Result Summary

			Parameters							
			Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	DRO (mg/L)	GRO (mg/L)	TDS (mg/L)
WQCC 20NMAC 6.2.3103 (mg/L)			**0.01**	**0.75**	**0.75**	**0.62**	**NE**	**0.2[1]**	**NE**	**1000**
40 CFR 141.62 MCL (June 8, 2012)			**0.005**	**1.0**	**0.7**	**10**	**NE**	**NE**	**NE**	**NE**
EPA RSL for Tap Water (April 2012)			**3.9E-04**	**0.86**	**1.3E-03**	**0.19**	**0.012**	**NE**	**NE**	**NE**
SAMPLE ID	**DATE SAMPLED**	**METHOD**								
EP-2 Inlet	10/31/2011	8260B/8015B	<0.005	6.3E-03	<0.005	<0.0075	<0.005	**39**	1.7	**6730**
	7/21/2010	8260B/8015B	<0.005	<0.005	<0.005	<0.0075	<0.005	**21**	0.83	**4120**
	6/17/2009	8260B/8015B	3.9E-03	0.02	**4.2E-03**	0.037	<0.001	**23**	2.0	**2600**
	8/21/2008	8260B/8015B	<0.01	0.026	**0.014**	0.1	<0.01	**290**	10	**2000**
	1/1/2008[2]	8260B/8015B	**0.13**	0.26	**0.044**	**0.26**	5.2E-03	**150**	2.6	**2200**

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STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
1) NMED Table 2a. TPH Screening Guidelines for Potable Ground Water (GW-1). (Oct 2006)
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) Due to inclement weather in December 2007, samples were collected in January 2008.

8.12.1 EP-2 INLET
BOD/COD Analytical Result Summary

			Parameters	
			BOD (mg/L)	COD (mg/L)
20NMAC 6.2.2101			<30	<125
SAMPLE ID	DATE SAMPLED	METHOD		
EP-2 Inlet	10/31/2011	SM5210B/5220C	**410**	**1520**
	7/21/2010	SM5210B/5220C	**1400**	**3200**
	6/18/2009	SM5210B/5220C	**191**	**1149**
	8/22/2008	SM5210B/5220C	**348**	**1540**
	3/26/2008	SM5210B/5220C	**649**	**1430**
	3/20/2008	SM5210B/5220C	**344**	**829**
	3/11/2008	SM5210B/5220C	**651**	**1150**
	3/6/2008	SM5210B/5220C	**947**	**1520**
	2/28/2008	SM5210B/5220C	**46.1**	**2440**
	2/21/2008	SM5210B/5220C	**>394**	**1950**
	2/14/2008	SM5210B/5220C	**570**	**2290**
	2/7/2008	SM5210B/5220C	**671**	**2570**
	1/31/2008	SM5210B/5220C	**414**	**1290**
	1/25/2008	SM5210B/5220C	**520**	**1200**
	1/18/2008	SM5210B/5220C	**462**	**1460**
	1/11/2008	SM5210B/5220C	**449**	**1350**

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STANDARDS
20 NMAC 6.2.2101 - General Requirements

NOTES:

8.12.2 EP-2 INLET

Volatile Organic Compound Analytical Result Summary

			Parameters												
			1,2,4-Trimethyl benzene (mg/L)	1,3,5-Trimethyl benzene (mg/L)	Naphthalene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	Acetone (mg/L)	2-Butanone (mg/L)	Carbon Disulfide (mg/L)	Isopropyl benzene (mg/L)	4-Isopropyl toluene (mg/L)	n-Butyl benzene (mg/L)	n-Propyl benzene (mg/L)	sec-Butyl benzene (mg/L)
WQCC 20NMAC 6.2.3103 (mg/L)			NE	NE	0.03	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
40 CFR 141.62 MCL (June 8,2012)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (Apr 2012)			0.015	0.087	1.4E-04	9.7E-04	0.027	12	NE	0.72	NE	NE	0.78	NE	NE
SAMPLE ID	**DATE SAMPLED**	**METHOD**													
EP-2 Inlet	10/31/2011	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	0.86	0.14	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	7/21/2010	8260B	<0.005	<0.005	<0.01	<0.02	<0.02	0.49	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	6/17/2009	8260B	**0.025**	8.2E-03	**0.011**	**0.057**	0.061	0.5	0.046	0.011	<0.001	<0.001	4.4E-03	1.8E-03	<0.001
	8/21/2008	8260B	**0.11**	0.035	**0.02**	**0.3**	**0.34**	1.2	0.14	<.1	<0.01	<0.01	0.029	0.013	<0.001
	1/1/2008[1]	8260B	**0.17**	0.047	**0.25**	**0.46**	**0.75**	<0.05	<0.05	0.14	6.3E-03	0.007	0.044	0.019	7.1E-03

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STANDARDS

WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS concentration or less.

a) Human Health Standards; b) Other Standards for Domestic Water

40 CFR 141.62 Detection Limits for Inorganic Contaminants

EPA Regional Screening Level (RSL) Summary Table (Nov 2011)

NOTES

1) Due to inclement weather in December 2007, samples were taken in January 2008.

8.13 MW-1, MW-2, MW-4, MW-5
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
WELL ID	DATE SAMPLED	METHOD					
MW-1	10/6/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/16/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/16/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	8/4/2008	8260B	<0.005	<0.001	<0.001	<0.0015	NA
	12/29/2007	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	10/26/2006	8260B	<0.001	<0.001	<0.001	<0.0015	<0.0015
MW-2	10/10/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/16/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
MW-4	10/12/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/19/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/8/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	8/5/2008	8260B	<0.005	<0.001	<0.001	<0.0015	NA
	12/29/2007	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	10/12/2005	8260B	<0.001	<0.001	<0.001	<0.0015	<0.0015
MW-5	10/10/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/19/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/15/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	8/13/2008	8260B	<0.005	<0.001	<0.001	<0.0015	NA
	12/29/2007	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	10/12/2005	8260B	<0.001	<0.001	<0.001	<0.0015	<0.0015

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STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Sandards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.13.1 MW-1, MW-2, MW-4, MW-5
General Chemistry Analytical Result Summary

			Parameters								
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6 to 9	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE
Well ID	**DATE SAMPLED**	**METHOD**									
MW-1	10/6/2011	300.0	**0.64**	47	0.11	**27**	**27**	<0.5	160	NA	NA
	7/16/2010	300.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/16/2009	300.0	**0.76**	53	NL	<1.0	<1.0	<0.5	160	**9.02**	1100
	7/10/2008	300.0	**81**	51	NL	<1.0	<1.0	<0.5	160	8.95	1100
	12/29/2007	300.0	**0.89**	53	NL	<1.0	<1.0	<0.5	170	8.89	1100
	5/24/2007	300.0	**0.69**	53	NL	<1.0	<1.0	<0.5	170	8.89	1100
	10/26/2006	300.0	**0.84**	46	NL	<1.0	<1.0	<0.5	150	8.98	NL
MW-2	10/10/2011	300.0	**0.79**	52	0.12	<1.0	<1.0	<0.5	160	NA	NA
	7/16/2009	300.0	**0.82**	60	NL	<1.0	<1.0	<0.5	170	**9.0**	1100
MW-4	10/12/2011	300.0	0.35	18	0.12	**6.8**	6.8	<0.5	150	NA	NA
	7/19/2010	300.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/8/2009	300.0	0.37	16	NL	<1.0	<1.0	<0.5	160	8.74	1200
	8/5/2008	300.0	0.37	17	NL	<1.0	<1.0	<0.5	160	8.63	1200
	12/29/2007	300.0	0.42	17	NL	<1.0	<1.0	<0.5	160	8.63	1200
MW-5	10/10/2011	300.0	**0.79**	59	0.11	<1.0	<1.0	<0.5	170	NA	NA
	7/19/2010	300.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/15/2009	300.0	**0.76**	66	NL	<1.0	<1.0	<0.5	180	8.96	1100
	8/13/2008	300.0	**0.85**	63	0.15	<1.0	<1.0	<0.5	180	**9.02**	1200
	12/29/2007	300.0	**0.91**	65	NL	<1.0	<1.0	<0.5	180	8.93	1200

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NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

8.13.1 MW-1, MW-2, MW-4, MW-5
General Chemistry Analytical Result Summary

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
1) NMED Table 2a. TPH Screening Guidelines for Potable Ground Water (GW-1). (Oct 2006)
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES:

8.13.2 MW-1, MW-2, MW-4, MW-5
DRO/GRO Analytical Result Summary

			Parameters	
			DRO (mg/L)	GRO (mg/L)
WQCC 20NMAC 6.2.3103 (Oct 2006)			0.2[1]	NE
Well ID	DATE SAMPLED	METHOD		
MW-1	10/6/2011	8015B	<1.0	<0.05
	7/16/2010	8015B	<1.0	<0.05
	3/1/2010[3]	8015B	<1.0	<0.05
	7/16/2009	8015B	<1.0	<0.05
	8/4/2008	8015B	<1.0	<0.05
	12/29/2007	8015B	<1.0	<0.05
	10/26/2006	8015B	<1.0	<0.05
MW-2	10/10/2010	8015B	<1.0	<0.05
	3/1/2010[3]	8015B	<1.0	<0.05
MW-4	10/12/2011	8015B	<1.0	<0.05
	7/19/2010	8015B	<1.0	<0.05
	3/1/2010[2]	8015B	<1.0	<0.05
	7/8/2009	8015B	<1.0	<0.05
	8/5/2008	8015B	<1.0	<0.05
	12/29/2007	8015B	<1.0	<0.05
	2006[2]	8015B	NA	NA
MW-5	10/10/2010	8015B	<1.0	<0.05
	7/19/2010	8015B	<1.0	<0.05
	3/1/2010[2]	8015B	<1.0	<0.05
	7/15/2009	8015B	<1.0	<0.05
	8/13/2008	8015B	<1.0	<0.05
	12/29/2007	8015B	<1.0	<0.05
	2006[2]	8015B	NA	NA

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
1) NMED Table 2a. TPH Screening Guidelines for Potable Ground Water (GW-1). (Oct 2006)
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) Wells MW-4, MW-5, SMW-2 and SMW-4 were not sampled in 2006. Analyses for metals were not conducted in 2006.
3) This was part of the 10 year RCRA Post Closure Sampling Event

8.13.3 MW-1, MW-2, MW-4, MW-5
Total Metals Analytical Result Summary

			Parameters												
			Arsenic (mg/L)	Barium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Sodium (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Selenium (mg/L)	Cyanide (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**NE**	**0.05**	**NE**	**1.0**	**0.05**	**0.2**	**0.05**	**0.2**	**0.002**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**NE**	**0.1**	**NE**	**NE**	**0.015[1]**	**NE**	**0.05**	**0.2**	**0.002**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**NE**	**NE**	**NE**	**11**	**NE**	**0.32**	**0.078**	**9.3E-03**	**6.3E-04**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**													
MW-1	10/6/2011	200.7	<0.0025	0.012	NL	<0.006	260	0.12	<0.005	0.01	<0.0025	NL	<0.0002	0.011	<0.01
	7/16/2010	6010B	**1.46E-03**	<0.02	NL	<0.006	NL	NL	<0.005	NL	<0.001	<0.01	<0.0002	NL	<002
	3/1/10[3]	6010B	<0.005	<0.02	NL	<0.006	NL	NL	<0.005	NL	<0.005	<0.01	<0.0002	NL	<0.02
	7/16/2009	6010B	**1.24E-03**	0.015	2.1	<0.006	250	NL	<0.005	NL	<0.001	<0.01	<0.0002	NL	<0.02
	8/4/2008	6010B	<0.02	<0.02	NL	<0.006	NL	NL	<0.005	NL	<0.05	<0.01	<0.0002	NL	NL
	12/29/2007	6010B	**0.02**	<0.02	3.2	<0.006	280	0.092	<0.005	0.018	<0.05	<0.01	<0.0002	<0.1	<0.05
	10/26/2006	6010B	NL	0.019	NL	<0.006	NL	NL	<0.005	NL	NL	<0.01	<0.0002	NL	<0.02
MW-2	10/10/2011	200.7	<0.0025	0.02	1.4	<0.006	250	<0.02	<0.005	0.008	<0.0025	NL	<0.0002	9.6E-03	<0.01
	3/1/10[3]	6010B	<0.005	<0.02	NL	<0.006	NL	NL	<0.005	NL	<0.005	<0.01	<0.0002	NL	<0.02
	7/16/2009	6010B	**1.04E-03**	0.019	1.6	<0.006	250	NL	<0.005	NL	<0.001	<0.01	<0.0002	NL	<0.02
MW-4	10/12/2011	200.7	<0.0025	0.022	NL	<0.006	280	<0.02	<0.005	6.9E-03	<0.0025	NL	<0.0002	0.018	<0.01
	7/19/2010	6010B	**1.17E-03**	<0.02	NL	<0.006	NL	NL	<0.005	NL	<0.001	<0.01	<0.0002	NL	<0.02
	3/1/10[3]	6010B	<0.005	0.023	NL	<0.006	NL	NL	<0.005	NL	<0.005	<0.01	<0.0002	NL	<0.02
	7/8/2009	6010B	<0.001	0.022	1.7	<0.006	280	NL	<0.005	NL	<0.001	<0.01	<0.0002	NL	<0.02
	8/5/2008	6010B	<0.02	<0.02	NL	<0.006	NL	NL	<0.005	NL	<0.05	<0.01	<0.0002	NL	<0.05
	12/29/2007	6010B	<0.02	0.021	1.9	<0.006	320	<0.05	<0.005	5.2E-03	<0.05	<0.01	<0.0002	<0.1	<0.05
	2006[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5	10/10/2011	200.7	<0.0025	0.024	1.4	<0.006	250	<0.02	<0.005	4.3E-03	<0.0025	NL	<0.0002	9.7E-03	<0.01
	7/19/2010	6010B	**1.36E-03**	<0.02	NL	<0.006	NL	NL	<0.005	NL	<0.001	<0.01	<0.0002	NL	<0.02
	3/1/10[3]	6010B	<0.005	0.024	NL	<0.006	NL	NL	<0.005	NL	<0.005	<0.01	<0.0002	NL	<0.02
	7/15/2009	6010B	<0.001	0.017	1.5	<0.006	260	NL	<0.005	NL	<0.001	<0.01	<0.0002	NL	<0.02
	8/13/2008	6010B	<0.02	<0.02	NL	<0.006	NL	NL	<0.005	NL	<0.05	NL	<0.0002	NL	<0.05
	12/29/2007	6010B	<0.02	<0.02	1.5	<0.006	290	<0.05	<0.005	4.5E-03	<0.05	<0.01	<0.0002	<0.01	<0.05
	2006[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS
Concentration or Less. a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Secondary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) Wells MW-4, MW-5 were not sampled in 2006. Analyses for metals was not conducted in 2006.
3) This was part of the 10 year RCRA Post Closure Sampling Event.

8.13.4 MW-1, MW-2, MW-4, MW-5
Dissolved Metals Analytical Result Summary

			Parameters													
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**NE**	**0.05**	**NE**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**0.05**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**0.32**	**NE**	**0.078**	**NE**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**														
MW-1	10/6/2011	200.7	**0.002**	0.01	<0.002	1.7	<0.006	<0.006	<0.02	<0.005	<0.002	<1.0	<0.001	240	0.011	0.11
	7/16/2010[3]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/1/2010[3]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/15/2009[3]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/4/2008	6010B	<0.02	<0.02	<0.002	1.7	<0.006	<0.006	NL	<0.005	NL	<1.0	<0.05	260	NL	NL
	12/29/2007	6010B	<0.02	<0.02	<0.002	1.9	<0.006	NL	NL	<0.005	NL	<1.0	<0.05	230	NL	NL
MW-2	10/10/2011	200.7	<0.001	0.019	<0.002	1.4	<0.006	<0.006	<0.02	<0.005	0.007	<1.0	<0.001	260	9.3E-03	<0.01
	7/16/2010[3]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/1/2010[3]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/16/2009[3]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	10/12/2011	200.7	<0.001	0.021	<0.002	1.7	<0.006	<0.006	<0.02	<0.005	5.8E-03	<1.0	<0.001	290	0.017	0.1
	7/19/2010[3]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/1/2010[3]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/8/2009[3]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/5/2008	6010B	<0.02	<0.02	<0.002	1.8	<0.006	<0.006	NL	<0.005	NL	<1.0	<0.05	280	NL	NL
	12/29/2007	6010B	<0.02	<0.02	<0.002	1.9	<0.006	<0.006	NL	<0.005	NL	<1.0	<0.05	250	NL	NL
	2006[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5	10/10/2011	200.7	**1.1E-03**	0.016	<0.002	1.4	<0.006	<0.006	<0.02	<0.005	4.4E-03	<1.0	<0.001	270	9.5E-03	0.12
	7/15/2009[3]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/1/2010[3]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/15/2009[3]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/13/2008	6010B	<0.02	<0.02	<0.002	1.4	<0.006	NL	NL	<0.005	NL	<1.0	<0.05	260	NL	<0.05
	12/29/2007	6010B	<0.02	<0.02	<0.002	1.4	<0.006	NL	NL	<0.005	NL	<1.0	<0.05	240	NL	NL
	2006[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less. a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Secondary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) Wells MW-4, MW-5 were not sampled in 2006. Analyses for metals was not conducted in 2006.
3) Analysis 6010B Total Recoverable Metals only.

8.13.5 MW-1, MW-2, MW-4, MW-5

Volatile and Semi-Volatile Organic Compound Analytical Result Summary

			Parameters		
			Acetone (mg/L)	Diethyl phthalate (mg/L)	Bis (2-ethylhexyl) phthalate (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE
EPA RSL for Tap Water (April 2012)			12	11	7.1E-05
Well ID	DATE SAMPLED	METHOD			
MW-1	10/6/2011	8260B	<0.01	NL	NL
	7/16/2010	8260/8270C	<0.01	1.03E-03	<0.005
	3/1/2010[3]	8260/8270C	<0.0025	NL	<0.005
	7/16/2009	8260/8270C	<0.0025	<0.01	<0.005
	8/4/2008	8260/8270C	<0.0025	<0.0005	<0.0005
	12/29/2007	8260/8270C	<0.0025	<0.01	<0.01
MW-2	10/10/2011	8260B	<0.01	NL	NL
	3/1/2010[3]	8260/8270C	2.73E-03	<0.01	<0.005
	7/16/2009	8260/8270C	<0.0025	<0.01	<0.005
MW-4	10/12/2011	8260B	<0.01	NL	NL
	3/1/2010[3]	8260/8270C	<0.0025	<0.01	<0.005
	7/19/2010	8260/8270C	<0.01	<0.01	<0.005
	7/8/2009	8260/8270C	<0.0025	NL	<0.005
	8/5/2008	8260/8270C	<0.0025	<0.0005	**6.79E-03**
	12/29/2007	8260/8270C	<0.01	<0.01	<0.01
	2006[2]	8260/8270C	NA	NA	NA
MW-5	10/10/2011	8260B	<0.01	NL	NL
	3/1/2010[3]	8260/8270C	3.36E-03	NL	<0.005
	7/19/2010	8260/8270C	<0.01	<0.01	<0.005
	7/15/2009	8260/8270C	4.92E-03	NL	NL
	8/13/2008	8260/8270C	<0.0025	<0.0005	<0.005
	12/29/2007	8260/8270C	<0.001	<0.01	<0.01
	2006[2]	8260/8270C	NA	NA	NA

DEFINITIONS
NE = Not establishes
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES

2) Wells MW-4 and MW-5 were not sampled in 2006. Analyses for metals were not conducted in 2006.
3) This was part of the 10 year RCRA Post Closure Sampling Event

8.14 OW-11, OW-12

BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			**0.01**	**0.75**	**0.75**	**0.62**	**NE**
40 CFR 141.62 MCL (June 8, 2012)			**0.005**	**1**	**0.7**	**10**	**NE**
EPA RSL for Tap Water (April 2012)			**3.9E-04**	**0.86**	**1.3E-03**	**0.19**	**0.012**
Well ID	**DATE SAMPLED**	**METHOD**					
OW-11	10/26/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/28/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/27/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.0025
	8/14/2008	8260B	<0.001	<0.001	<0.001	<0.0015	<0.0025
	12/27/2007	8260B	<0.001	<0.001	<0.001	<0.0015	<0.0025
	10/24/2006	8260B	<0.001	<0.001	<0.001	<0.0015	<0.0025
OW-12	10/26/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/22/2010	8021B	<0.001	<0.001	<0.001	<0.002	<0.0025
	7/29/2009	8260B	<0.001	<0.001	<0.001	<0.002	<0.0025
	8/19/2008	8260B	<0.001	<0.001	<0.001	<0.002	<0.001
	12/27/2007	8260B	<0.001	<0.001	<0.001	<0.002	<0.001
	10/27/2006	8260B	<0.001	<0.001	<0.001	<0.001	<0.0025

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.14.1 OW-11, OW-12
General Chemistry Analytical Result Summary

			Parameters								
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6 to 9	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE
Well ID	**DATE SAMPLED**	**METHOD**									
OW-11	10/26/2011	300.0	**2.2**	95	0.19	<0.1	0.77	<0.5	**940**	NA	NA
	7/28/2010	300.0	**2.8**	89	0.21	<0.1	0.3	<0.5	**1100**	8.39	2800
	7/27/2009	300.0	**2**	97	NL	**1.2**	1.2	<0.5	**950**	8.41	2500
	8/14/2008	300.0	**2.2**	90	0.29	0.75	0.75	<0.5	**940**	8.39	2600
	12/27/2007	300.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/24/2006	300.0	**2.5**	86	NL	<0.1	<0.1	<0.5	**1100**	8.4	3100

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES

8.14.2 OW-11, OW-12

Total Metals Analytical Result Summary

			Parameters															
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Selenium (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**NE**	**0.05**	**0.002**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**NE**	**0.05**	**0.002**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**NE**	**0.078**	**6.3E-04**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**																
OW-11	10/26/2011	200.7/200.8	<0.0025	7.7E-03	<0.002	NL	<0.006	<0.006	<0.02	<0.005	NL	0.016	NL	NL	0.003	<0.0002	**0.21**	<0.01
	7/28/2010	6010B	<0.02	<0.02	<0.002	NL	<0.006	<0.006	<0.05	<0.005	NL	0.016	1.8	NL	<0.05	<0.0002	**0.236**	<0.02
	7/27/2009	6010B	**2.02E-03**	<0.01	<0.002	11	<0.006	<0.006	<0.05	<0.005	1.2	0.016	1.8	640	5.06E-03	<0.0002	**0.216**	<0.02
	8/14/2008	6010B	<0.02	<0.01	<0.002	11	<0.006	<0.006	<0.05	<0.005	1.3	0.015	1.8	640	<0.05	<0.0002	**0.249**	<0.02
	12/27/2007	6010B	<0.02	<0.01	<0.002	11	<0.006	<0.006	<0.05	<0.005	1.3	0.016	1.6	NL	<0.05	<0.0002	**0.22**	NL
	10/28/2006	6010B	<0.02	<0.02	<0.002	12	<0.006	<0.006	<0.05	<0.005	1.4	NL	NL	NL	<0.05	<0.0002	NL	NL

DEFINITIONS

NE = Not established

NA = Not analyzed

NL = Not listed on laboratory analysis

Bold and highlighted values represent values above the applicable standards

STANDARDS

WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.

a) Human Health Standards; b) Other standards for Domestic Water

40 CFR 141.62 Detection Limits for Inorganic Contaminants

1) National Primary Drinking Water Regulation (May 2009); Action Level

EPA Regional Screening Level (RSL) Summary Table

NOTES

8.14.3 OW-11, OW-12
Dissolved Metals Analytical Result Summary

			Parameters														
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**0.05**	**NE**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**0.05**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**0.078**	**NE**	**4.7E-02**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**															
OW-11	10/26/2011	200.7/200.8	0.002	7.5E-03	<0.002	11	<0.006	<0.006	<0.02	<0.005	1.2	0.016	1.6	3.4E-03	640	**0.22**	0.11
	7/28/2010	6010B	<0.02	<0.02	<0.002	12	<0.006	<0.006	<0.02	<0.005	1.3	0.016	1.8	<0.05	630	**0.215**	<0.05
	7/27/2009[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/14/08[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/27/2007	6010B	NA	<0.01	NA	11	NA	NA	<0.05	NA	1.3	0.016	1.6		690	**0.22**	NA
	10/28/2006	6010B	NA	<0.02	NA	12	NA	NA	<0.05	NA	1.4	NA	NA	NA	NA	NA	NA

NOTES
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Secondary Drinking Water Regulation (May 2009)

Notes:
2) Analysis 6010B run as Total Recoverable Metals only.

8.15 SMW-2, SMW-4
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1.0	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
Well ID	**DATE SAMPLED**	**METHOD**					
SMW-2	10/12/2011	8260B	<0.001	<0.001	<0.001	<0.0015	7.9E-03
	7/16/2010	8260B	<0.001	<0.001	<0.001	<0.0015	8.8E-03
	7/27/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	8/14/2008	8260B	<0.005	<0.001	<0.001	<0.0015	<0.001
	1/1/2008[2]	8260B	<0.001	<0.001	<0.001	<0.0015	9.9E-03
	2006[1]	8260B	NA	NA	NA	NA	NA
SMW-4	10/10/2011	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/16/2010	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	7/27/2009	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	8/14/2008	8260B	<0.005	<0.001	<0.001	<0.0015	<0.001
	12/29/2007	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	2006[1]	8260B	NA	NA	NA	NA	NA

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) *Wells SMW-2 and SMW-4 were not sampled in 2006. Analyses for metals were not conducted in 2006.*
2) *Due to inclement weather in December 2007, annual samples were not collected until January 2008*

8.15.1 SMW-2, SMW-4
General Chemistry and DRO/GRO Analytical Result Summary

			Parameters										
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µS/cm)	DRO (mg/L)	GRO (mg/L)
WQCC 20NMAC 6.2.3103			1.6	250.0	NE	NE	10	NE	600.0	6 TO 9	NE	0.2[1]	NE
40 CFR 141.62 MCL (June 8, 2012)			4.0	NE	NE	1	10	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.62	NE	NE	1.6	25	3.1E-04	NE	NE	NE	NE	NE
Well ID	**DATE SAMPLED**	**METHOD**											
SMW-2	10/12/2011	300.0	0.22	**2600**	3.1	<10	<10	<0.05	**1600**	NA	NA	<1.0	0.36
	7/16/2010	300.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<0.05
	7/27/2009	300.0	0.32	**2300**	NL	<10	<10	<2.5	**1700**	7.61	7700	<1.0	0.73
	8/14/2008	300.0	0.36	**2000**	3.1	<1.0	<1.0	<0.5	**1600**	7.25	8700	<1.0	0.36
	1/1/2008[3]	300.0	0.36	**2000**	NL	<2.0	<2.0	<0.5	**1600**	7.29	9200	<1.0	0.69
	2006[2]	300.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SMW-4	10/10/2011	300.0	**1.1**	**58**	0.2	**1.3**	1.3	<0.5	170	NA	NA	<1.0	<0.05
	7/16/2010	300.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<0.05
	3/1/2010[4]	8015B	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<0.05
	1/0/1900	300.0	**1.2**	58	NL;	<1.0	<1.0	<0.5	170	8.53	1300	<1.0	0.69
	8/14/2008	300.0	**1.1**	52	0.15	0.11	0.11	<0.5	150	8.63	1200	<1.0	<0.05
	12/29/2007	300.0	**1.4**	60	NL	<1.0	<1.0	<0.5	180	8.34	1300	<1.0	<0.05
	2006[2]	300.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

DEFINITIONS
NE = Not established
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NL = Not listed on laboratory analysis

Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
1) NMED Table 2a. TPH Screening Guidelines for Potable Ground Water (GW-1). (Oct 2006)
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Sreening Level (RSL) Summary Table

NOTES
2) *Wells SMW-2 and SMW-4 were not sampled in 2006. Analyses for metals were not conducted in 2006.*
3) *Due to inclement weather in December 2007, annual samples were not collected until January 2008*
4) *This was part of the 10 year RCRA Post Closure sampling event*

8.15.2 SMW-2, SMW-4
Total Metals Analytical Result Summary

			Parameters																
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Selenium (mg/L)	Cyanide (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**NE**	**0.05**	**0.02**	**0.002**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**NE**	**0.05**	**0.02**	**0.002**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.90E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**NE**	**0.078**	**9.3E-03**	**6.30E-04**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**																	
SMW-2	10/12/2011	200.7/200.8	**5.2E-03**	0.031	<0.002	NL	**0.11**	<0.006	0.68	<0.005	NL	0.16	NL	2000	0.011	NL	<0.0002	0.12	<0.01
	7/16/2010	6010B	**3.5E-03**	0.022	<0.002	NL	**0.093**	NL	NL	<0.005	NL	NL	NL	NL	<0.001	**5.25E-02**	<0.0002	NL	<0.02
	7/27/2009	6010B	**0.00384**	0.016	<0.002	220	<0.006	NL	NL	6.3E-03	68	NL	1.1	2000	4.7E-03	**6.62E-02**	<0.0002	NL	<0.02
	8/14/2008	6010B	<0.02	<0.02	<0.002	NL	9.2E-03	NL	NL	<0.005	NL	NL	<1.0	NL	<0.05	**6.17E-02**	<0.0002	NL	0.11
	1/1/2008[2]	6010B	<0.02	<0.02	<0.002	200	**0.055**	NL	NL	<0.005	69	NL	1.1	2200	<0.25	**6.51E-02**	<0.0002	NL	<0.05
	2006[1]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SMW-4	10/10/2011	200.7/200.8	**2.9E-03**	0.037	<0.002	NL	**0.058**	<0.006	0.94	<0.005	N;	0.029	NL	300	<0.0025	NL	<0.0002	0.037	0.012
	7/16/2010	6010B	**3.33E-03**	0.027	<0.002	NL	<0.006	NL	NL	<0.005	NL	NL	NL	NL	<0.001	<0.01	<0.0002	NL	<0.02
	3/1/10[3]	6010B	<0.005	0.035	<0.002	NL	8.2E-03	NL	NL	<0.005	NL	NL	NL	NL	<0.005	<0.01	<0.0002	NL	<0.02
	7/27/2009	6010B	**2.97E-03**	0.028	<0.002	4.4	7.5E-03	NL	NL	<0.005	1.4	NL	<1.0	310	<0.001	<0.01	<0.0002	NL	<0.02
	8/14/2008	6010B	<0.02	<0.02	<0.002	NL	<0.006	NL	NL	<0.005	NL	NL	NL	NL	<0.05	<0.01	<0.0002	NL	<0.05
	12/29/2007	6010B	<0.02	0.024	<0.002	4.6	<0.006	NL	NL	<0.005	1.2	NL	<1.0	340	<0.05	<0.01	<0.0002	NL	<0.05
	2006[1]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009) Action Level
EPA Regional Sreening Level (RSL) Summary Table (Nov 2011)

NOTES
1) *Wells SMW-2 and SMW-4 were not sampled in 2006. Analyses for metals were not conducted in 2006.*
2) *Due to inclement weather in December 2007, annual samples were not collected until January 2008*
3) *This was part of the 10 year RCRA Post Closure sampling event*

8.15.3 SMW-2, SMW-4
Dissolved Metals Analytical Result Summary

			Parameters															
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Selenium (mg/L)	Cyanide (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**NE**	**0.05**	**0.02**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**NE**	**0.05**	**0.02**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.90E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**NE**	**0.078**	**9.3E-03**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**																
SMW-2	10/12/2011	200.7/200.8	**6.4E-03**	0.016	<0.002	230	<0.006	<0.006	<0.1	<0.005	76	0.24	<5.0	2200	0.015	NL	**0.11**	0.11
	7/16/2010	6010B[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/27/2009	6010B[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/14/2008	6010B	<0.02	<0.02	<0.002	200	<0.006	NL	NL	<0.005	64	NL	<1.0	1900	<0.25	NL	NL	NL
	1/1/2008[2]	6010B	<0.02	<0.02	<0.002	190	<0.006	NL	NL	<0.005	64	NL	1.1	1700	<0.05		NL	NL
	2006[1]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SMW-4	10/10/2011	200.7/200.8	0.003	0.02	<0.002	4.2	9.2E-03	<0.006	0.035	<0.005	1.2	4.1E-03	<1.0	300	1.1E-03	NL	**0.032**	0.13
	7/16/2010	6010B[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/1/10[3]	6010B[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/27/2009	6010B[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/14/2008	6010B	<0.02	<0.02	<0.002	3.0	<0.006	NL	NL	<0.005	<1.0	NL	<1.0	280	<0.05	NL	NL	NL
	12/29/2007	6010B	<0.02	<0.02	<0.002	3.6	<0.006	NL	NL	<0.005	<1.0	NL	<1.0	260	<0.05	NL	NL	NL
	2006[1]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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NE = Not established
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Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulatioin (May 2009), Action Level
EPA Regional Sreening Level (RSL) Summary Table (Nov 2011)

NOTES
1) *Wells SMW-2 and SMW-4 were not sampled in 2006. Analyses for metals was not conducted in 2006.*
2) *Due to inclement weather in December 2007, annual samples were not collected until January 2008*
3) *This was part of the 10 year RCRA Post Closure sampling event*
4) *Analysis 6010B Total Recoverable Metals only.*

8.15.4 SMW-2, SMW-4
Volatile and Semi Volatile Organic Compound Analytical Result Summary

			Parameters					
			Acetone (mg/L)	bis(2-Ethylhexyl) phthalate (mg/L)	Diethyl phthalate (mg/L)	Phenol (mg/L)	1,4-Dioxane (mg/L)	Benzenethiol (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	NE	0.005	NE	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			12	7.2E-05	11	4.5	6.7E-04	0.013
Well ID	**DATE SAMPLED**	**METHOD**						
SMW-2	10/12/2011	8260B	<0.01	NA	NA	NA	NA	NA
	7/16/2010	8260B/8270C	<0.01	<0.0001	1.89E-03	<0.001	NL	<0.0005
	7/27/2009	8260B/8270C	6.25E-03	<0.0001	<0.0001	<0.001	<0.001	<0.0005
	11/13/2008	8260B/8270C	7.53E-03	<0.0001	<0.0001	<0.001	<.001	<0.0005
	8/14/2008	8260B/8270C	7.53E-03	<0.0005	5.7E-04	<0.0001	**1.36E-02**	<0.0001
	1/1/2008[2]	8260B/8270C	<0.01	<0.0001	<0.0001	<0.0001	**1.48E-02**	1.9E-04
	2006[1]	8260B/8270C	NA	NA	NA	NA	**NA**	NA
SMW-4	10/10/2011	8260B	<0.01	NA	NA	NA	NA	NA
	7/16/2010	8260B/8270C	<0.01	<0.0001	<0.0001	<0.001	NL	<0.0005
	3/1/2010[3]	8260B/8270C	<0.0025	<0.005	<0.01	<0.01	<0.005	<0.005
	7/27/2009	8260B/8270C	<0.0025	**1.05E-03**	1.48E-03	<0.001	<0.001	<0.0005
	8/14/2008	8260B/8270C	NA	<0.0001	5.0E-04	1.13E-03	<0.005	<0.0001
	12/29/2007	8260B/8270C	<0.01	<0.0001	<0.0001	<0.0001	<0.005	<0.0001
	2006[1]	8260B/8270C	NA	NA	NA	NA	NA	NA

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) *Wells SMW-2 and SMW-4 were not sampled in 2006. Analyses for metals were not conducted in 2006.*
2) *Due to inclement weather in December 2007, annual samples were not collected until January 2008*
3) *This was part of the 10 year RCRA Post Closure Sampling requirement, Total Recoverable Metals Analysis*

8.16 PW-2, PW-3, PW-4
BTEX Analytical Result Summary

			Parameters						
			Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE	NE	10
40 CFR 141.62 MCL (June 8, 2012)			0.005	1	0.7	10	NE	1	10
EPA RSL for Tap Water (April 2012)			3.9E-04	8.6E-01	1.3E-03	0.19	0.012	1.6	25
Well ID	**DATE SAMPLED**	**METHOD**							
PW-2	12/15/2011[1]	8260B/Anions	<0.001	<0.001	<0.001	<0.0015	<0.001	<1.0	<1.0
	10/26/2011	8260B/Anions	<0.001	<0.001	<0.001	<0.0015	<0.001	<0.1	<0.1
	9/12/2008	8260B/Anions	<0.001	<0.001	<0.001	<0.0015	<0.01	<1.0	<1.0
	12/9/2004	8260B	<0.001	<0.001	<0.001	<0.0015	NA	<1.0	<1.0
PW-3	10/31/2011	8260B/Anions	<0.001	<0.001	<0.001	<0.0015	<0.01	NL	<0.1
	9/23/2010	8260B/Anions	<0.001	<0.001	<0.001	<0.0015	<0.01	<1.0	<1.0
	8/21/2008	8260B/Anions	<0.001	<0.001	<0.001	<0.0015	<0.01	<0.01	0.13
	1/1/2008	8260B/Anions	<0.001	<0.001	<0.001	<0.0015	<0.01	<0.2	<0.2
	10/27/2006	8260B/Anions	<0.001	<0.001	<0.001	<0.0015	<0.01	<0.2	<0.2
PW-4	7/28/2010	8260B/Anions	<0.001	<0.001	<0.001	<0.0015	<0.001	<0.01	0.14
	9/12/2008	8260B/Anions	<0.001	<0.001	<0.001	<0.0015	<0.01	<0.01	<0.02
	8/4/2004	8260B	<0.001	<0.001	<0.001	<0.0015	NA	<0.01	<0.02

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STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) Re-sampled on 12/15/2011 due to detection of PCE during the Annual sampling event on 10/26/2011.
In the field blank submitted with the 10/26/11 sampling, toluene was detected at 0.0017 ppm.

8.16.1 PW-2, PW-3, PW-4
Total Metals Analytical Result Summary

			Parameters															
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Mercury (mg/L)	Cyanide (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**NE**	**0.05**	**NE**	**0.002**	**0.2**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**0.05**	**NE**	**0.002**	**0.2**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**0.32**	**NE**	**0.078**	**NE**	**6.30E-04**	**9.3E-03**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**																
PW-2	12/15/2011[2]	200.7/200.8	**5.5E-03**	0.12	<0.002	NL	<0.006	<0.006	0.74	<0.005	0.011	NL	<0.0025	NL	<0.0002	<0.01	<0.0025	<0.01
	10/26/2011[2]	200.7/200.8	<0.0025	0.016	<0.002	NL	<0.006	<0.006	0.29	<0.005	0.058	NL	<0.0025	NL	<0.0002	<0.01	<0.0025	<0.01
	9/12/2008	6010B	<0.02	0.013	<0.002	NL	<0.006	<0.006	0.07	<0.005	<0.002	NL	<0.05	NL	<0.0002	<0.01	1.6E-03	<0.05
PW-3	10/31/2011	200.7/200.8	**3.5E-03**	0.01	<0.002	NL	<0.006	<0.006	0.09	<0.005	0.003	NL	1.20E-03	NL	<0.0002	<0.01	1.4E-03	0.023
	9/23/2010	6010B	<0.02	<0.02	<0.002	NL	<0.006	0.032	0.47	7.4E-03	4.6E-03	NL	<0.05	NL	<0.0002	<0.005	0.001	0.037
	8/21/2008	6010B	<0.02	<0.02	<0.002	NL	<0.006	<0.006	<0.05	<0.005	<0.0002	NL	<0.25	NL	<0.0002	<0.004	<6.3E-04	<0.05
	1/1/2008	6010B	<0.02	0.014	<0.002	190	<0.006	<0.006	0.2	5.6E-03	0.015	1.2	<0.5	15	<0.0002	<0.01	<0.1	0.041
	10/27/2006	6010B	<0.02	<0.02	<0.002	NL	<0.006	<0.006	<0.05	<0.005	<0.0002	NL	<0.05	NL	<0.0002	<0.01	<0.1	<0.05
PW-4	7/28/2010	6010B	<0.02	<0.02	<0.002	NL	<0.006	<0.006	0.23	<0.005	4.4E-03	NL	<0.05	NL	<0.0002	<0.01	2.1E-03	<0.02
	9/12/2008	6010B	<0.02	0.013	<0.002	NL	<0.006	<0.006	0.11	<0.005	0.005	NL	<0.05	NL	<0.0002	<0.01	1.4E-03	<0.02

DEFINITIONS
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STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) PW-2 was re-sampled on 12/15/2011 due to detection of PCE during the Annual sampling event on 10/26/2011.
In the field blank submitted with the 10/26/11 sampling, toluene was detected at 0.0017 ppm.

8.16.2 PW-2, PW-3, PW-4
Dissolved Metals Analytical Result Summary

			Parameters													
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**NE**	**0.05**	**NE**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**0.05**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**0.32**	**NE**	**0.078**	**NE**	**0.047**	**4.7**
Well ID	**DATE SAMPLED**	**METHOD**														
PW-2	12/15/2011[3]	200.7/200.8	**2.7E-03**	0.014	<0.002	NL	<0.006	<0.006	0.23	<0.005	0.006	NL	<0.001	NL	1.9E-03	0.053
	10/26/2011	200.7/200.8	<0.001	0.016	<0.002	NL	<0.006	<0.006	<0.02	<0.005	0.06	NL	<0.001	NL	2.2E-03	0.045
	9/12/2008[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PW-3	10/31/2011	200.7/200.8	**3.3E-03**	0.011	<0.002	NL	<0.006	<0.006	0.079	<0.005	3.5E-03	NL	1.2E-03	NL	1.4E-03	0.06
	9/23/2010	6010B	<0.02	<0.02	<0.002	240	<0.006	<0.006	0.098	<0.005	<0.002	1.5	<0.05	50	0.001	<0.05
	8/23/2008[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/1/2008[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/27/2006[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PW-4	7/28/2010	6010B	<0.02	<0.02	<0.002	NL	<0.006	<0.006	0.09	<0.005	3.6E-03	NL	<0.05	NL	1.46E-03	0.086
	9/12/2008[2]	6010B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES:
2) Analysis 6010B run as Total Recoverable Metals only.
3) PW-2 was re-sampled on 12/15/2011 due to detection of PCE during the Annual sampling event on 10/26/2011.
In the field blank submitted with the 10/26/11 sampling, toluene was detected at 0.0017 ppm.

8.16.3 PW-2, PW-3, PW-4

Volatile and Semi Volatile Organic Compound Analytical Result Summary

			Parameters						
			2,4-Dimethylphenol (mg/L)	2-Methylnaphthalene (mg/L)	2-Methylphenol (mg/L)	3+4-Methylphenol (mg/L)	Phenanthrene (mg/L)	Phenol (mg/L)	Tetrachloroethene (PCE) (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	NE	NE	NE	0.005	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.27	0.027	NE	NE	NE	4.5	NE
Well ID	**DATE SAMPLED**	**METHOD**							
PW-2	12/15/2011[5]	8270C/8260B	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001
	10/26/2011	8270C/8260B	<0.01	<0.004	<0.01	<0.01	<0.01	<0.01	7.3E-03[4]
PW-3	10/31/2011	8270C/8260B	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	11/1/2010[3]	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	9/23/2010[2]	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	8/21/2008	8270C	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	1/1/2008[1]	8270C	0.016	**0.032**	0.21	0.36	0.017	**0.8**	

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STANDARDS

WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or less.

a) Human Health Standards; b) Other Standards for Domestic Water

40 CFR 141.62 Detection Limits for Inorganic Contaminants

EPA Regional Screening Level (RSL) Summary Table

NOTES

1) *Due to inclement weather conditions in December 2007, the 2007 annual sampling was completed in January 2008.*
2) *Method 8270C sample was extracted past the 7 day holding time.*
3) *Method 8270C analysis was re-sampled due to Hall Lab note stating sample for 8270 was extracted past the 7 day holding time.*
4) *Constituent detected for the first time during the Annual Sampling Event. In the field blank submitted, toluene was detected at 0.0017 mg/L.*
5) *PW-2 was re-sampled due to the detection of PCE in the 10/26/2011 sample.*

8.17 RW-1, RW-2, RW-5, RW-6
BTEX Analytical Result Summary

			Parameters				
			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	0.75	0.75	0.62	NE
40 CFR 141.62 MCL (June 8, 2012)			0.005	1	0.7	10	NE
EPA RSL for Tap Water (April 2012)			3.9E-04	0.86	1.3E-03	0.19	0.012
SAMPLE ID	DATE SAMPLED	METHOD					
RW-1[1]	10/3/2011	8260B	**51**	**37**	**3.7**	**23**	**2.9**
RW-2[1]	10/3/2011	8260B	**39**	**5.3**	**0.57**	**1.5**	**3.7**
RW-5[1]	10/4/2011	8260B	**0.56**	<0.01	**0.21**	**1.5**	**0.095**
RW-6[1]	10/4/2011	8260B	**0.87**	0.029	**0.33**	<0.015	<0.01

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STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

1) Recovery wells added to the approved 2010 FWGWMP (8/25/10) annual sampling schedule.

8.17.1 RW-1, RW-2, RW-3, RW-5
General Chemistry, BOD/COD, Analytical Result Summary

			Parameters						
			Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)
WQCC 20NMAC 6.2.3103			**1.6**	**250.0**	**NE**	**NE**	**10**	**NE**	**600.0**
40 CFR 141.62 MCL (June 8, 2012)			**4.0**	**NE**	**NE**	**1**	**10**	**NE**	**NE**
EPA RSL for Tap Water (April 2012)			**0.62**	**NE**	**NE**	**1.6**	**25**	**3.1E-04**	**NE**
SAMPLE ID	**DATE SAMPLED**	**METHOD**							
RW-1[3]	10/3/2011	300.0	<0.5	**410**	3.3	**220**	**220**	<2.5	<2.5
RW-2[3]	10/3/2011	300.0	<0.5	130	2.5	**67**	**67**	<2.5	<2.5
RW-5[3]	10/4/2011	300.0	0.54	26	0.86	**14**	**14**	<2.5	<2.5
RW-6[3]	10/4/2011	300.0	<0.5	80	0.91	<1.0	<1.0	<2.5	<2.5

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STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other standards for Domestic Water
1) 20 NMAC 20.6.2.2101 General Requirements
2) NMED Table 2a. TPH Screening Guidelines for Potable Ground Water (GW-1). (Oct 2006)
EPA Regional Screening Level (RSL) Summary Table

NOTES
3) Recovery wells added to the approved 2010 FWGWMP (8/25/10) annual sampling schedule.

8.17.2 RW-1, RW-2, RW-5, RW-6
Total Metals Analytical Result Summary

			Parameters												
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Selenium (mg/L)	Silver (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**0.05**	**1.0**	**1.0**	**0.05**	**0.2**	**0.05**	**0.05**	**0.002**	**0.03**	**10**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**0.05**	**NE**	**0.002**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**0.62**	**11**	**NE**	**0.32**	**0.078**	**0.071**	**6.3E-04**	**0.047**	**4.7**
SAMPLE ID	**DATE SAMPLED**	**METHOD**													
RW-1[2]	10/3/2011	200.7/200.8	**0.01**	**4.8**	<0.002	<0.006	0.035	**4.6**	<0.005	**3.3**	7.5E-03	<0.005	**0.012**	4.3E-03	0.06
RW-2[2]	10/3/2011	200.7/200.8	**6.1E-03**	**3.1**	<0.002	<0.006	9.8E-03	**11**	<0.005	**2.2**	6.9E-03	<0.005	**2.3E-03**	<0.0025	0.028
RW-5[2]	10/4/2011	200.7/200.8	**6.3E-03**	**3.7**	<0.002	<0.006	<0.006	**7.8**	<0.005	**0.97**	<0.0025	<0.005	<0.0002	<0.0025	0.013
RW-6[2]	10/4/2011	200.7/200.8	**0.017**	**4.2**	<0.002	<0.006	<0.006	**11**	9.3E-03	**1.1**	<0.0025	<0.005	<0.0002	<0.0025	<0.01

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a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1. National Primary Drinking Water Regulation (May 2009); Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) Recovery wells added to the approved 2010 FWGWMP (8/25/10) annual sampling schedule.

8.17.3 RW-1, RW-2, RW-5, RW-6
Dissolved Metals Analytical Result Summary

			Parameters															
			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**1.0**	**0.05**	**NE**	**0.2**	**NE**	**0.05**	**0.05**	**NE**	**0.03**	**10.0**
40 CFR 141.62 MCL (June 8, 2012)			**0.01**	**2.0**	**0.005**	**NE**	**0.1**	**1.3[1]**	**NE**	**0.015[1]**	**NE**	**NE**	**NE**	**0.05**	**NE**	**NE**	**0.03**	**NE**
EPA RSL for Tap Water (April 2012)			**4.5E-05**	**2.9**	**6.9E-03**	**NE**	**NE**	**0.62**	**11**	**NE**	**NE**	**0.32**	**NE**	**0.078**	**0.071**	**NE**	**0.047**	**4.7**
SAMPLE ID	**DATE SAMPLED**	**METHOD**																
RW-1[2]	10/3/2011	200.7/200.8	**7.1E-03**	**5.0**	<0.002	230	<0.006	<0.006	**5.2**	<0.005	40	**3.3**	1.1	0.013	<0.005	260	2.8E-03	0.067
RW-2[2]	10/3/2011	200.7/200.8	**0.006**	**2.8**	<0.002	130	<0.006	<0.006	**6.1**	<0.005	22	**2.0**	<1.0	0.01	<0.005	210	<0.001	<0.01
RW-5[2]	10/4/2011	200.7/200.8	**4.8E-03**	**3.1**	<0.002	75	<0.006	<0.006	**5.4**	<0.005	14	**0.89**	<1.0	3.5E-03	<0.005	210	<0.005	<0.01
RW-6[2]	10/4/2011	200.7/200.8	**0.016**	0.021	<0.002	16	0.02	<0.006	**4.9**	<0.005	12	0.02	0	4.4E-03	<0.005	270	<0.005	<0.01

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STANDARDS
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a) Human Health Standards; b) Other standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
1) National Primary Drinking Water Regulation (May 2009), Action Level
EPA Regional Screening Level (RSL) Summary Table

NOTES
2) Recovery wells added to the approved 2010 FWGWMP (8/25/10) annual sampling schedule.

8.17.4 RW-1, RW-2, RW-5, RW-6
Volatile Organic Compound Analytical Result Summary

			Parameters									
			1,2,4-Trimethyl-benzene (mg/L)	1,3,5-Trimethyl-benzene (mg/L)	Naphthalene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	Chloromethane (mg/L)	Isopropylbenzene (mg/L)	4-Isopropyltoluene (mg/L)	n-Propylbenzene (mg/L)	Styrene (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	0.03	NE	NE	NE	NE	NE	NE	NE
40 CFR 141.62 MCL (June 8, 2012)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (April 2012)			0.015	0.087	1.4E-04	9.7E-04	0.027	0.19	NE	NE	NE	NE
SAMPLE ID	DATE SAMPLED	METHOD										
RW-1[2]	10/3/2011	8260B	**5.8**	**0.98**	**0.6**	**0.071**	**0.15**	<0.03	<0.01	<0.01	0.4	0.013
RW-2[2]	10/3/2011	8260B	**0.098**	0.024	**0.057**	**0.054**	<0.04	0.14	<0.01	<0.01	0.036	<0.01
RW-5[2]	10/4/2011	8260B	**0.13**	0.046	**0.17**	**0.11**	0.16	<0.03	0.017	0.01	0.04	<0.01
RW-6[2]	10/4/2011	8260B	**0.42**	**0.16**	**0.52**	**0.21**	**0.31**	<0.03	0.043	0.015	0.078	<0.01

DEFINITIONS	STANDARDS
NE = Not establishes	WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less
NA = Not analyzed	a) Human Health Standards; b) Other Standards for Domestic Water
NL = Not listed on laboratory analysis	40 CFR 141.62 Detection Limits for Inorganic Contaminants
Bold and highlighted values represent values above the applicable standards	EPA Regional Screening Level (RSL) Summary Table

NOTES:

2) Recovery wells added to the approved 2010 FWGWMP (8/25/10) annual sampling schedule.

8.17.5 RW-1, RW-2, RW-5, RW-6
Semi-Volatile Organic Compound Analytical Result Summary

			Parameters										
			Aniline (mg/L)	Benzoic Acid (mg/L)	Benzyl Alcohol (mg/L)	2,4-Dimethylphenol (mg/L)	2-Methylnaphthalene (mg/L)	1-Methylnaphthalene (mg/L)	2-Methylphenol (mg/L)	3+4-Methylphenol (mg/L)	Naphthalene (mg/L)	Phenanthrene (mg/L)	Phenol (mg/L)
WQCC 20NMAC 6.2.3103			**NE**	**NE**	**NE**	**NE**	**NE**	**0.005**	**NE**	**NE**	**0.03**	**NE**	**0.005**
40 CFR 141.62 MCL (June 8, 2012)			**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
EPA RSL for Tap Water (April 2012)			**0.012**	**58**	**1.5**	**0.27**	**0.027**	**4.5**	**NE**	**NE**	**1.4E-04**	**NE**	**4.5**
SAMPLE ID	**DATE SAMPLED**	**METHOD**											
RW-1[1]	10/3/2011	8270C	<0.1	<0.2	<0.1	<0.1	**1.1**	**0.5**	<0.1	<0.1	**1.3**	<0.1	<0.1
RW-2[1]	10/3/2011	8270C	**0.15**	0.021	<0.01	0.16	<0.01	**0.023**	0.09	0.032	**0.026**	<0.01	**0.038**
RW-5[1]	10/4/2011	8270C	<0.01	<0.02	<0.01	<0.01	**0.13**	**0.1**	<0.01	<0.01	**0.11**	<0.01	<0.01
RW-6[1]	10/4/2011	8270C	<0.1	<0.2	<0.1	<0.1	**0.59**	**0.42**	<0.1	<0.1	**0.46**	<0.1	<0.1

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limits for Inorganic Contaminants
EPA Regional Screening Level (RSL) Summary Table

NOTES
1) Recovery wells added to the approved 2010 FWGWMP (8/25/10) annual sampling schedule.

9.0 Well Data Summary Table

The Well Data Summary Table is currently under revision based on past information reporting incorrect ground level elevation, stick up length, well casing elevation, and well casing bottom elevations. These discrepancies were outlined in NMED's NOD, Annual Ground Water Monitoring Report, Gallup Refinery 2009, dated May 16, 2011, Comment 15d, "*[I]t appears that all the wells need to be resurveyed to provide accurate information. NMED will address resurveying all wells at the refinery in a separate letter*". Based on this comment Gallup Refinery determined there was an immediate need to have the wells resurveyed and did not wait for the official letter dated June 6, 2011, "Requirement to Resurvey Ground water Monitoring Wells and Recovery Wells," from NMED. Gallup Refinery was in receipt of the letter on June 7, 2011 and at this time the survey was already in progress and completed on June 7, 2011.

The Well Data Summary Table was updated with data provided by DePauli Engineering who conducted the survey on all active wells on June 7, 2011. Gallup Refinery submitted the survey report along with the updated Well Data Summary Table to NMED on August 1, 2011 and to date report has not been approved. The Well Data Summary Table included in this report is the one that was submitted in response to NMED's Third NOD on June 12, 2012 for approval.

2011 CORRECTED WELL ELEVATION SUMMARY TABLE
Revision 3 - June 12, 2012

Date of Installation	Well ID Number	2011 Survey Measurement date[1]	Previous Casing Diameter (Inch)	2011 Verified Casing Diameter[2] (Inch)	Previous Ground Level Elevation (feet)	2011 Survey Ground Level Elevation[1] (feet)	Previous Well Casing Rim Elevation (feet)	2011 Survey Well Casing Rim Elevation[1] (feet)	2011 Measuring Point Description[1]	Previous Stick-up length[3] (feet)	2011 Survey Stick up Length[4] (feet)	Previous Well Casing Bottom Elevation (feet)	2011 Survey Well Casing Bottom Elevation[5] (feet)	Previous Total Well Depth (feet)	2011 Survey Total Well Depth[6] (feet)	Screened Interval Depth Top to Bottom[7] (feet)	Previous Stratigraphic unit in which screen exists	2012 Re-Evaluated Stratigraphic unit in which screen exists[8]
11/10/2003	BW-1A	6/7/2011	2.00	2.00	6,876.73	6,874.10	6,876.73	6,876.68	North edge PVC casing	4.38	2.58	6,836.73	6,839.06	40.00	37.62	30 - 35	Chinle/Alluvium	Upper Sand
10/28/2003	BW-1B	6/7/2011	2.00	2.00	6,876.91	6874.13[9]	6,876.91	6,876.94	North edge PVC casing	2.39	0.281	6,811.71	6,809.49	67.55	67.45	54.6 - 64.6	Chinle/Alluvium	Chinle/Alluvium Interface
11/10/2003	BW-1C	6/7/2011	2.00	2.00	6,876.75	6,873.95	6,876.75	6,876.78	North edge PVC casing	4.52	2.83	6,719.75	6,740.39	157.00	136.39	125 -135	Sonsela Sandstone	Sonsela
11/10/2003	BW-2A	6/7/2011	2.00	2.00	6,874.72	6,871.88	6,874.72	6,874.69	North edge PVC casing	4.27	2.81	6,809.22	6,807.12	65.50	67.57	55 - 65	Chinle/Alluvium	Upper Sand
10/28/2003	BW-2B	6/7/2011	2.00	2.00	6,874.58	6,871.66	6,874.58	6,874.50	North edge PVC casing	4.50	2.84	6,784.08	6,782.24	90.50	92.26	80 - 90	Sonsela sandstone	Chinle/Alluvium Interface
10/28/2003	BW-2C	6/7/2011	2.00	2.00	6,875.40	6,872.90	6,875.40	6,875.30	North edge PVC casing	2.98	2.40	6,724.40	6,722.46	151.00	152.84	139.5 - 149.5	Sonsela sandstone	Sonsela
6/15/2004	BW-3A	6/7/2011	2.00	2.00	6,878.22	6,875.94	6,878.22	6,878.39	North edge PVC casing	3.00	2.45	6,828.22	6,826.04	52.60	52.35	39.5 - 49.5	Chinle/alluvium	Upper Sand
10/15/2003	BW-3B	6/7/2011	2.00	2.00	6,878.79	6,876.16	6,878.79	6,878.59	North edge PVC casing	3.15	2.43	6,803.79	6,809.19	75.00	69.40	63 - 73	Chinle/alluvium	Chinle/Alluvium Interface
7/20/2004	BW-3C	6/7/2011	2.00	2.00	6,878.08	6,875.72	6,878.08	6,877.95	North edge PVC casing	2.69	2.23	6,723.08	6,723.40	155.00	154.55	144.5 - 154.5	Sonsela sandstone	Sonsela
1/5/1981	OW-1	6/7/2011	4.00	4.00	6,868.00	6,866.32	6,868.45	6866.62[10]	North edge PVC casing*	1.92	0.30[10]	6,773.96	6,772.07	94.04	94.55	89.3 - 99.3	Sonsela sandstone	Sonsela
11/25/1980	OW-10	6/7/2011	4.00	4.00	6,872.00	6,873.67	6,875.12	6,874.91	North edge PVC casing	1.59	1.24	6,804.00	6,814.58	68.00	60.33	40 - 60	Chinle/alluvium	Sonsela
9/25/1981	OW-11	6/7/2011	4.00	4.00	6,923.89	6,922.05	6,923.51	6,923.51	North edge PVC casing	2.08	1.46	6,857.27	6,857.72	66.62	65.79	43 - 65	Chinle/alluvium	Sonsela
12/15/1980	OW-12	6/7/2011	4.00	4.00	6,940.43	6,939.57	6,940.43	6,940.69	North edge PVC casing	1.88	1.12	6,795.43	6,811.84	145.00	128.85	117.8 - 137.8	Sonsela sandstone	Sonsela
12/10/1980	OW-13	6/7/2011	4.00	4.00	6,920.12	6,918.95	6,920.12	6,920.07	North edge PVC casing	4.79	1.12	6,820.12	6,820.92	100.00	99.15	78.2 - 98.2	Sonsela sandstone	Sonsela
12/17/1980	OW-14	6/7/2011	4.00	4.00	6,926.64	6,924.55	6,926.64	6,926.65	North edge PVC casing	2.25	2.10	6,881.64	6,880.13	45.00	46.52	35 - 45	Chinle/alluvium	Chinle/Alluvium Interface
8/23/1996	OW-29	6/7/2011	4.00	4.00	6,913.50	6,913.89	6,913.50	6,917.00	North edge PVC casing	3.88	3.11	6,864.50	6,865.92	49.00	51.08	37.5 - 47.5	Chinle/alluvium	Chinle/Alluvium Interface
8/28/1996	OW-30	6/7/2011	4.00	4.00	6,921.60	6,921.81	6,921.60	6,924.69	North edge PVC casing	4.85	2.88	6,873.20	6,874.79	48.40	49.90	37.9 - 47.9	Chinle/alluvium	Chinle/Alluvium Interface
10/5/2009	OW-50	6/7/2011	2.00	2.00	6,914.37	6,912.63	6,914.37	6,914.21	North edge PVC casing	2.71	1.58	6,977.37	6,850.21	63.00	64.00	48 - 63	Chinle/alluvium	Chinle/Alluvium Interface
10/5/2009	OW-52	6/7/2011	2.00	2.00	6,906.26	6,906.53	6,907.68	6,907.68	North edge PVC casing	2.21	1.15	6,985.26	6,829.94	79.00	77.74	64 - 79	Chinle/alluvium	Chinle/Alluvium Interface
10/14/1981	MW-1	6/7/2011	5.00	5.00	6,878.52	6,876.63	6,878.15	6,878.12	North edge PVC casing	1.25	1.49	6,746.50	6,747.29	132.02	130.83	117.72 - 127.72	Chinle/Alluvium	Sonsela
10/15/1981	MW-2	6/7/2011	5.00	5.00	6,878.40	6,878.39	6,880.84	6,880.30	North edge PVC casing	1.88	1.91	6,741.90	6,742.82	138.94	137.48	112 - 122	Chinle/alluvium	Sonsela
10/16/1981	MW-4	6/7/2011	5.00	5.00	6,882.54	6,879.89	6,882.20	6,881.63	North edge PVC casing	2.31	1.74	6,760.40	6,759.91	122.14	121.72	101 - 121	Sonsela sandstone	Sonsela
7/21/1986	MW-5	6/7/2011	4.00	4.00	6,883.32	6,880.20	6,882.93	6,882.83	North edge aluminum casing	2.02	2.63	6,750.30	6,752.00	133.02	130.83	115 - 125	Sonsela sandstone	Sonsela
3/28/1995	RW-1	6/7/2011	4.00	4.00	6,943.50	6,942.86	6,943.50	6,946.06	North edge PVC casing	4.42	3.20	6,900.50	6,903.02	43.00	43.04	25 - 40	Chinle/alluvium	Chinle/Alluvium Interface
3/29/1995	RW-2	6/7/2011	4.00	4.00	6,927.20	6,926.40	6,927.20	6,928.53	North edge PVC casing	3.58	2.13	6,889.20	6,888.73	38.00	39.80	26.1 - 36.1	Chinle/alluvium	Chinle/Alluvium Interface
8/27/1997	RW-5	6/7/2011	4.00	4.00	6,942.50	6,941.53	6,942.50	6,943.57	West Edge PVC Casing (Existing Mark)	2.92	2.04	6,902.50	6,903.98	40.00	39.59	29.5 - 39.5	Chinle/alluvium	Chinle/Alluvium Interface
8/27/1997	RW-6	6/7/2011	4.00	4.00	6942.6[11]	6,941.96	6942.6[11]	6,944.01	North edge PVC casing	2.58	2.05	6,933.80	6,903.11	38.80	40.90	28.5 - 38.5	Chinle/alluvium	Chinle/Alluvium Interface
9/26/1985	SMW-2	6/7/2011	2.00	2.00	6,884.44	6,881.63	6,884.11	6,883.97	North edge aluminum casing	4.54	2.34	6,827.10	6,831.17	57.34	52.80	34.31 - 54.31	Chinle/alluvium	Chinle/Alluvium Interface and Upper Sand
9/25/1985	SMW-4	6/7/2011	2.00	2.00	6,882.54	6,877.63	6,882.73	6,879.52	North edge aluminum casing	3.83	1.89	6,760.40	6,809.84	122.14	69.68	51.7 - 71.7	Chinle/alluvium	Chinle/Alluvium Interface

2011 CORRECTED WELL ELEVATION SUMMARY TABLE
Revision 3 - June 12, 2012

Date of Installation	Well ID Number	2011 Survey Measurement date[1]	Previous Casing Diameter (Inch)	2011 Verified Casing Diameter[2] (Inch)	Previous Ground Level Elevation (feet)	2011 Survey Ground Level Elevation[1] (feet)	Previous Well Casing Rim Elevation (feet)	2011 Survey Well Casing Rim Elevation[1] (feet)	2011 Measuring Point Description[1]	Previous Stick-up length[3] (feet)	2011 Survey Stick up Length[4] (feet)	Previous Well Casing Bottom Elevation (feet)	2011 Survey Well Casing Bottom Elevation[5] (feet)	Previous Total Well Depth (feet)	2011 Survey Total Well Depth[6] (feet)	Screened Interval Depth Top to Bottom[7] (feet)	Previous Stratigraphic unit in which screen exists	2012 Re-Evaluated Stratigraphic unit in which screen exists[8]
7/8/2004	GWM-1	6/7/2011	2.00	2.00	6,912.65	6,910.22	6,912.65	6,912.61	North edge PVC casing	3.88	2.39	6,888.95	6,886.41	23.70	26.20	17.5 - 23.5	Chinle/alluvium	Chinle/Alluvium Interface
9/25/2005	GWM-2	6/7/2011	2.00	2.00	6,913.17	6,910.32	6,913.17	6,913.09	North edge PVC casing	4.75	2.77	6,896.97	6,894.28	18.97	18.81	3.2 - 16.2	Chinle/alluvium	Chinle/Alluvium Interface
9/25/2005	GWM-3	6/7/2011	2.00	2.00	6,912.65	6,907.35	6,912.65	6,910.25	North edge PVC casing	4.85	2.90	6,896.15	6,892.45	17.94	17.80	3 - 15	Chinle/alluvium	Chinle/Alluvium Interface
3/14/2008	NAPIS-1	6/7/2011	2.00	2.00	6,918.43	6,913.62	6,918.43	6,913.86	North edge PVC casing	0.29	0.24	6,904.40	6,900.33	14.00	13.53	3.7 - 13.7	Chinle/alluvium	Chinle/Alluvium Interface
3/14/2008	NAPIS-2	6/7/2011	2.00	2.00	6,917.27	6,913.40	6,917.27	6,912.65	North edge PVC casing	0.10	-0.75	6,902.80	6,899.04	14.50	13.61	4.2 - 14.2	Chinle/alluvium	Chinle/Alluvium Interface
3/14/2008	NAPIS-3	6/7/2011	2.00	2.00	6,917.31	6,913.38	6,917.31	6,912.76	North edge PVC casing	0.29	-0.62	6,886.60	6,882.34	30.70	30.42	25.4 - 30.4	Chinle/alluvium	Chinle/Alluvium Interface
6/11/2007	KA-3	6/7/2011	2.00	2.00	6,917.17	6,913.29	6,917.17	6,912.52	North edge PVC casing	0.17	-0.77	6,892.40	6,889.32	25.00	23.20	15 - 25	Chinle/alluvium	Chinle/Alluvium Interface

NOTES:

1) Surveyed by DePauli Engineering & Surveying, LLC on June 7, 2011 at request of NMED due to discrepancies on well casing and ground level elevations.
2) Field verified using a tape measure by Gallup Refinery field technician.
3) Original measurements were given in inches and converted to feet by dividing by 12.
4) Stick up length is determined by subtracting 2011 Survey Ground Level Elevation from 2011 Survey Well Casing Rim Elevation.
5) 2011 Survey Well Casing Bottom Elevation is determined by subtracting the 2011 Survey Well Casing Rim Elevation from the 2011 Survey Total Well Depth Measurement.
6) Total well depth was determined using a bottom sensing meter, Testwell Water level meter with bottom sensing indicator.
7) Screened interval for each well was verfied to the well boring logs. Settlement may have occurred since installation of well which is why total well depth is higher or equal to the screened interval levels.
8) Stratigraphic interpretation conducted by Peregrine Geoconnect to re-evaluate the named zones they produce water from. Tables were updated to reflect correct stratigraphic zone.
9) BW-1B 2011 Survey Ground Level Elevation is to the lowest concrete pad elevation surrounding the well.
10) OW-1 original stick up length was measured to the top of the pvc casing which is connected to the well shroud with a rubber coupling. 2011 survey measurement was taken to the top segment of pvc casing not connected to the rubber coupling. (Coupling is where elevation is referenced)
11) RW-6 elevation data was originally entered incorrectly as 6972.6 feet. Correct elevation is 6942.6 feet.
12) NAPIS 2, 3 and 4 well shroud is located below ground level therefore values entered in "2011 Survey Stick-Up Length (feet)" indicate a negative value.
13) Previous measurements and elevations are from the Well Data Summary Table from the 2009 Annual Ground Water Monitoring Report.

2011 Quarterly/Annual DTW Measurements

Date of Installation	Well ID Number	Measurement date	Casing Diameter (Inch)	A Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Ground Elevation Inside Steel Sleeve (ft)	Stick-up length (ft)	Well Casing Bottom Elevations (ft)	Total Well Depth (ft)	A Depth to SPH (ft)	B SPH Thickness (ft)	C Depth to Water (ft)	D = A-C Ground water Elevation (ft)	= 0.8 B + D Corrected Water Table Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists	Purge Volume = 3 Well Vol (gal)
11/10/2003	BW-1A	10/28/2011	2.00	6,874.10	6,876.68	6,872.30	4.38	6,839.06	37.62	N/A	N/A	0.00	DRY	N/A	30 - 35	Chinle/alluvium	N/A
10/28/2003	BW-1B	10/28/2011	2.00	6,874.13	6,876.94	6,876.26	0.68	6,809.49	67.45	N/A	N/A	0.00	DRY	N/A	54.6 - 64.6	Chinle/alluvium	N/A
11/10/2003	BW-1C	10/28/2011	2.00	6,873.95	6,876.78	6,872.28	4.50	6,740.39	136.39	N/A	N/A	6.11	6,870.67	N/A	125 -135	Sonsela sandstone	63.66
11/10/2003	BW-2A	10/28/2011	2.00	6,871.88	6,874.69	6,870.45	4.24	6,807.12	67.57	N/A	N/A	32.16	6,842.53	N/A	55 - 65	Chinle/alluvium	17.32
10/28/2003	BW-2B	10/28/2011	2.00	6,871.66	6,874.50	6,870.06	4.44	6,782.24	92.26	N/A	N/A	27.56	6,846.94	N/A	80 - 90	Sonsela sandstone	31.64
10/28/2003	BW-2C	10/28/2011	2.00	6,872.90	6,875.30	6,872.02	3.28	6,722.46	152.84	N/A	N/A	20.18	6,855.12	N/A	139.5 - 149.5	Sonsela sandstone	64.87
6/15/2004	BW-3A	10/28/2011	2.00	6,875.94	6,878.39	6,875.08	3.31	6,826.04	52.35	N/A	N/A	0.00	6,878.39	N/A	39.5 - 49.5	Chinle/alluvium	N/A
10/15/2003	BW-3B	10/28/2011	2.00	6,876.16	6,878.59	6,875.41	3.18	6,809.19	69.40	N/A	N/A	32.10	6,846.49	N/A	63 - 73	Chinle/alluvium	18.24
7/20/2004	BW-3C	10/28/2011	2.00	6,875.72	6,877.95	6,875.27	2.68	6,723.40	154.55	N/A	N/A	7.62	6,870.33	N/A	144.5 - 154.5	Sonsela sandstone	71.8
9/25/1981	OW-11	10/26/2011	4.00	6,922.05	6,923.51	6,921.80	1.71	6,857.72	65.79	N/A	N/A	20.83	6,902.68	N/A	43 - 65	Chinle/alluvium	99.81
12/15/1980	OW-12	10/26/2011	4.00	6,939.57	6,940.69	6,939.04	1.65	6,811.84	128.85	N/A	N/A	48.00	6,892.69	N/A	117.8 - 137.8	Sonsela sandstone	179.49
10/14/1981	MW-1	10/6/2011	5.00	6,876.63	6,878.12	6,876.79	1.33	6,747.29	130.83	N/A	N/A	6.79	6,871.33	N/A	117.72 - 127.72	Chinle/alluvium	379.56
10/15/1981	MW-2	10/10/2011	5.00	6,878.39	6,880.30	6,878.41	1.89	6,742.82	137.48	N/A	N/A	8.80	6,871.50	N/A	112 - 122	Chinle/alluvium	393.76
10/16/1981	MW-4	10/12/2011	5.00	6,879.89	6,881.63	6,879.34	2.29	6,759.91	121.72	N/A	N/A	7.72	6,873.91	N/A	101 - 121	Sonsela sandstone	348.84
7/21/1986	MW-5	10/10/2011	4.00	6,880.20	6,882.83	6,881.77	1.06	6,752.00	130.83	N/A	N/A	14.52	6,868.31	N/A	115 - 125	Sonsela sandstone	258.21
9/26/1985	SMW-2	10/12/2011	2.00	6,881.63	6,883.97	6,879.07	4.90	6,831.17	52.80	N/A	N/A	25.58	6,858.39	N/A	34.31 - 54.31	Chinle/alluvium	13.31
9/25/1985	SMW-4	10/10/2011	2.00	6,877.63	6,879.52	6,875.72	3.80	6,809.84	69.68	N/A	N/A	29.33	6,850.19	N/A	51.7 - 71.7	Chinle/alluvium	19.73
1/5/1981	OW-1	12/15/2011	4.00	6,866.32	6,866.62	6,866.44	0.18	6,772.07	94.55	N/A	N/A	3.48	6,863.14	N/A	89.3 - 99.3	Sonsela sandstone	178
		10/13/2011	4.00	6,866.32	6,866.62	6,866.44	0.18	6,772.07	94.55	N/A	N/A	0.00	6,866.62	N/A	89.3 - 99.3	Sonsela sandstone	209.52
		10/26/2011	4.00	6,866.32	6,866.62	6,866.44	0.18	6,772.07	94.55	N/A	N/A	0.17	6,866.45	N/A	89.3 - 99.3	Sonsela sandstone	209.52
		6/20/2011	4.00	6,866.32	6,866.62	6,866.44	0.18	6,772.07	94.55	N/A	N/A	1.90	6,864.72	N/A	89.3 - 99.3	Sonsela sandstone	204.55
		2/28/2011	4.00	6,866.32	6,866.62	6,866.44	0.18	6,772.07	94.55	N/A	N/A	1.84	6,864.78	N/A	89.3 - 99.3	Sonsela sandstone	204.68

9.2 - 2011 DTW Summary Table

Date of Installation	Well ID Number	Measurement date	Casing Diameter (Inch)	A Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Ground Elevation Inside Steel Sleeve (ft)	Stick-up length (ft)	Well Casing Bottom Elevations (ft)	Total Well Depth (ft)	A Depth to SPH (ft)	B SPH Thickness (ft)	C Depth to Water (ft)	D = A-C Ground water Elevation (ft)	= 0.8 B + D Corrected Water Table Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists	Purge Volume = 3 Well Vol (gal)
11/25/1980	OW-10	12/15/2011	4.00	6,873.67	6,874.91	6,872.59	2.32	6,814.58	60.33	N/A	N/A	0.78	6,874.13	N/A	40 - 60	Chinle/alluvium	116
		10/13/2011	4.00	6,873.67	6,874.91	6,872.59	2.32	6,814.58	60.33	N/A	N/A	0.19	6,874.72	N/A	40 - 60	Chinle/alluvium	133.51
		10/26/2011	4.00	6,873.67	6,874.91	6,872.59	2.32	6,814.58	60.33	N/A	N/A	0.42	6,874.49	N/A	40 - 60	Chinle/alluvium	133
		6/20/2011	4.00	6,873.67	6,874.91	6,872.59	2.32	6,814.58	60.33	N/A	N/A	1.40	6,873.51	N/A	40 - 60	Chinle/alluvium	147.85
		2/28/2011	4.00	6,873.67	6,874.91	6,872.59	2.32	6,814.58	60.33	N/A	N/A	0.35	6,874.56	N/A	40 - 60	Chinle/alluvium	150.18
12/10/1980	OW-13	12/13/2011	4.00	6,918.95	6,920.07	6,915.33	4.74	6,820.92	99.15	N/A	N/A	23.00	6,897.07	N/A	78.2 - 98.2	Sonsela sandstone	150
		10/25/2011	4.00	6,918.95	6,920.07	6,915.33	4.74	6,820.92	99.15	N/A	N/A	23.14	6,896.93	N/A	78.2 - 98.2	Sonsela sandstone	168.74
		6/20/2011	4.00	6,918.95	6,920.07	6,915.33	4.74	6,820.92	99.15	N/A	N/A	23.19	6,896.88	N/A	78.2 - 98.2	Sonsela sandstone	170.52
		2/24/2011	4.00	6,918.95	6,920.07	6,915.33	4.74	6,820.92	99.15	N/A	N/A	23.32	6,896.75	N/A	78.2 - 98.2	Sonsela sandstone	170.23
12/17/1980	OW-14	12/13/2011	4.00	6,924.55	6,926.65	6,924.40	2.25	6,880.13	46.52	N/A	N/A	25.19	6,901.46	N/A	35 - 45	Chinle/alluvium	42
		10/24/2011	4.00	6,924.55	6,926.65	6,924.40	2.25	6,880.13	46.52	N/A	N/A	25.38	6,901.27	N/A	35 - 45	Chinle/alluvium	46.93
		6/20/2011	4.00	6,924.55	6,926.65	6,924.40	2.25	6,880.13	46.52	N/A	N/A	25.45	6,901.20	N/A	35 - 45	Chinle/alluvium	43.4
		2/24/2011	4.00	6,924.55	6,926.65	6,924.40	2.25	6,880.13	46.52	N/A	N/A	25.69	6,900.96	N/A	35 - 45	Chinle/alluvium	42.87
8/23/1996	OW-29	12/13/2011	4.00	6,913.89	6,917.00	6,912.09	4.91	6,865.92	51.08	N/A	N/A	20.00	6,897.00	N/A	37.5 - 47.5	Chinle/alluvium	61
		10/24/2011	4.00	6,913.89	6,917.00	6,912.09	4.91	6,865.92	51.08	N/A	N/A	20.06	6,896.94	N/A	37.5 - 47.5	Chinle/alluvium	68.4
		6/20/2011	4.00	6,913.89	6,917.00	6,912.09	4.91	6,865.92	51.08	N/A	N/A	20.44	6,896.56	N/A	37.5 - 47.5	Chinle/alluvium	63.4
		2/24/2011	4.00	6,913.89	6,917.00	6,912.09	4.91	6,865.92	51.08	N/A	N/A	20.49	6,896.51	N/A	37.5 - 47.5	Chinle/alluvium	69.95
8/28/1996	OW-30	12/15/2011	4.00	6,921.81	6,924.69	6,919.84	4.85	6,874.79	49.90	N/A	N/A	24.64	6,900.05	N/A	37.9 - 47.9	Chinle/alluvium	50
		10/24/2011	4.00	6,921.81	6,924.69	6,919.84	4.85	6,874.79	49.90	N/A	N/A	24.70	6,899.99	N/A	37.9 - 47.9	Chinle/alluvium	55.94
		6/20/2011	4.00	6,921.81	6,924.69	6,919.84	4.85	6,874.79	49.90	N/A	N/A	24.80	6,899.89	N/A	37.9 - 47.9	Chinle/alluvium	52.39
		2/24/2011	4.00	6,921.81	6,924.69	6,919.84	4.85	6,874.79	49.90	N/A	N/A	24.91	6,899.78	N/A	37.9 - 47.9	Chinle/alluvium	52.15
10/5/2009	OW-50[3]	12/15/2011	2.00	6,912.63	6,914.21	6,911.46	2.75	6,850.21	64.00	N/A	N/A	17.30	6,896.91	N/A	48 - 63	Chinle/alluvium	23
		10/25/2011	2.00	6,912.63	6,914.21	6,911.46	2.75	6,850.21	64.00	N/A	N/A	17.51	6,896.70	N/A	48 - 63	Chinle/alluvium	22.73
		6/20/2011	2.00	6,912.63	6,914.21	6,911.46	2.75	6,850.21	64.00	N/A	N/A	17.61	6,896.60	N/A	48 - 63	Chinle/alluvium	22.2
		3/1/2011	2.00	6,912.63	6,914.21	6,911.46	2.75	6,850.21	64.00	N/A	N/A	17.61	6,896.60	N/A	48 - 63	Chinle/alluvium	22.2

9.2 - 2011 DTW Summary Table

Date of Installation	Well ID Number	Measurement date	Casing Diameter (Inch)	A Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Ground Elevation Inside Steel Sleeve (ft)	Stick-up length (ft)	Well Casing Bottom Elevations (ft)	Total Well Depth (ft)	A Depth to SPH (ft)	B SPH Thickness (ft)	C Depth to Water (ft)	D = A-C Ground water Elevation (ft)	= 0.8 B + D Corrected Water Table Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists	Purge Volume = 3 Well Vol (gal)
10/5/2009	OW-52[3]	12/13/2011	2.00	6,906.53	6,907.68	6,905.31	2.37	6,829.94	77.74	N/A	N/A	15.90	6,891.78	N/A	64 - 79	Chinle/alluvium	30
		10/25/2011	2.00	6,906.53	6,907.68	6,905.31	2.37	6,829.94	77.74	N/A	N/A	16.14	6,891.54	N/A	64 - 79	Chinle/alluvium	30.12
		6/20/2011	2.00	6,906.53	6,907.68	6,905.31	2.37	6,829.94	77.74	N/A	N/A	16.09	6,891.59	N/A	64 - 79	Chinle/alluvium	30.76
		3/1/2011	2.00	6,906.53	6,907.68	6,905.31	2.37	6,829.94	77.74	N/A	N/A	16.18	6,891.50	N/A	64 - 79	Chinle/alluvium	30.72
7/8/2004	GWM-1	12/14/2011	2.00	6,910.22	6,912.61	6,908.36	4.25	6,886.41	26.20	N/A	N/A	16.08	6,896.53	N/A	17.5 - 23.5	Chinle/alluvium	4.9
		9/26/2011	2.00	6,910.22	6,912.61	6,908.36	4.25	6,886.41	26.20	N/A	N/A	16.42	6,896.19	N/A	17.5 - 23.5	Chinle/alluvium	4.78
		6/15/2011	2.00	6,910.22	6,912.61	6,908.36	4.25	6,886.41	26.20	N/A	N/A	15.82	6,896.79	N/A	17.5 - 23.5	Chinle/alluvium	3.84
		2/16/2011	2.00	6,910.22	6,912.61	6,908.36	4.25	6,886.41	26.20	N/A	N/A	15.99	6,896.62	N/A	17.5 - 23.5	Chinle/alluvium	3.16
9/25/2005	GWM-2	12/14/2011	2.00	6,910.32	6,913.09	6,908.05	5.04	6,894.28	18.81	N/A	N/A	15.40	6,897.69	N/A	3.2 - 16.2	Chinle/alluvium	1.6
		9/26/2011	2.00	6,910.32	6,913.09	6,908.05	5.04	6,894.28	18.81	N/A	N/A	15.89	6,897.20	N/A	3.2 - 16.2	Chinle/alluvium	1.51
		6/15/2011	2.00	6,910.32	6,913.09	6,908.05	5.04	6,894.28	18.81	N/A	N/A	15.02	6,898.07	N/A	3.2 - 16.2	Chinle/alluvium	1.93
		2/16/2011	2.00	6,910.32	6,913.09	6,908.05	5.04	6,894.28	18.81	N/A	N/A	15.08	6,898.01	N/A	3.2 - 16.2	Chinle/alluvium	0.7
9/25/2005	GWM-3	12/14/2011	2.00	6,907.35	6,910.25	6,905.48	4.77	6,892.45	17.80	N/A	N/A	14.35	6,895.90	N/A	3 - 15	Chinle/alluvium	1.7
		9/26/2011	2.00	6,907.35	6,910.25	6,905.48	4.77	6,892.45	17.80	N/A	N/A	15.64	6,894.61	N/A	3 - 15	Chinle/alluvium	3.94
		6/15/2011	2.00	6,907.35	6,910.25	6,905.48	4.77	6,892.45	17.80	N/A	N/A	14.20	6,896.05	N/A	3 - 15	Chinle/alluvium	1.82
		2/16/2011	2.00	6,907.35	6,910.25	6,905.48	4.77	6,892.45	17.80	N/A	N/A	12.84	6,897.41	N/A	3 - 15	Chinle/alluvium	0.46
3/14/2008	NAPIS-1	12/14/2011	2.00	6,913.62	6,913.86	6,913.56	0.30	6,900.33	13.53	N/A	N/A	7.45	6,906.41	N/A	3.7 - 13.7	Chinle/alluvium	3
		9/27/2011	2.00	6,913.62	6,913.86	6,913.56	0.30	6,900.33	13.53	N/A	N/A	7.30	6,906.56	N/A	3.7 - 13.7	Chinle/alluvium	3.05
		6/15/2011	2.00	6,913.62	6,913.86	6,913.56	0.30	6,900.33	13.53	N/A	N/A	7.96	6,905.90	N/A	3.7 - 13.7	Chinle/alluvium	2.95
		3/2/2011	2.00	6,913.62	6,913.86	6,913.56	0.30	6,900.33	13.53	N/A	N/A	7.47	6,906.39	N/A	3.7 - 13.7	Chinle/alluvium	3.19
3/14/2008	NAPIS-2	12/14/2011	2.00	6,913.40	6,912.65	6,912.54	0.11	6,899.04	13.61	N/A	N/A	8.20	6,904.45	N/A	4.2 - 14.2	Chinle/alluvium	2.6
		9/27/2011	2.00	6,913.40	6,912.65	6,912.54	0.11	6,899.04	13.61	N/A	N/A	8.18	6,904.47	N/A	4.2 - 14.2	Chinle/alluvium	2.66
		6/15/2011	2.00	6,913.40	6,912.65	6,912.54	0.11	6,899.04	13.61	N/A	N/A	8.67	6,903.98	N/A	4.2 - 14.2	Chinle/alluvium	2.85
		3/2/2011	2.00	6,913.40	6,912.65	6,912.54	0.11	6,899.04	13.61	N/A	N/A	9.14	6,903.51	N/A	4.2 - 14.2	Chinle/alluvium	2.62

9.2 - 2011 DTW Summary Table

Date of Installation	Well ID Number	Measurement date	Casing Diameter (Inch)	A Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Ground Elevation Inside Steel Sleeve (ft)	Stick-up length (ft)	Well Casing Bottom Elevations (ft)	Total Well Depth (ft)	A Depth to SPH (ft)	B SPH Thickness (ft)	C Depth to Water (ft)	D = A-C Ground water Elevation (ft)	= 0.8 B + D Corrected Water Table Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists	Purge Volume = 3 Well Vol (gal)
3/14/2008	NAPIS-3	12/14/2011	2.00	6,913.38	6,912.76	6,912.53	0.23	6,882.34	30.42	N/A	N/A	8.30	6,904.46	N/A	25.4 - 30-4	Chinle/alluvium	11
		9/27/2011	2.00	6,913.38	6,912.76	6,912.53	0.23	6,882.34	30.42	N/A	N/A	7.74	6,905.02	N/A	25.4 - 30-4	Chinle/alluvium	11.09
		6/15/2011	2.00	6,913.38	6,912.76	6,912.53	0.23	6,882.34	30.42	N/A	N/A	7.89	6,904.87	N/A	25.4 - 30-4	Chinle/alluvium	11.15
		3/2/2011	2.00	6,913.38	6,912.76	6,912.53	0.23	6,882.34	30.42	N/A	N/A	8.11	6,904.65	N/A	25.4 - 30-4	Chinle/alluvium	11.05
6/11/2007	KA-3	12/14/2011	2.00	6,913.29	6,912.52	6,912.20	0.32	6,889.32	23.20	N/A	N/A	8.08	6,904.44	N/A	15 - 25	Chinle/alluvium	7.25
		9/27/2011	2.00	6,913.29	6,912.52	6,912.20	0.32	6,889.32	23.20	N/A	N/A	8.11	6,904.41	N/A	15 - 25	Chinle/alluvium	7.38
		6/15/2011	2.00	6,913.29	6,912.52	6,912.20	0.32	6,889.32	23.20	N/A	N/A	8.44	6,904.08	N/A	15 - 25	Chinle/alluvium	8.1
		3/2/2011	2.00	6,913.29	6,912.52	6,912.20	0.32	6,889.32	23.20	N/A	N/A	8.51	6,904.01	N/A	15 - 25	Chinle/alluvium	8.06
3/28/1995	RW-1	11/28/2011	4.00	6,942.86	6,946.06	6,941.25	4.81	6,903.02	43.04	30.77	0.08	30.85	6,915.21	6915.274	25 - 40	Chinle/alluvium	NA
		10/3/2011	4.00	6,942.86	6,946.06	6,941.25	4.81	6,903.02	43.04	30.81	0.09	30.90	6,915.16	6915.232	25 - 40	Chinle/alluvium	NA
		6/27/2011	4.00	6,942.86	6,946.06	6,941.25	4.81	6,903.02	43.04	30.52	0.11	30.63	6,915.43	6915.518	25 - 40	Chinle/alluvium	NA
		3/9/2011	4.00	6,942.86	6,946.06	6,941.25	4.81	6,903.02	43.04	30.04	0.11	30.15	6,915.91	6915.998	25 - 40	Chinle/alluvium	NA
3/29/1995	RW-2	11/28/2011	4.00	6,926.40	6,928.53	6,925.02	3.51	6,888.73	39.80	0.00	0.00	31.65	6,896.88	6896.88	26.1 - 36.1	Chinle/alluvium	NA
		10/3/2011	4.00	6,926.40	6,928.53	6,925.02	3.51	6,888.73	39.80	0.00	0.00	25.36	6,903.17	6903.17	26.1 - 36.1	Chinle/alluvium	NA
		6/27/2011	4.00	6,926.40	6,928.53	6,925.02	3.51	6,888.73	39.80	0.00	0.00	26.71	6,901.82	6901.82	26.1 - 36.1	Chinle/alluvium	NA
		3/9/2011	4.00	6,926.40	6,928.53	6,925.02	3.51	6,888.73	39.80	0.00	0.00	25.68	6,902.85	6902.85	26.1 - 36.1	Chinle/alluvium	NA
8/27/1997	RW-5	11/28/2011	4.00	6,941.53	6,943.57	6,940.82	2.75	6,903.98	39.59	0.00	29.85	29.85	6,913.72	6937.6	29.5 - 39.5	Chinle/alluvium	NA
		10/3/2011	4.00	6,941.53	6,943.57	6,940.82	2.75	6,903.98	39.59	0.00	0.00	29.89	6,913.68	6913.68	29.5 - 39.5	Chinle/alluvium	NA
		6/27/2011	4.00	6,941.53	6,943.57	6,940.82	2.75	6,903.98	39.59	0.00	30.11	30.11	6,913.46	6937.548	29.5 - 39.5	Chinle/alluvium	NA
		3/9/2011	4.00	6,941.53	6,943.57	6,940.82	2.75	6,903.98	39.59	0.00	0.00	30.05	6,913.52	6913.52	29.5 - 39.5	Chinle/alluvium	NA
8/27/1997	RW-6	11/28/2011	4.00	6,941.96	6,944.01	6,941.49	2.52	6,903.11	40.90	29.90	0.03	29.93	6,914.08	6914.104	28.5 - 38.5	Chinle/alluvium	NA
		10/4/2011	4.00	6,941.96	6,944.01	6,941.49	2.52	6,903.11	40.90	29.91	0.03	29.94	6,914.07	6914.094	28.5 - 38.5	Chinle/alluvium	NA
		6/27/2011	4.00	6,941.96	6,944.01	6,941.49	2.52	6,903.11	40.90	30.11	0.04	30.15	6,913.86	6913.892	28.5 - 38.5	Chinle/alluvium	NA
		3/9/2011	4.00	6,941.96	6,944.01	6,941.49	2.52	6,903.11	40.90	30.24	0.02	30.26	6,913.75	6913.766	28.5 - 38.5	Chinle/alluvium	NA

NOTES:
DTB - Depth to Bottom
DTW - Depth to Water
SPH = Separate Phase Hydrocarbons
Corrected water table elevations are only provided if SPH was detected.
Total well depth re-measured on 9-19-11.

2011 CORRECTED WELL ELEVATION SUMMARY TABLE

Revision 4 - September 26, 2012

Date of Installation	Well ID Number	2011 Survey Measurement date[1]	Previous Casing Diameter (Inch)	2011 Verified Casing Diameter[2] (Inch)	Previous Ground Level Elevation (feet)	2011 Survey Ground Level Elevation[1] (feet)	Previous Well Casing Rim Elevation (feet)	2011 Survey Well Casing Rim Elevation[1] (feet)	2011 Measuring Point Description[1]	Previous Stick-up length[3] (feet)	2011 Survey Stick up Length[4] (feet)	Previous Well Casing Bottom Elevation (feet)	2011 Survey Well Casing Bottom Elevation[5] (feet)	Previous Total Well Depth (feet)	2011 Survey Total Well Depth[6] (feet)	Screened Interval Depth Top to Bottom[7] (feet)	Previous Stratigraphic unit in which screen exists	2012 Re-Evaluated Stratigraphic unit in which screen exists[8]
11/10/2003	BW-1A	6/7/2011	2.00	2.00	6,876.73	6,874.10	6,876.73	6,876.68	North edge PVC casing	4.38	2.58	6,836.73	6,839.06	40.00	37.62	30 - 35	Chinle/Alluvium	Upper Sand
10/28/2003	BW-1B	6/7/2011	2.00	2.00	6,876.91	6874.13[9]	6,876.91	6,876.94	North edge PVC casing	2.39	2.81	6,811.71	6,809.49	67.55	67.45	54.6 - 64.6	Chinle/Alluvium	Chinle/Alluvium Interface
11/10/2003	BW-1C	6/7/2011	2.00	2.00	6,876.75	6,873.95	6,876.75	6,876.78	North edge PVC casing	4.52	2.83	6,719.75	6,740.39	157.00	136.39	125 -135	Sonsela Sandstone	Sonsela
11/10/2003	BW-2A	6/7/2011	2.00	2.00	6,874.72	6,871.88	6,874.72	6,874.69	North edge PVC casing	4.27	2.81	6,809.22	6,807.12	65.50	67.57	55 - 65	Chinle/Alluvium	Upper Sand
10/28/2003	BW-2B	6/7/2011	2.00	2.00	6,874.58	6,871.66	6,874.58	6,874.50	North edge PVC casing	4.50	2.84	6,784.08	6,782.24	90.50	92.26	80 - 90	Sonsela sandstone	Chinle/Alluvium Interface
10/28/2003	BW-2C	6/7/2011	2.00	2.00	6,875.40	6,872.90	6,875.40	6,875.30	North edge PVC casing	2.98	2.40	6,724.40	6,722.46	151.00	152.84	139.5 - 149.5	Sonsela sandstone	Sonsela
6/15/2004	BW-3A	6/7/2011	2.00	2.00	6,878.22	6,875.94	6,878.22	6,878.39	North edge PVC casing	3.00	2.45	6,828.22	6,826.04	52.60	52.35	39.5 - 49.5	Chinle/alluvium	Upper Sand
10/15/2003	BW-3B	6/7/2011	2.00	2.00	6,878.79	6,876.16	6,878.79	6,878.59	North edge PVC casing	3.15	2.43	6,803.79	6,809.19	75.00	69.40	63 - 73	Chinle/alluvium	Chinle/Alluvium Interface
7/20/2004	BW-3C	6/7/2011	2.00	2.00	6,878.08	6,875.72	6,878.08	6,877.95	North edge PVC casing	2.69	2.23	6,723.08	6,723.40	155.00	154.55	144.5 - 154.5	Sonsela sandstone	Sonsela
1/5/1981	OW-1	6/7/2011	4.00	4.00	6,868.00	6,866.32	6,868.45	6866.62[10]	North edge PVC casing	1.92	0.30[10]	6,773.96	6,772.07	94.04	94.55	89.3 - 99.3	Sonsela sandstone	Sonsela
11/25/1980	OW-10	6/7/2011	4.00	4.00	6,872.00	6,873.67	6,875.12	6,874.91	North edge PVC casing	1.59	1.24	6,804.00	6,814.58	68.00	60.33	40 - 60	Chinle/alluvium	Sonsela
9/25/1981	OW-11	6/7/2011	4.00	4.00	6,923.89	6,922.05	6,923.51	6,923.51	North edge PVC casing	2.08	1.46	6,857.27	6,857.72	66.62	65.79	43 - 65	Chinle/alluvium	Sonsela
12/15/1980	OW-12	6/7/2011	4.00	4.00	6,940.43	6,939.57	6,940.43	6,940.69	North edge PVC casing	1.88	1.12	6,795.43	6,811.84	145.00	128.85	117.8 - 137.8	Sonsela sandstone	Sonsela
12/10/1980	OW-13	6/7/2011	4.00	4.00	6,920.12	6,918.95	6,920.12	6,920.07	North edge PVC casing	4.79	1.12	6,820.12	6,820.92	100.00	99.15	78.2 - 98.2	Sonsela sandstone	Sonsela
12/17/1980	OW-14	6/7/2011	4.00	4.00	6,926.64	6,924.55	6,926.64	6,926.65	North edge PVC casing	2.25	2.10	6,881.64	6,880.13	45.00	46.52	35 - 45	Chinle/alluvium	Chinle/Alluvium Interface
8/23/1996	OW-29	6/7/2011	4.00	4.00	6,913.50	6,913.89	6,913.50	6,917.00	North edge PVC casing	3.88	3.11	6,864.50	6,865.92	49.00	51.08	37.5 - 47.5	Chinle/alluvium	Chinle/Alluvium Interface
8/28/1996	OW-30	6/7/2011	4.00	4.00	6,921.60	6,921.81	6,921.60	6,924.69	North edge PVC casing	4.85	2.88	6,873.20	6,874.79	48.40	49.90	37.9 - 47.9	Chinle/alluvium	Chinle/Alluvium Interface
10/5/2009	OW-50	6/7/2011	2.00	2.00	6,914.37	6,912.63	6,914.37	6,914.21	North edge PVC casing	2.71	1.58	6,977.37	6,850.21	63.00	64.00	48 - 63	Chinle/alluvium	Chinle/Alluvium Interface
10/5/2009	OW-52	6/7/2011	2.00	2.00	6,906.26	6,906.53	6,907.68	6,907.68	North edge PVC casing	2.21	1.15	6,985.26	6,829.94	79.00	77.74	64 - 79	Chinle/alluvium	Chinle/Alluvium Interface
10/14/1981	MW-1	6/7/2011	5.00	5.00	6,878.52	6,876.63	6,878.15	6,878.12	North edge PVC casing	1.25	1.49	6,746.50	6,747.29	132.02	130.83	117.72 - 127.72	Chinle/Alluvium	Sonsela
10/15/1981	MW-2	6/7/2011	5.00	5.00	6,878.40	6,878.39	6,880.84	6,880.30	North edge PVC casing	1.88	1.91	6,741.90	6,742.82	138.94	137.48	112 - 122	Chinle/alluvium	Sonsela
10/16/1981	MW-4	6/7/2011	5.00	5.00	6,882.54	6,879.89	6,882.20	6,881.63	North edge PVC casing	2.31	1.74	6,760.40	6,759.91	122.14	121.72	101 - 121	Sonsela sandstone	Sonsela
7/21/1986	MW-5	6/7/2011	4.00	4.00	6,883.32	6,880.20	6,882.93	6,882.83	North edge aluminum casing	2.02	2.63	6,750.30	6,752.00	133.02	130.83	115 - 125	Sonsela sandstone	Sonsela
3/28/1995	RW-1	6/7/2011	4.00	4.00	6,943.50	6,942.86	6,943.50	6,946.06	North edge PVC casing	4.42	3.20	6,900.50	6,903.02	43.00	43.04	25 - 40	Chinle/alluvium	Chinle/Alluvium Interface
3/29/1995	RW-2	6/7/2011	4.00	4.00	6,927.20	6,926.40	6,927.20	6,928.53	North edge PVC casing	3.58	2.13	6,889.20	6,888.73	38.00	39.80	26.1 - 36.1	Chinle/alluvium	Chinle/Alluvium Interface
8/27/1997	RW-5	6/7/2011	4.00	4.00	6,942.50	6,941.53	6,942.50	6,943.57	West Edge PVC Casing (Existing Mark)	2.92	2.04	6,902.50	6,903.98	40.00	39.59	29.5 - 39.5	Chinle/alluvium	Chinle/Alluvium Interface
8/27/1997	RW-6	6/7/2011	4.00	4.00	6942.6[11]	6,941.96	6942.6[11]	6,944.01	North edge PVC casing	2.58	2.05	6,933.80	6,903.11	38.80	40.90	28.5 - 38.5	Chinle/alluvium	Chinle/Alluvium Interface
9/26/1985	SMW-2	6/7/2011	2.00	2.00	6,884.44	6,881.63	6,884.11	6,883.97	North edge aluminum casing	4.54	2.34	6,827.10	6,831.17	57.34	52.80	34.31 - 54.31	Chinle/alluvium	Chinle/Alluvium Interface and Upper Sand
9/25/1985	SMW-4	6/7/2011	2.00	2.00	6,882.54	6,877.63	6,882.73	6,879.52	North edge aluminum casing	3.83	1.89	6,760.40	6,809.84	122.14	69.68	51.7 - 71.7	Chinle/alluvium	Chinle/Alluvium Interface

2011 CORRECTED WELL ELEVATION SUMMARY TABLE
Revision 4 - September 26, 2012

Date of Installation	Well ID Number	2011 Survey Measurement date[1]	Previous Casing Diameter (Inch)	2011 Verified Casing Diameter[2] (Inch)	Previous Ground Level Elevation (feet)	2011 Survey Ground Level Elevation[1] (feet)	Previous Well Casing Rim Elevation (feet)	2011 Survey Well Casing Rim Elevation[1] (feet)	2011 Measuring Point Description[1]	Previous Stick-up length[3] (feet)	2011 Survey Stick up Length[4] (feet)	Previous Well Casing Bottom Elevation (feet)	2011 Survey Well Casing Bottom Elevation[5] (feet)	Previous Total Well Depth (feet)	2011 Survey Total Well Depth[6] (feet)	Screened Interval Depth Top to Bottom[7] (feet)	Previous Stratigraphic unit in which screen exists	2012 Re-Evaluated Stratigraphic unit in which screen exists[8]
7/8/2004	GWM-1	6/7/2011	2.00	2.00	6,912.65	6,910.22	6,912.65	6,912.61	North edge PVC casing	3.88	2.39	6,888.95	6,886.41	23.70	26.20	17.5 - 23.5	Chinle/alluvium	Chinle/Alluvium Interface
9/25/2005	GWM-2	6/7/2011	2.00	2.00	6,913.17	6,910.32	6,913.17	6,913.09	North edge PVC casing	4.75	2.77	6,896.97	6,894.28	18.97	18.81	3.2 - 16.2	Chinle/alluvium	Chinle/Alluvium Interface
9/25/2005	GWM-3	6/7/2011	2.00	2.00	6,912.65	6,907.35	6,912.65	6,910.25	North edge PVC casing	4.85	2.90	6,896.15	6,892.45	17.94	17.80	3 - 15	Chinle/alluvium	Chinle/Alluvium Interface
3/14/2008	NAPIS-1	6/7/2011	2.00	2.00	6,918.43	6,913.62	6,918.43	6,913.86	North edge PVC casing	0.29	0.24	6,904.40	6,900.33	14.00	13.53	3.7 - 13.7	Chinle/alluvium	Chinle/Alluvium Interface
3/14/2008	NAPIS-2	6/7/2011	2.00	2.00	6,917.27	6,913.40	6,917.27	6,912.65	North edge PVC casing	0.10	-0.75	6,902.80	6,899.04	14.50	13.61	4.2 - 14.2	Chinle/alluvium	Chinle/Alluvium Interface
3/14/2008	NAPIS-3	6/7/2011	2.00	2.00	6,917.31	6,913.38	6,917.31	6,912.76	North edge PVC casing	0.29	-0.62	6,886.60	6,882.34	30.70	30.42	25.4 - 30.4	Chinle/alluvium	Chinle/Alluvium Interface
6/11/2007	KA-3	6/7/2011	2.00	2.00	6,917.17	6,913.29	6,917.17	6,912.52	North edge PVC casing	0.17	-0.77	6,892.40	6,889.32	25.00	23.20	15 - 25	Chinle/alluvium	Chinle/Alluvium Interface

NOTES:

1) Surveyed by DePauli Engineering & Surveying, LLC on June 7, 2011 at request of NMED due to discrepancies on well casing and ground level elevations.
2) Field verified using a tape measure by Gallup Refinery field technician.
3) Original measurements were given in inches and converted to feet by dividing by 12.
4) Stick up length is determined by subtracting 2011 Survey Ground Level Elevation from 2011 Survey Well Casing Rim Elevation.
5) 2011 Survey Well Casing Bottom Elevation is determined by subtracting the 2011 Survey Well Casing Rim Elevation from the 2011 Survey Total Well Depth Measurement.
6) Total well depth was determined using a bottom sensing meter, Testwell Water level meter with bottom sensing indicator.
7) Screened interval for each well was verfied to the well boring logs. Settlement may have occurred since installation of well which is why total well depth is higher or equal to the screened interval levels.
8) Stratigraphic interpretation conducted by Peregrine Geoconnect to re-evaluate the named zones they produce water from. Tables were updated to reflect correct stratigraphic zone.
9) BW-1B 2011 Survey Ground Level Elevation is to the lowest concrete pad elevation surrounding the well.
10) OW-1 original stick up length was measured to the top of the pvc casing which is connected to the well shroud with a rubber coupling. 2011 survey measurement was taken to the top segment of pvc casing not connected to the rubber coupling. (Coupling is where elevation is referenced)
11) RW-6 elevation data was originally entered incorrectly as 6972.6 feet. Correct elevation is 6942.6 feet.
12) NAPIS 2, 3 and 4 well shroud is located below ground level therefore values entered in "2011 Survey Stick-Up Length (feet)" indicate a negative value.
13) Previous measurements and elevations are from the Well Data Summary Table from the 2009 Annual Ground Water Monitoring Report.

10.0 Monitoring Schedule

Table 1

Sampling Location ID	Frequency	Sample Date(s)	Inspection Date(s)	General Monitoring and Sampling Comments.	Analytical Data
Pilot Effluent	Quarterly (Q)	3/9/11, 6/16/11, 9/29/11, 12/14/11		VOC, DRO extended/GRO, BOD, COD, WQCC Metals	Appendix K, Section 8.1
NAPIS Effluent	Q	3/8/11, 6/15/11, 9/28/11, 12/14/11		Gen Chem, VOC, SVOC, DRO extended/GRO, WQCC Metals	Appendix K, Section 8.1
AL-2 to EP-1	Q	3/8/11, 6/15/11, 9/28/11, 12/14/11		Major Cations/Anions, VOC, SVOC, DRO extended/GRO, WQCC Metals	Appendix K, Section 8.1
Influent to AL-1	Q	3/9/11, 6/16/11, 9/28/11, 12/14/11		VOC, BOD, COD, Chlorides, DRO extended/GRO, pH, Phenol	Appendix K, Section 8.2
Influent to AL-2	Q	3/9/11, 6/16/11, 9/28/11, 12/14/11		VOC, BOD, COD, Chlorides, DRO extended/GRO, pH, Phenol	Appendix K , Section 8.2
Influent to EP-1	Q	3/9/11, 6/15/11, 9/28/11, 12/15/11		Major Cations/Anions, pH, BOD, COD, Chlorides, VOC, SVOC, DRO extended/GRO, WQCC Metals	Appendix K, Section 8.2
NAPI Secondary Containment (LDU)[1] East LDU, West LDU, Oil Sump LDU	Q	3/3/11, 6/15/11, 9/26/11, 12/14/11		BTEX, DRO extended/GRO, WQCC Metals or check for fluids	Appendix K, Section 8.3
RW-1[1]	Q	10/3/11	3/9/011, 6/27/11, 10/3/11, 11/8/11	Measure DTW, DTP	Appendix K, Section 8.17
RW-2[1]	Q	10/3/11	3/9/011, 6/27/11, 10/3/11, 11/8/11	Measure DTW, DTP	Appendix K, Section 8.17
RW-5[1]	Q	10/4/11	3/9/011, 6/27/11, 10/4/11, 11/8/11	Measure DTW, DTP	Appendix K, Section 8.17
RW-6[1]	Q	10/4/11	3/9/011, 6/27/11, 10/4/11, 11/8/11	Measure DTW, DTP	Appendix K, Section 8.17
OW-1[1]	Q	3/1/11, 6/20/11, 10/27/11, 12/15/11		Visual Check for Artesian flow conditions; Major Cations/Anions, VOC, DRO extended/GRO, WQCC Metals	Appendix K, Section 8.4
OW-10[1]	Q	2/28/11, 6/20/11, 10/26/11, 12/15/11		Visual Check for Artesian flow conditions; Major Cations/Anions, VOC, DRO extended/GRO, WQCC Metals	Appendix K, Section 8.4
OW-13	Q	2/24/11, 6/20/11, 10/25/11, 12/13/11		VOC	Appendix K, Section 8.5
OW-14	Q	2/24/11, 6/20/11, 10/24/11, 12/13/11		VOC	Appendix K, Section 8.5
OW-29	Q	2/24/11, 6/20/11, 10/24/11, 12/13/11		VOC	Appendix K, Section 8.5
OW-30	Q	2/24/11, 6/20/11, 10/24/11, 12/15/11		VOC	Appendix K, Section 8.5
OW-50[2]	Q	3/1/11, 6/20/11, 10/25/11, 12/15/11		VOC, SVOC, WQCC Metals, DRO extended/GRO, General Chemistry	Appendix K, Section 8.6
OW-52[2]	Q	3/1/11, 6/20/11, 10/25/11, 12/13/11		VOC, SVOC, WQCC Metals, DRO extended/GRO, General Chemistry	Appendix K, Section 8.6
GWM-1	Q	2/16/11, 6/15/11, 9/26/11, 12/14/11	2/24/11, 3/3/11, 3/10/11, 3/17/11, 4/7/11, 4/18/11, 5/12/11, 5/23/11, 6/8/11, 6/15/11, 7/6/11	Major Cations/Anions, VOC, DRO extended/GRO, WQCC Metals	Appendix K, Section 8.7
GWM-2	Q	2/16/11, 6/15/11, 9/26/11, 12/14/11	2/24/11, 3/3/11, 3/10/11, 3/17/11, 4/7/11, 4/18/11, 5/12/11, 5/23/11, 6/8/11, 6/15/11, 7/6/11	Check for water. If water is detected report to OCD & NMED within 24 hours. Sample for BTEX, DRO extended/GRO, Major Cations/Anions.	Appendix K, Section 8.7
GWM-3	Q	2/16/11, 6/15/11, 9/26/11, 12/14/11	2/24/11, 3/3/11, 3/10/11, 3/17/11, 4/7/11, 4/18/11, 5/12/11, 5/23/11, 6/8/11, 6/15/11, 7/6/11	Check for water. If water is detected report to OCD & NMED within 24 hours. Sample for BTEX, DRO extended/GRO, Major Cations/Anions.	Appendix K, Section 8.7
NAPIS-1	Q	1/30/12[3], 3/2/11, 6/15/11, 9/27/11, 12/14/11		Major Cations/Anions, BTEX, SVOC, DRO extended/GRO, WQCC Metals	Appendix K, Section 8.8
NAPIS-2	Q	1/30/12[4], 3/2/11, 6/15/11, 9/27/11, 12/14/11		Major Cations/Anions, BTEX, SVOC, DRO extended/GRO, WQCC Metals	Appendix K, Section 8.8
NAPIS-3	Q	3/2/11, 6/15/11, 9/27/11, 12/14/11		Major Cations/Anions, BTEX, SVOC, DRO extended/GRO, WQCC Metals	Appendix K, Section 8.8
KA-3	Q	3/2/11, 6/15/11, 9/27/11, 12/14/11		Major Cations/Anions, BTEX, SVOC, DRO extended/GRO, WQCC Metals	Appendix K, Section 8.8
BW to EP-2	Semi-Annual (SA)	5/23/2011, 11/1/11		Major Cations/Anions	Appendix K, Section 8.9
Evaporation Pond 1 (EP-1)	SA	5/23/11, 5/24/11, 11/1/11, 11/2/11		General Chemistry, VOC, SVOC, WQCC 20.6.2.3103 constituents, BOD, COD, E-Coli Bacteria, WQCC Metals	Appendix K, Section 8.10
EP-2	SA	5/23/11, 5/24/11, 11/1/11, 11/2/11		Same as EP-1	Appendix K, Section 8.10
EP-3	SA	5/23/11, 5/24/11, 11/1/11, 11/2/11		Same as EP-1	Appendix K, Section 8.10
EP-4	SA	5/23/11, 5/24/11, 11/1/11, 11/2/11		Same as EP-1	Appendix K, Section 8.10
EP-5	SA	5/23/11, 5/24/11, 11/1/11, 11/2/11		Same as EP-1	Appendix K, Section 8.10
EP-6	SA	5/23/11, 5/24/11, 11/1/11, 11/2/11		Same as EP-1	Appendix K, Section 8.10

10.0 Monitoring Schedule

Table 1

Sampling Location ID	Frequency	Sample Date(s)	Inspection Date(s)	General Monitoring and Sampling Comments.	Analytical Data
EP-7	SA	5/23/11, 5/24/11, 11/1/11, 11/2/11		Same as EP-1	Appendix K, Section 8.10
EP-8	SA	5/23/11, 5/24/11, 11/1/11, 11/2/11		Same as EP-1	Appendix K, Section 8.10
EP-9a[1]	SA	5/23/11, 5/24/11, 11/1/11, 11/2/11		Same as EP-1	Appendix K, Section 8.10
EP-11[1]	SA	5/23/11, 5/24/11, 11/1/11, 11/2/11		Same as EP-1	Appendix K, Section 8.10
EP-12A[1]	SA	5/23/11, 5/24/11, 11/1/11, 11/2/11		Same as EP-1	Appendix K, Section 8.10
EP-12B[1]	SA	5/23/11, 5/24/11, 11/1/11, 11/2/11		Same as EP-1	Appendix K, Section 8.10
BW-1A	Annual (A)		10/28/11 - Dry	Major Cations/Anions, VOC, SVOC, WQCC Metals	Appendix K, Section 8.10
BW-1B	A		10/28/11 - Dry	Major Cations/Anions, VOC, SVOC, WQCC Metals	Appendix K, Section 8.11
BW-1C	A	10/28/11		Major Cations/Anions, VOC, SVOC, WQCC Metals	Appendix K, Section 8.11
BW-2A	A	10/28/11		Major Cations/Anions, VOC, SVOC, WQCC Metals	Appendix K, Section 8.11
BW-2B	A	10/28/11		Major Cations/Anions, VOC, SVOC, WQCC Metals	Appendix K, Section 8.11
BW-2C	A	10/28/11		Major Cations/Anions, VOC, SVOC, WQCC Metals	Appendix K, Section 8.11
BW-3A	A		10/28/11 - Dry	Major Cations/Anions, VOC, SVOC, WQCC Metals	Appendix K, Section 8.11
BW-3B	A	10/28/11		Major Cations/Anions, VOC, SVOC, WQCC Metals	Appendix K, Section 8.11
BW-3C	A	10/28/11		Major Cations/Anions, VOC, SVOC, WQCC Metals	Appendix K, Section 8.11
EP-2 Inlet	A	10/31/11		VOC, DRO extended/GRO, BOD, COD, TDS	Appendix K, Section 8.12
MW-1	A	10/6/11		Major Cations/Anions, VOC, DRO extended/GRO, WQCC Metals. For RCRA 10 year requirements: Gen Chem, RCRA List constituents (total and dissolved) including mercury and cyanide, VOC, SVOC, TPH	Appendix K, Section 8.13
MW-2	A	10/10/11		Major Cations/Anions, VOC, DRO extended/GRO, WQCC Metals	Appendix K, Section 8.13
MW-4	A	10/12/11		Major Cations/Anions, VOC, DRO extended/GRO, WQCC Metals. For RCRA 10 year requirements: Gen Chem, RCRA List constituents (total and dissolved) including mercury and cyanide, VOC, SVOC, TPH	Appendix K, Section 8.13
MW-5	A	10/10/11		Major Cations/Anions, VOC, DRO extended/GRO, WQCC Metals. For RCRA 10 year requirements: Gen Chem, RCRA List constituents (total and dissolved) including mercury and cyanide, VOC, SVOC, TPH	Appendix K, Section 8.13
OW-11	A	10/26/11		Major Cations/Anions, VOC, SVOC, WQCC Metals	Appendix K, Section 8.14
OW-12	A	10/26/11		VOC	Appendix K, Section 8.14
SMW-2	A	10/12/11		Major Cations/Anions, VOC, DRO extended/GRO, WQCC Metals.	Appendix K, Section 8.15
SMW-4	A	10/10/11		Major Cations/Anions, VOC, DRO extended/GRO, WQCC Metals. For RCRA 10 year requirements: Gen Chem, RCRA List constituents (total and dissolved) including mercury and cyanide, VOC, SVOC, TPH	Appendix K, Section 8.15
PW-2	Every 3 years. Start 2008	10/26/11, 12/15/2011		VOC, SVOC, WQCC Metals, Cyanide, Nitrates	Appendix K, Section 8.16
PW-3[5]	Annual starting with 2009	10/31/11		VOC, SVOC, WQCC Metals, Cyanide, Nitrates	Appendix K, Section 8.16
PW-4	Every 3 years. Start 2007	Last sampled 7/28/10		VOC, SVOC, WQCC Metals, Cyanide, Nitrates	Appendix K, Section 8.16

NOTES:

1) Additional location sites and sampling frequency changes in the 2010 Facility Wide Ground Water Monitoring Plan (FWGWMP) (approved with modifications 8/25/10)

2) OW-50 and OW-52: New wells installed on 10/8/09. Analytical suite is per NMED correspondence dated 6/4/10 "Approved with Modifications".

3) Resampled for 8270C Analysis only. Original sample taken on 12/14/11 sample container broke in transit to lab.

4) General chemistry parameters was missed during the fourth quarter sampling (12/14/11).

5) Sampling changed to annual per NMED directive, Comment 8, Notice of Disapproval (NOD) dated 3/26/09 due to detection of 2-Methylnaphthalene in annual sampling for 2007 conducted in January 2008.

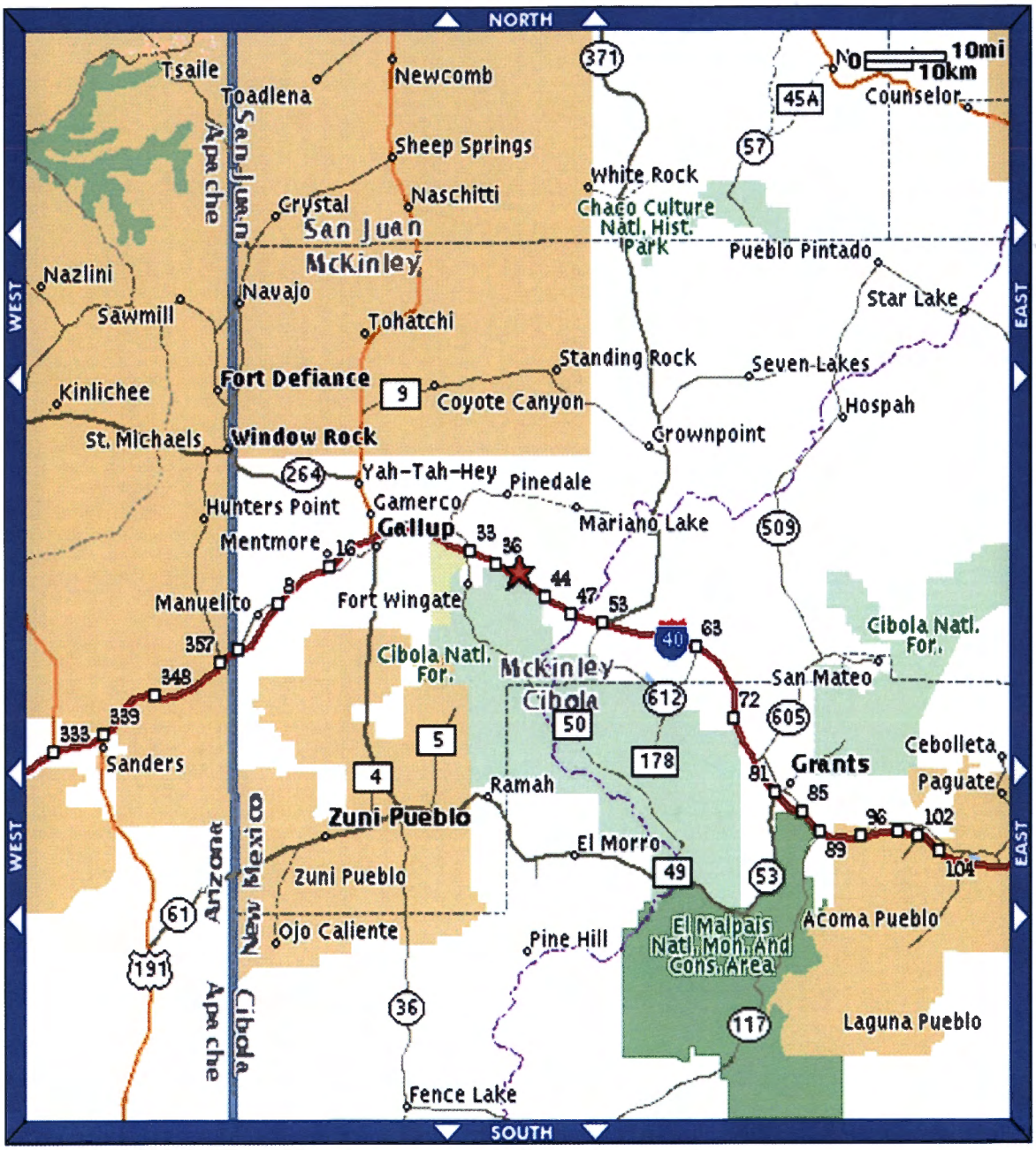


Figure 1: Regional map showing the location of the Gallup Refinery (red star along Interstate-40, 20 miles east of the City of Gallup).

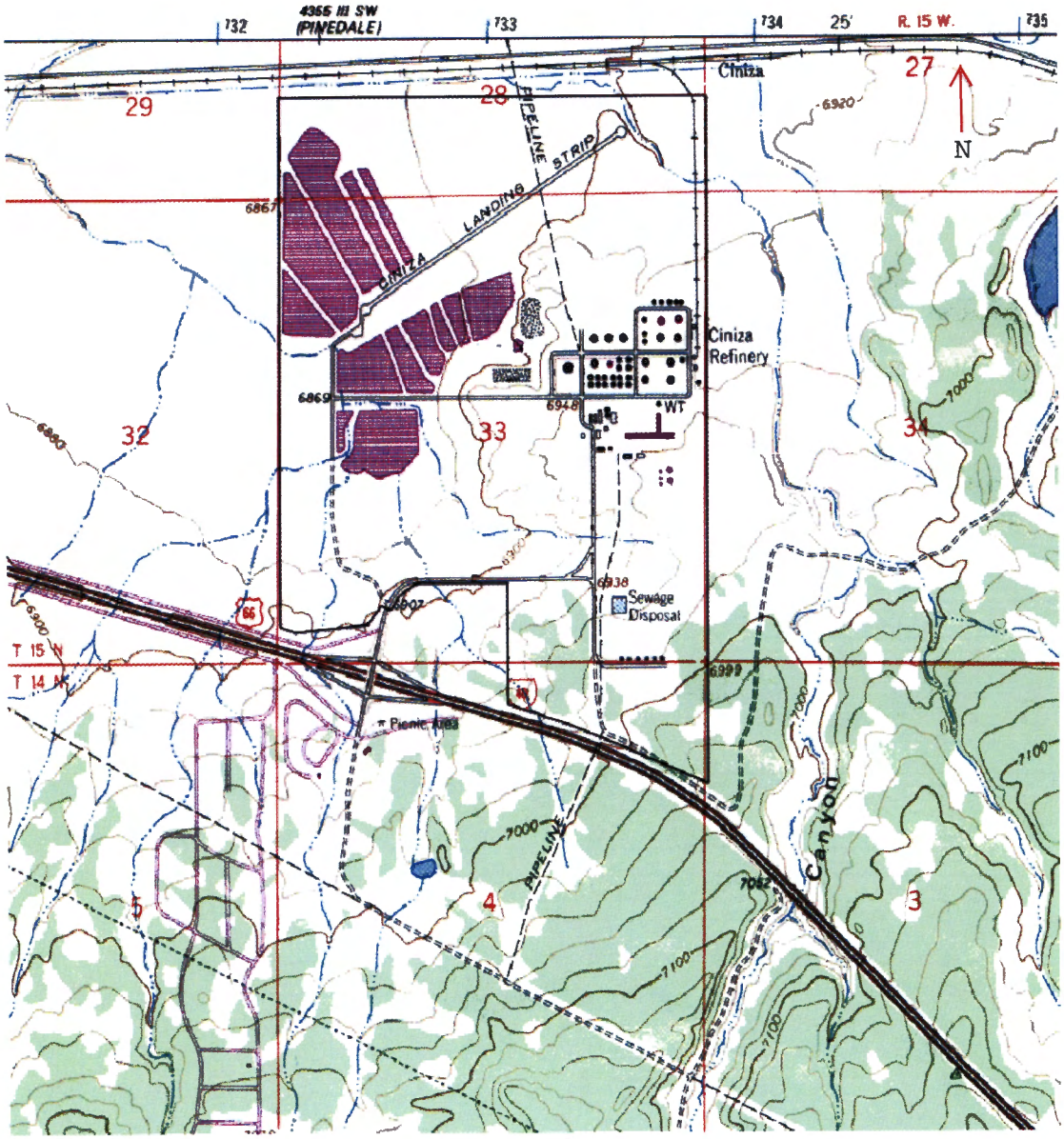


Figure 2: Topographic Map of the Gallup Refinery Site - USGS Topographical Map - Gallup Quadrangle (Revised 1980)

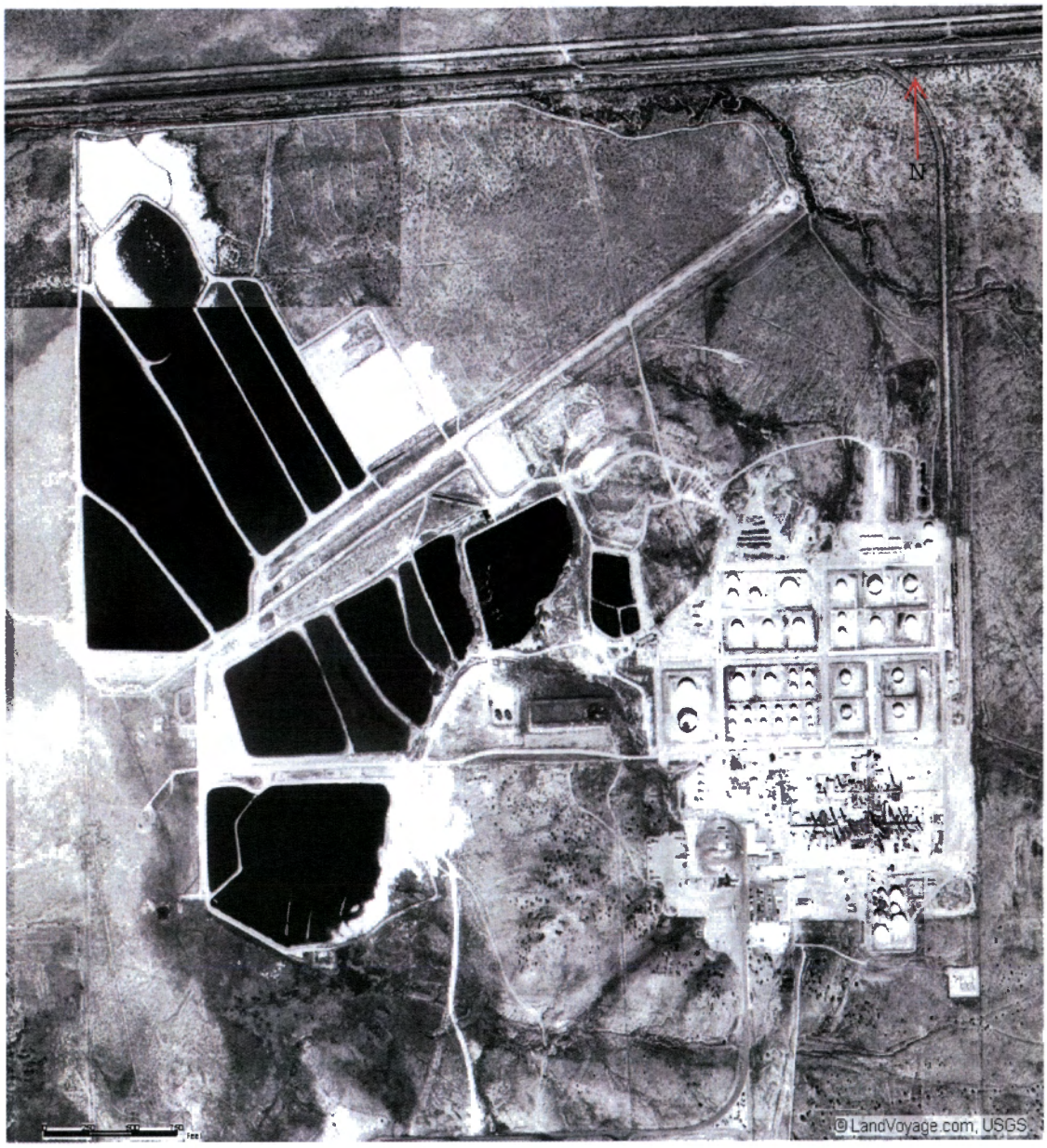
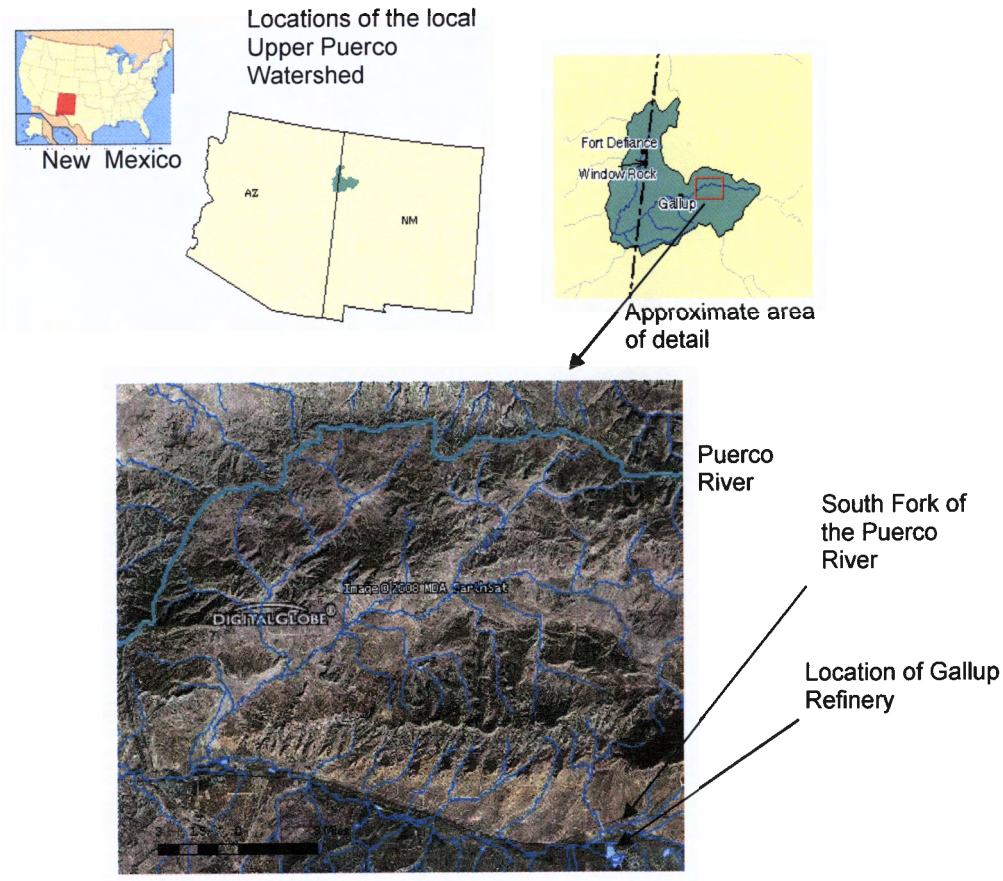


Figure 3: Aerial photograph of the Gallup Refinery

Figure 4: **Regional scale**: Flow lines and major surface water bodies (from: EPA Enviromapper - http://map24.epa.gov/EMR/?ZoomToWatershed=15020006) North is towards the top of the page.



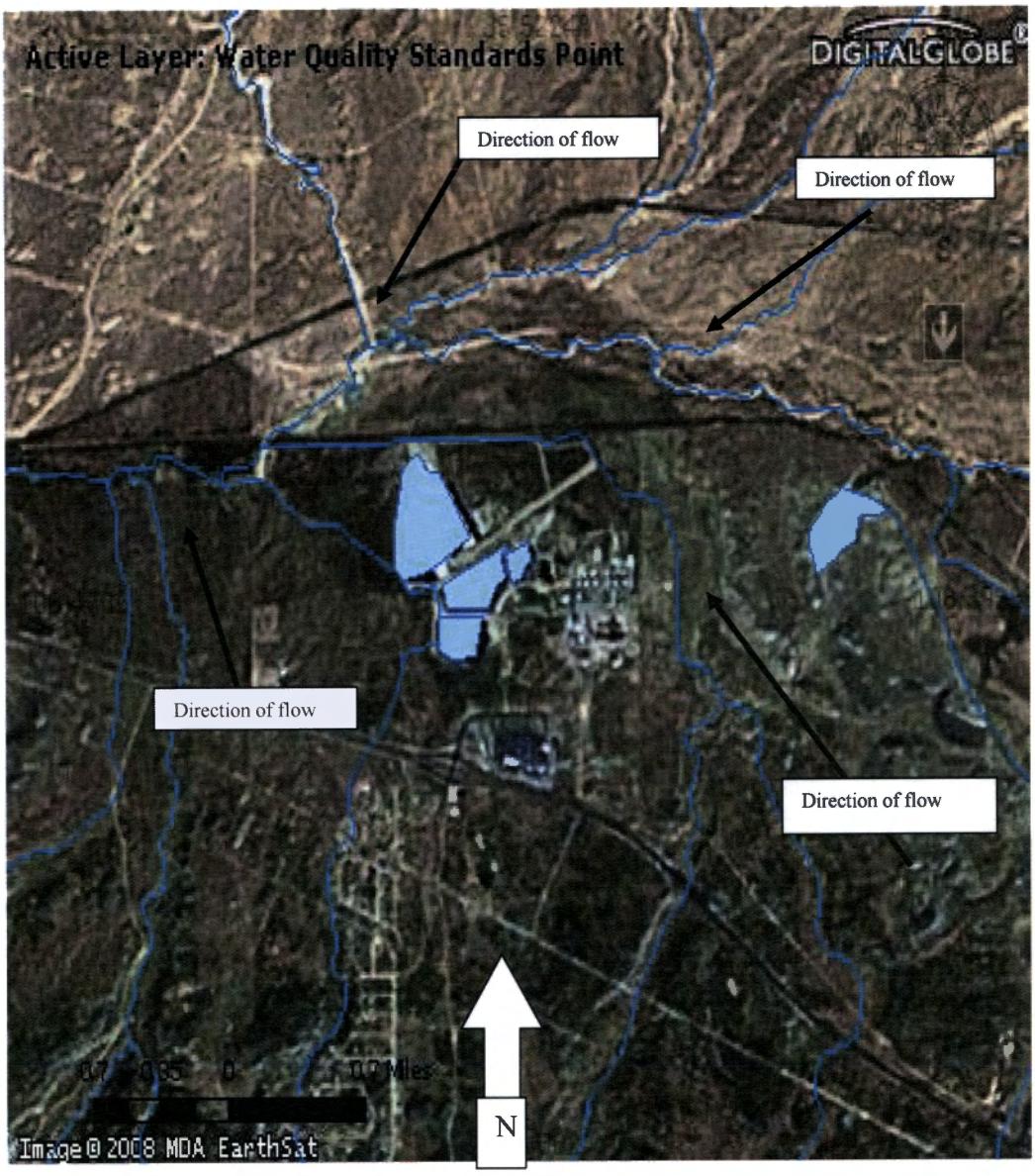
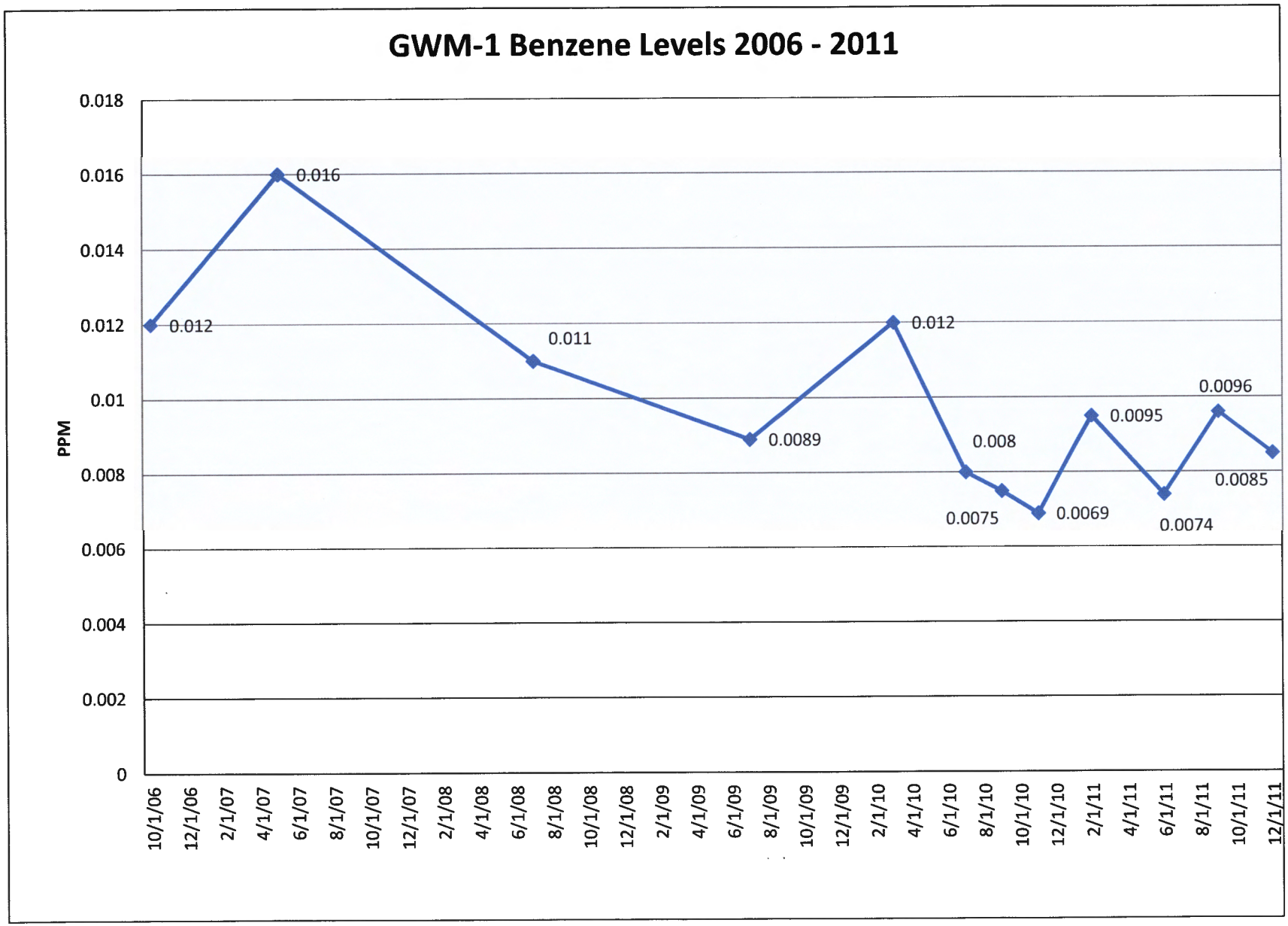


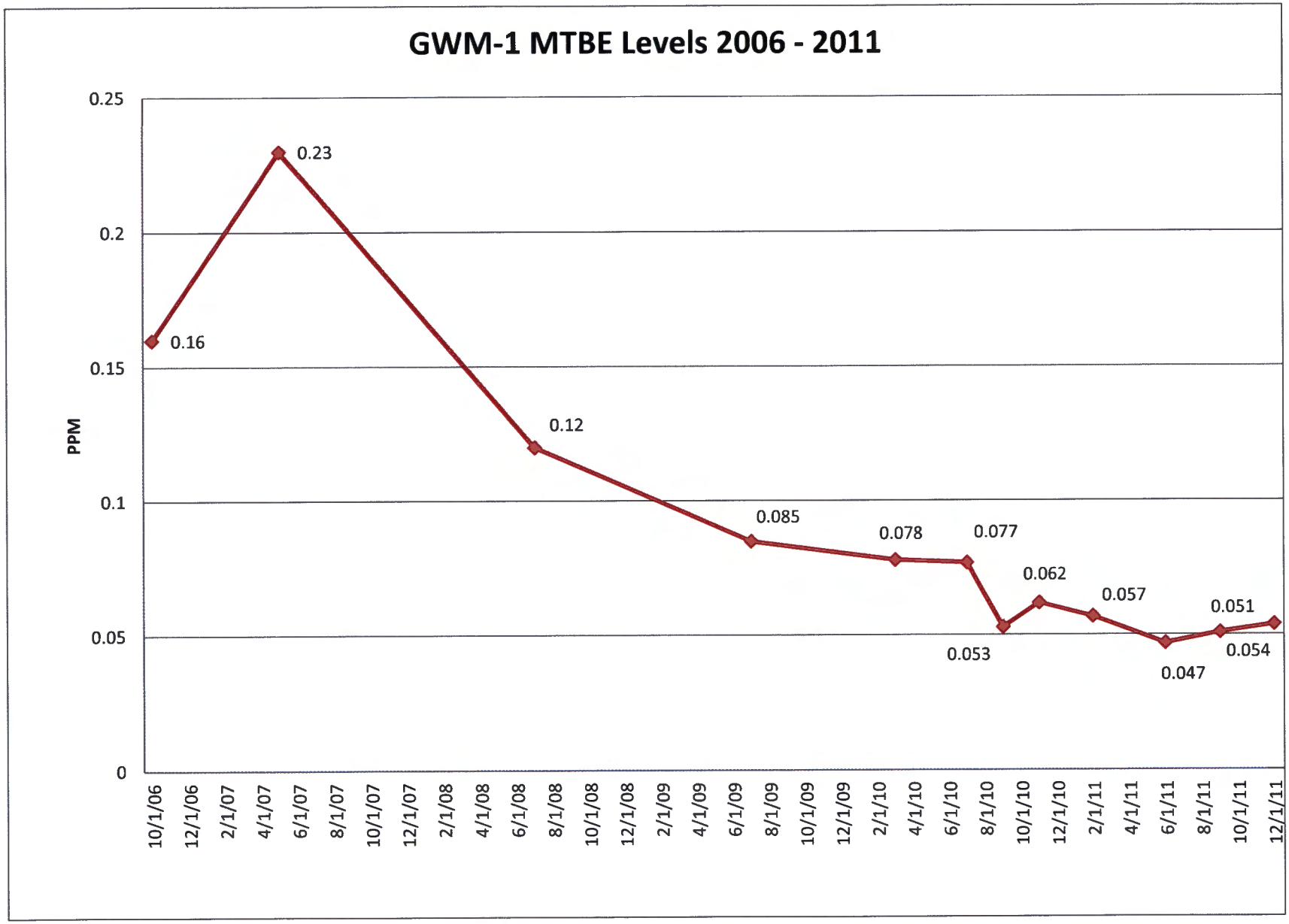
Figure 5: Localized scale: Flow lines and major surface water bodies (from: EPA Enviromapper - http://map24.epa.gov/EMR/?ZoomToWatershed=15020006) North is towards the top of the page. The pond to the east is Jon Myers' Livestock Pond.

TO VIEW THE MAP AND/OR MAPS WITH THIS DOCUMENT, PLEASE CALL THE HAZARDOUS WASTE BUREAU AT 505-476-6000 TO MAKE AN APPOINTMENT

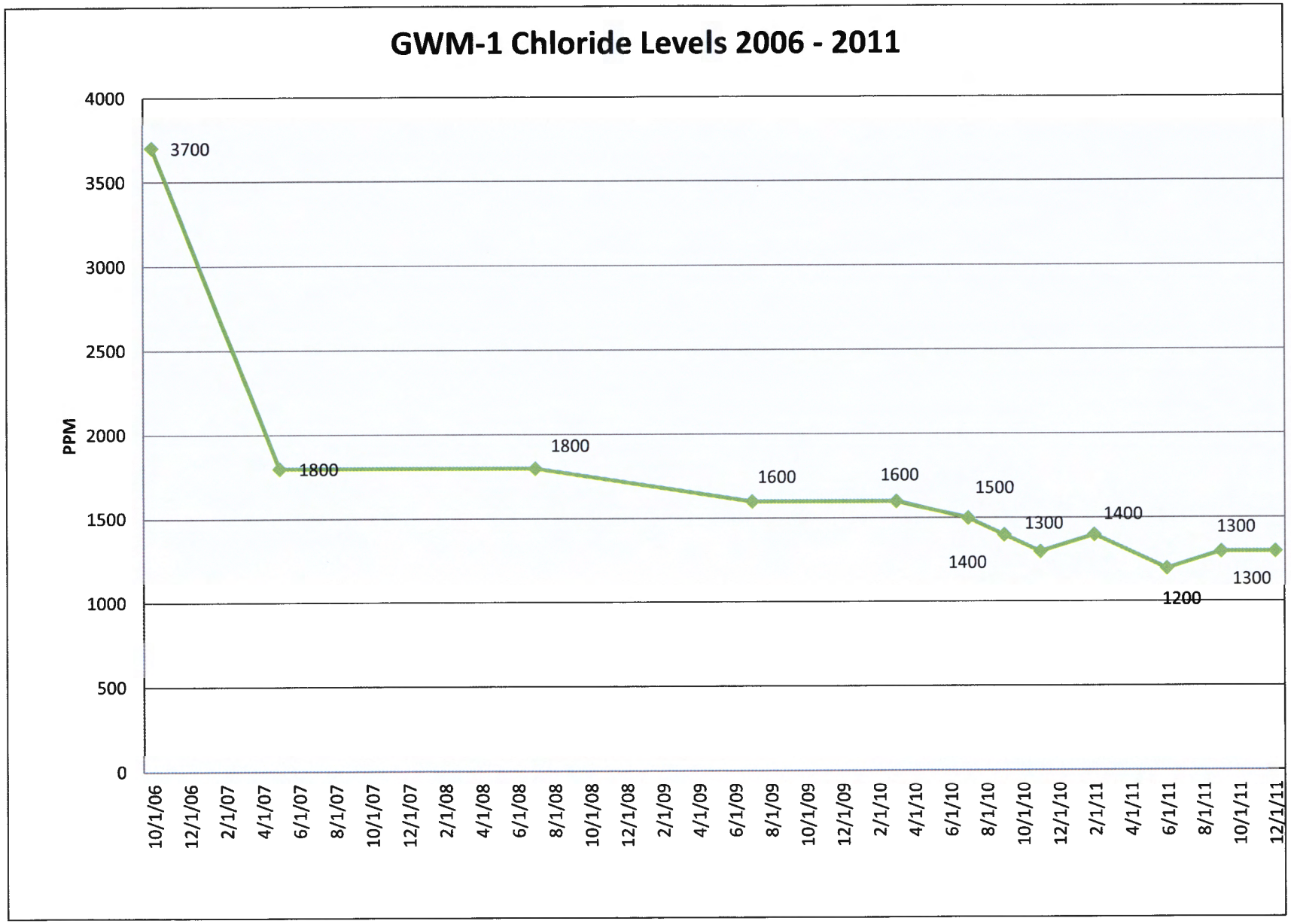
GRAPH 1


GWM-1 Benzene Levels 2006 - 2011
PPM
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
0.012
0.016
0.011
0.0089
0.012
0.008
0.0075
0.0069
0.0095
0.0074
0.0096
0.0085
10/1/06
12/1/06
2/1/07
4/1/07
6/1/07
8/1/07
10/1/07
12/1/07
2/1/08
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
12/1/10
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11

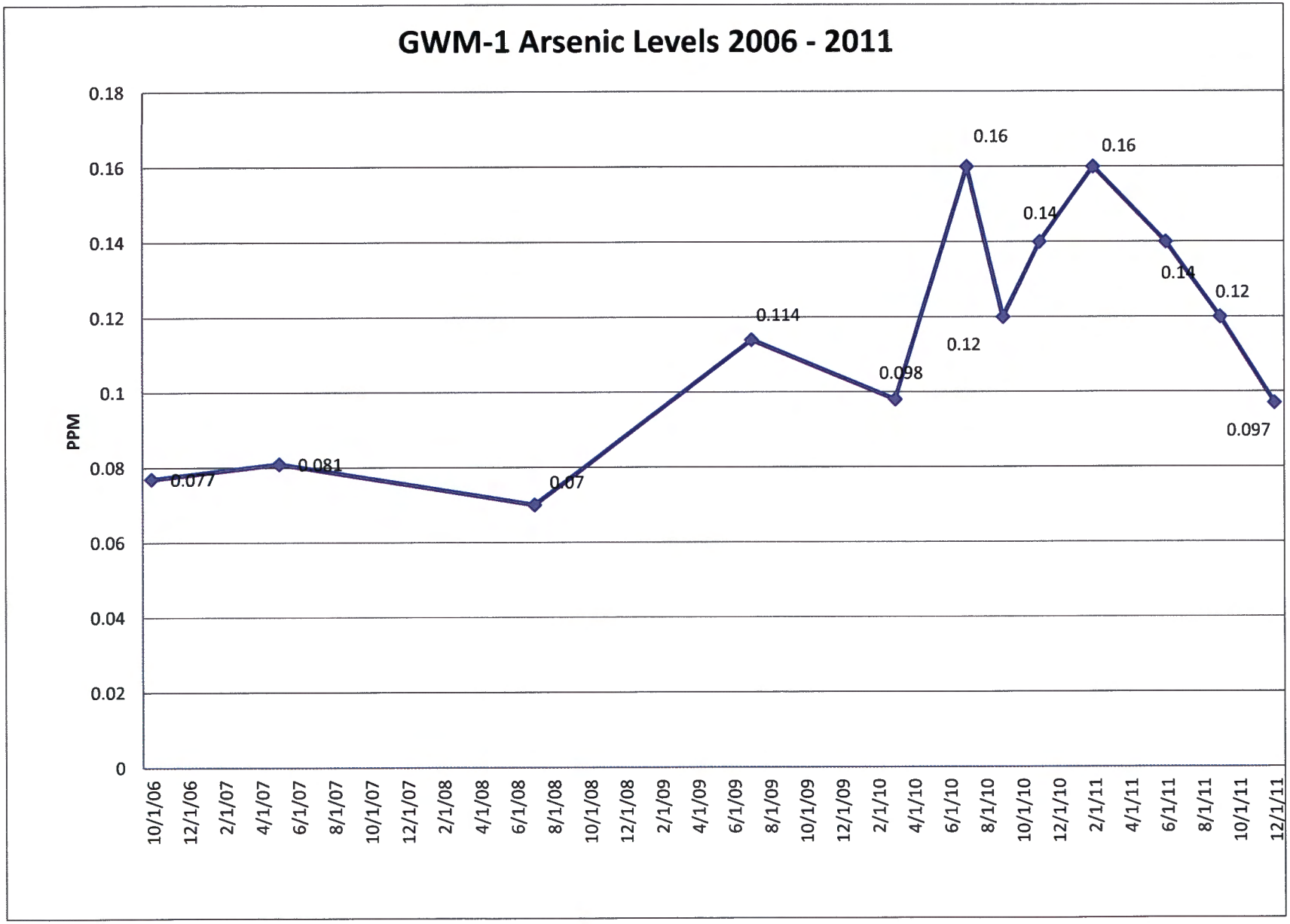
GRAPH 2


GWM-1 MTBE Levels 2006 - 2011
PPM
0.25
0.2
0.15
0.1
0.05
0
0.16
0.23
0.12
0.085
0.078
0.077
0.053
0.062
0.057
0.047
0.051
0.054
10/1/06
12/1/06
2/1/07
4/1/07
6/1/07
8/1/07
10/1/07
12/1/07
2/1/08
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
12/1/10
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11

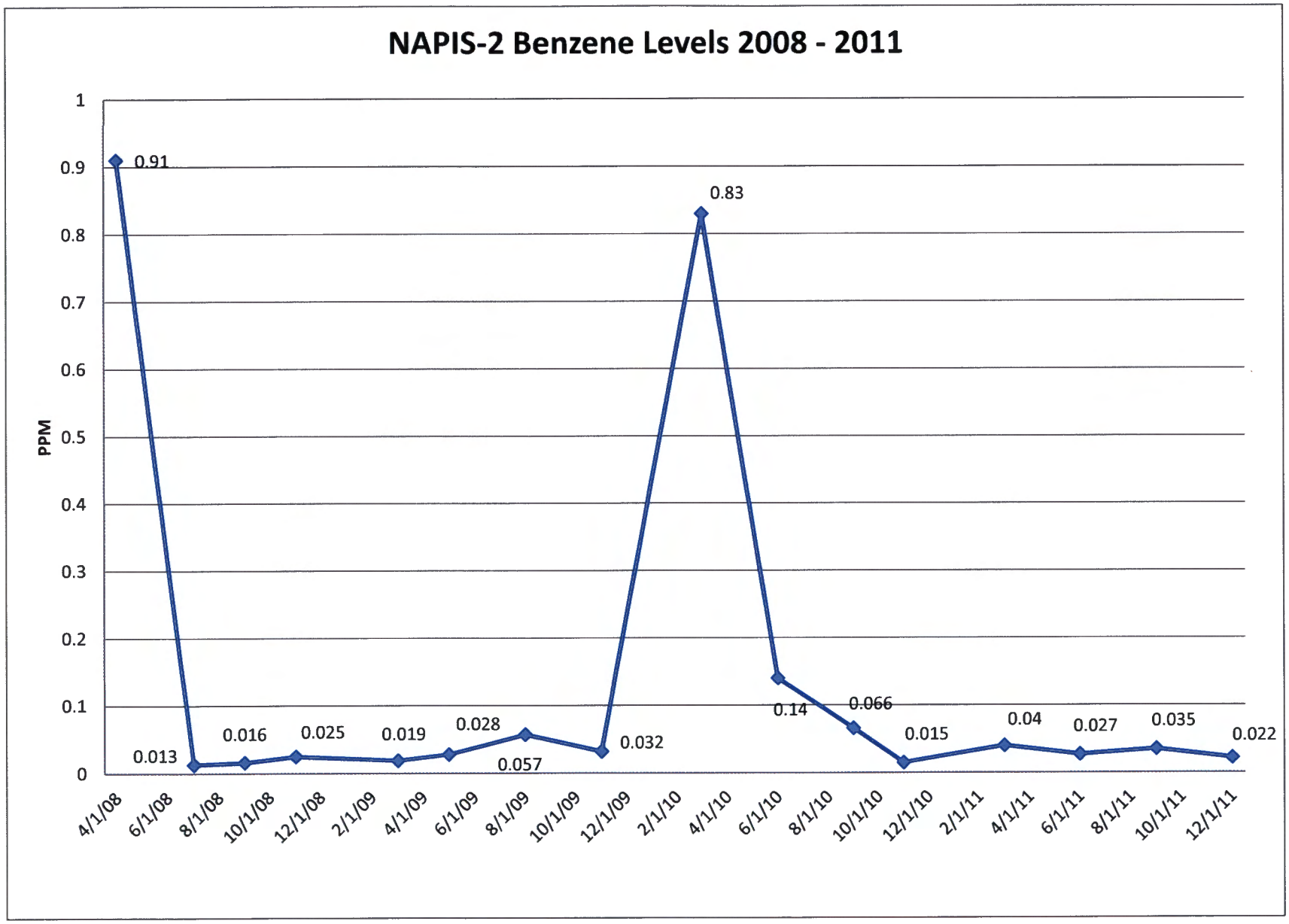
GRAPH 3


GWM-1 Chloride Levels 2006 - 2011
PPM
4000
3500
3000
2500
2000
1500
1000
500
0
3700
1800
1800
1600
1600
1500
1400
1300
1400
1200
1300
1300
10/1/06
12/1/06
2/1/07
4/1/07
6/1/07
8/1/07
10/1/07
12/1/07
2/1/08
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
12/1/10
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11

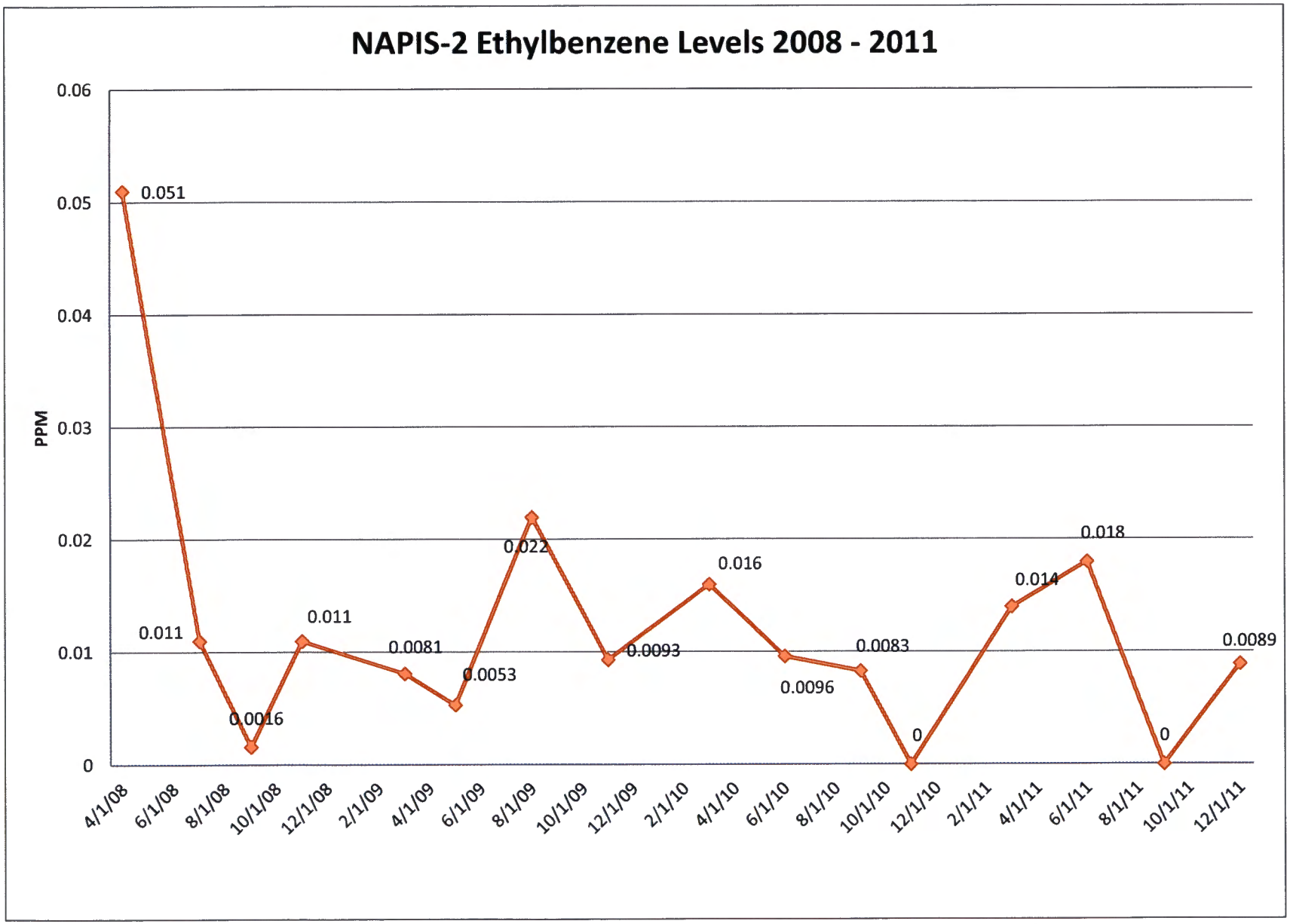
GRAPH 4


GWM-1 Arsenic Levels 2006 - 2011
PPM
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
0.077
0.081
0.07
0.114
0.098
0.16
0.12
0.14
0.16
0.14
0.12
0.097
10/1/06
12/1/06
2/1/07
4/1/07
6/1/07
8/1/07
10/1/07
12/1/07
2/1/08
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
12/1/10
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11

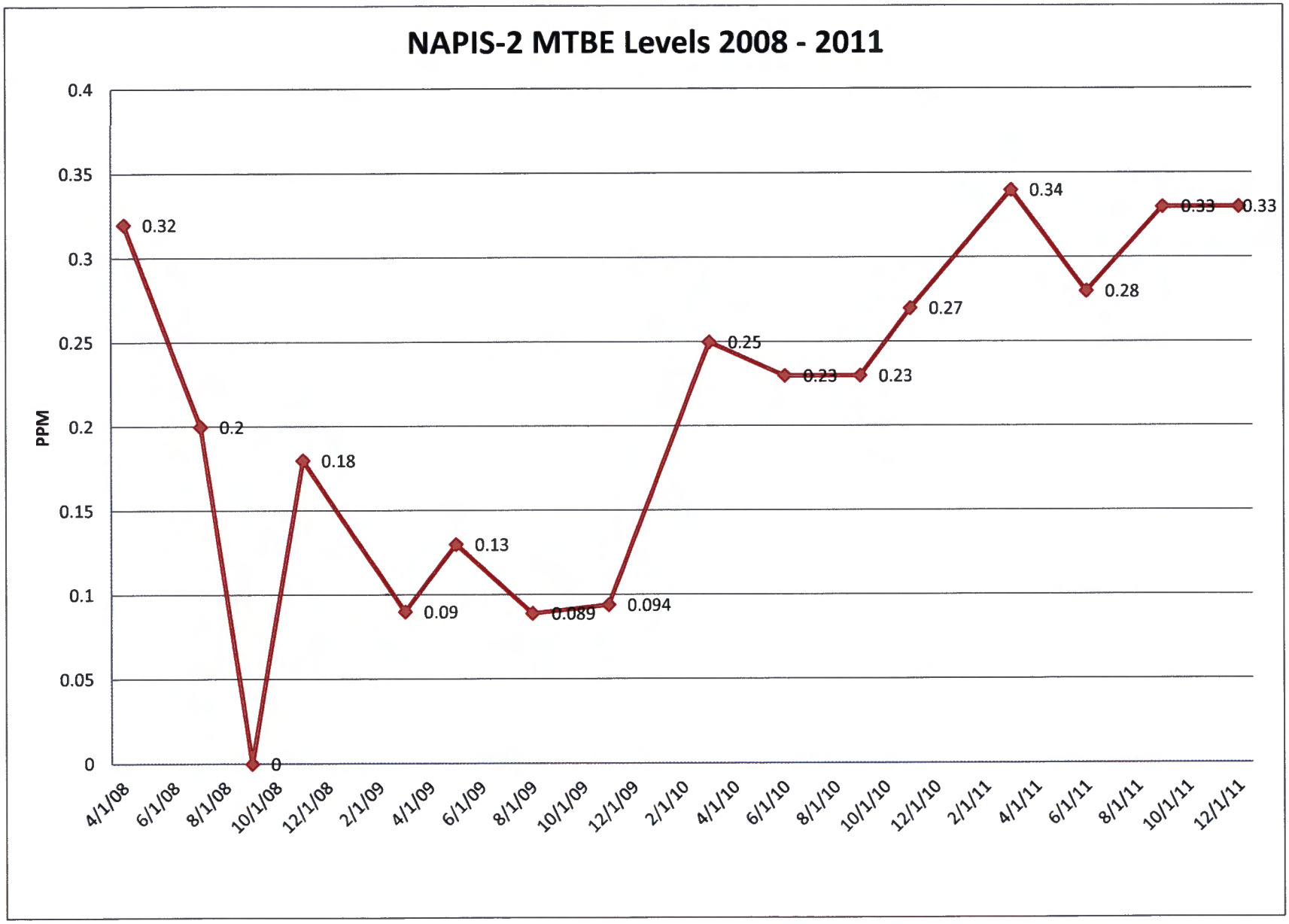
GRAPH 5


NAPIS-2 Benzene Levels 2008 - 2011
PPM
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0.91
0.013
0.016
0.025
0.019
0.028
0.057
0.032
0.83
0.14
0.066
0.015
0.04
0.027
0.035
0.022
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
12/1/10
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11

GRAPH 6


NAPIS-2 Ethylbenzene Levels 2008 - 2011
PPM
0.06
0.05
0.04
0.03
0.02
0.01
0
0.051
0.011
0.0016
0.011
0.0081
0.0053
0.022
0.0093
0.016
0.0096
0.0083
0
0.014
0.018
0
0.0089
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
12/1/10
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11

GRAPH 7


NAPIS-2 MTBE Levels 2008 - 2011
PPM
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0.32
0.2
0
0.18
0.09
0.13
0.089
0.094
0.25
0.23
0.23
0.27
0.34
0.28
0.33
0.33
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
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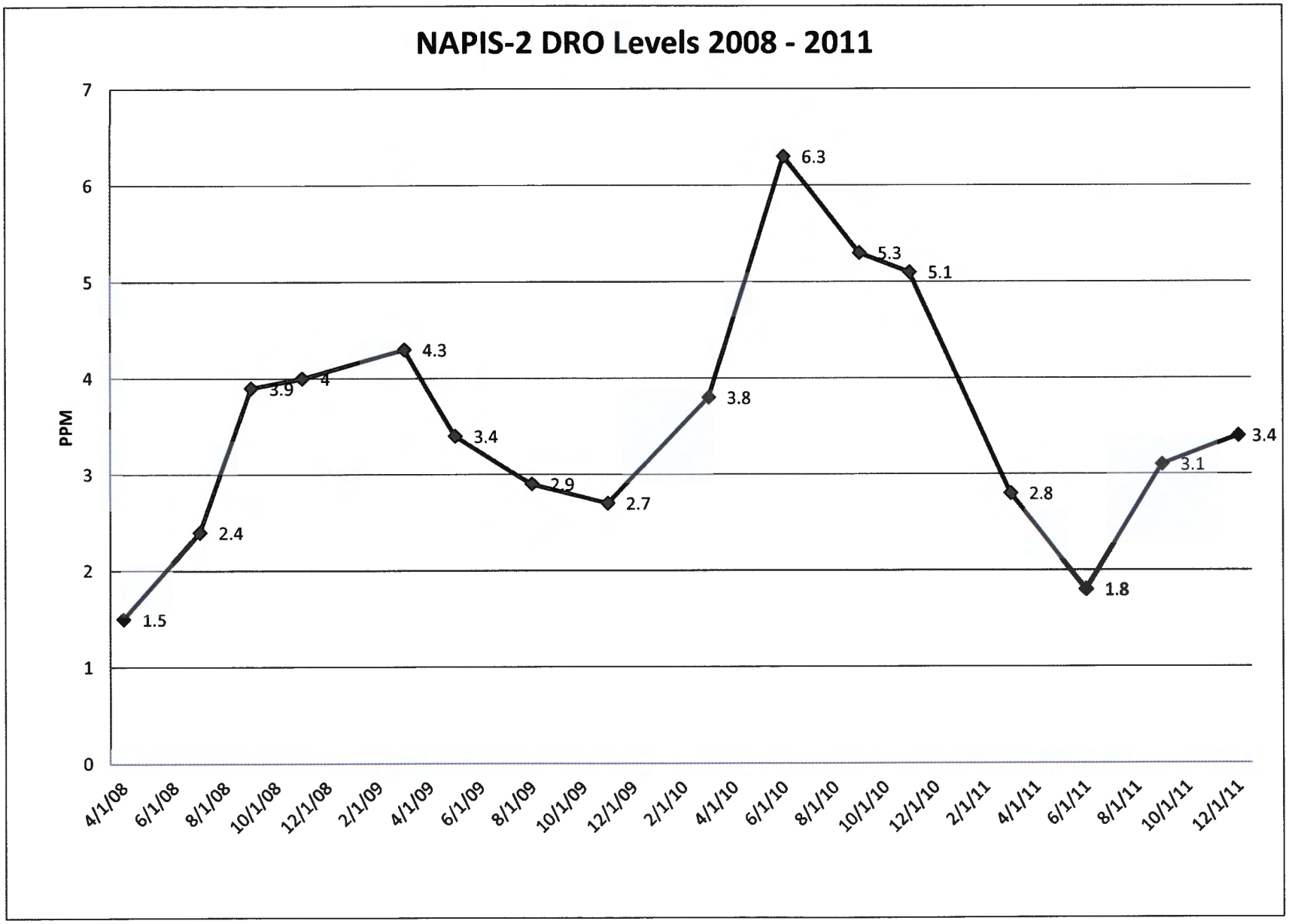
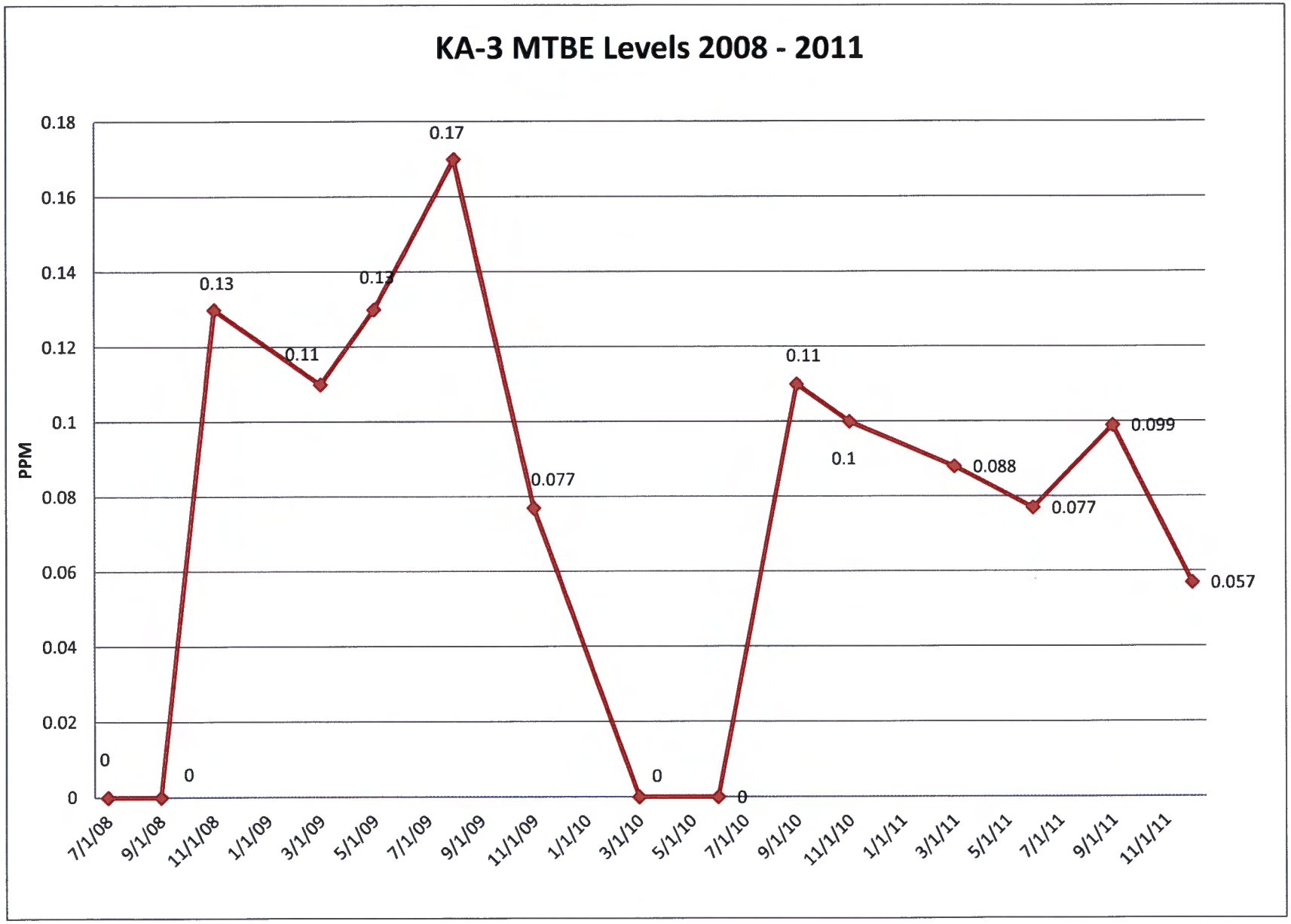
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11

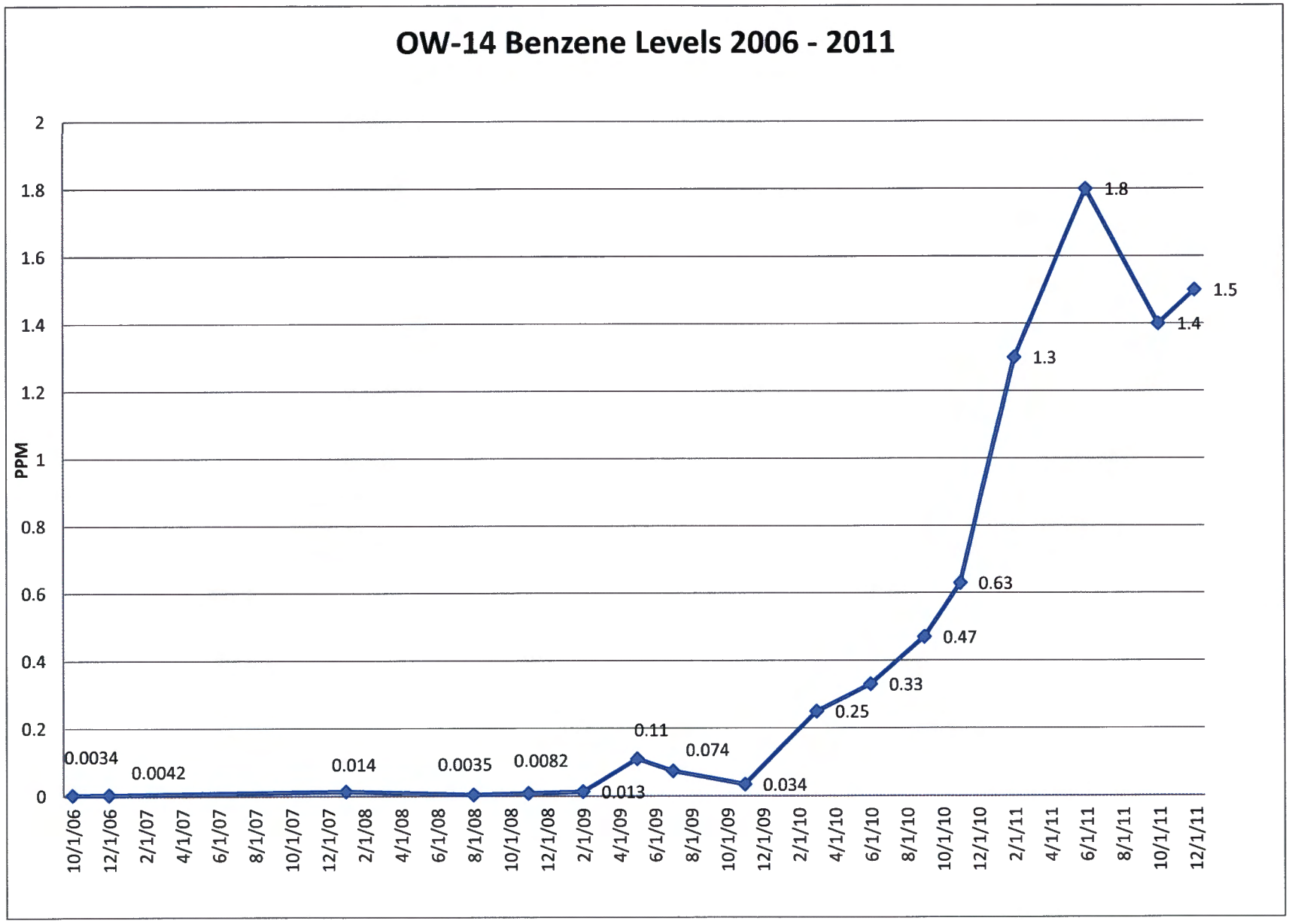
GRAPH 8


NAPIS-2 DRO Levels 2008 - 2011
PPM
0
1
2
3
4
5
6
7
1.5
2.4
3.9
4
4.3
3.4
2.9
2.7
3.8
6.3
5.3
5.1
2.8
1.8
3.1
3.4
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
12/1/10
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11

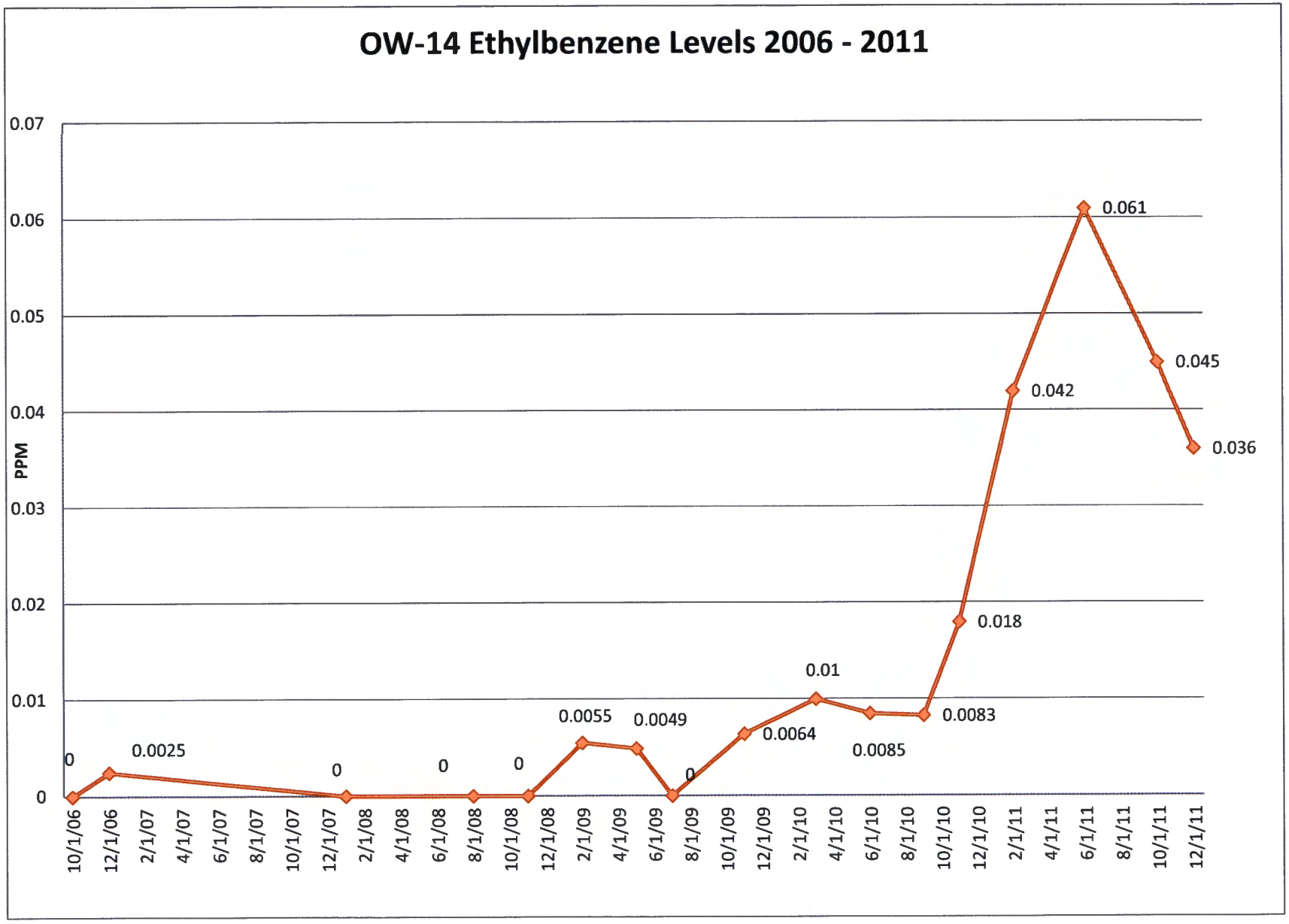
GRAPH 9


KA-3 MTBE Levels 2008 - 2011
PPM
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
0
0
0.13
0.11
0.13
0.17
0.077
0
0
0.11
0.1
0.088
0.077
0.099
0.057
7/1/08
9/1/08
11/1/08
1/1/09
3/1/09
5/1/09
7/1/09
9/1/09
11/1/09
1/1/10
3/1/10
5/1/10
7/1/10
9/1/10
11/1/10
1/1/11
3/1/11
5/1/11
7/1/11
9/1/11
11/1/11

GRAPH 10


OW-14 Benzene Levels 2006 - 2011
PPM
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0.0034
0.0042
0.014
0.0035
0.0082
0.013
0.11
0.074
0.034
0.25
0.33
0.47
0.63
1.3
1.8
1.4
1.5
10/1/06
12/1/06
2/1/07
4/1/07
6/1/07
8/1/07
10/1/07
12/1/07
2/1/08
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
12/1/10
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11

GRAPH 11


OW-14 Ethylbenzene Levels 2006 - 2011
PPM
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0
0.0025
0
0
0
0.0055
0.0049
0
0.0064
0.01
0.0085
0.0083
0.018
0.042
0.061
0.045
0.036
10/1/06
12/1/06
2/1/07
4/1/07
6/1/07
8/1/07
10/1/07
12/1/07
2/1/08
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
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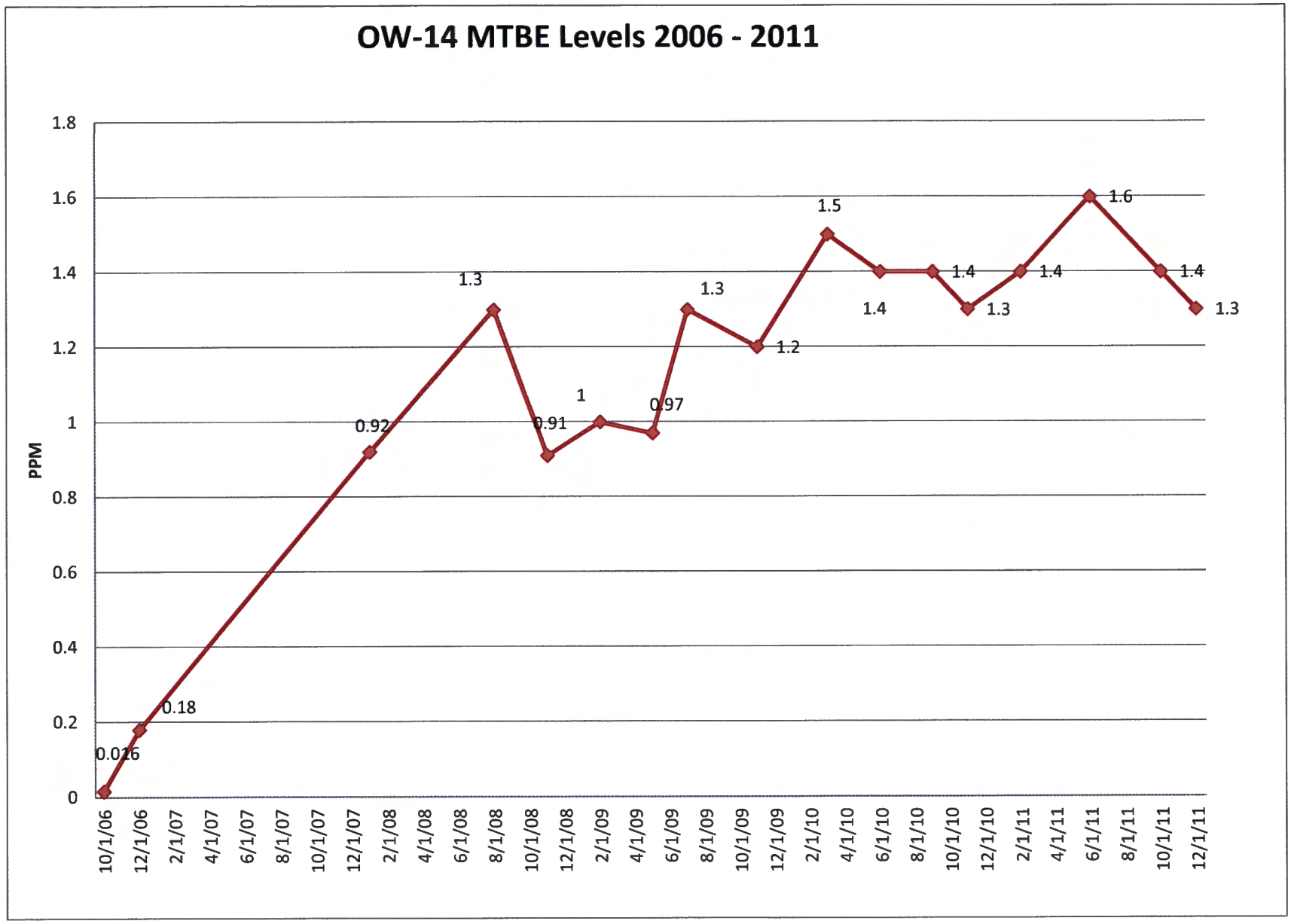
6/1/11
8/1/11
10/1/11
12/1/11

GRAPH 12


OW-14 MTBE Levels 2006 - 2011
PPM
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0.016
0.18
0.92
1.3
0.91
1
0.97
1.3
1.2
1.5
1.4
1.4
1.3
1.4
1.6
1.4
1.3
10/1/06
12/1/06
2/1/07
4/1/07
6/1/07
8/1/07
10/1/07
12/1/07
2/1/08
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
12/1/10
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11

RW-1 HYDROCARBON RECOVERY LOG
Western Refining - Gallup Refinery
2/22/05 thru 11/8/11

Measurement Date	Time	Quarter	Method	Status	Depth to Product (ft)	Depth to Water (ft)	Product Thickness Level (ft)	Product Bailed/Purged (gal)	Water Purged (gal)
2/22/2005	8:30	1st	NR	Start	32.46	36.5	4.04	14	NR
3/2/2005	7:45	1st	NR	Start	32.42	36.44	4.02	9	NR
3/8/2005	8:30	1st	NR	Start	31.92	36.35	4.43	15	NR
3/9/2005	830	1st	NR	Start	31.92	37.5	5.58	4	NR
3/11 to 3/18/05	NR	1st	NR	Start	NR	NR	NR	74	NR
3/18 to 3/23/05	NR	1st	Pump	Continue pumping	NR	NR	NR	48	NR
3/23 to 4/1/05	NR	1st	Pump	Continue pumping	NR	NR	NR	62	NR
4/1 To 4/4/05		2nd	Pump	Pump shutdown to measure	NR	NR	NR	27	NR
4/5/2005	11:30	2nd	Pump		34.75	38.92	4.17	NR	NR
4/4 to 4/15/05	11:00	2nd	Pump	Continue pumping	NR	NR	NR	50	NR
4-15 to 5-5-05	12:30	2nd	Pump	Continue pumping	NR	NR	NR	45	154
5-5 to 6-17-05	11:30	2nd	Pump	Continue pumping	NR	NR	NR	24	196
6/27/2005	14:30	2nd		Pump shutdown to measure	NR	NR	NR	NR	NR
6/28/2005	11:30	2nd			32.46	33.25	33	NR	NR
6/28/2005		2nd	Pump	Continue pumping	NR	NR	NR	NR	NR
6/17 to 7/8/2005	10:30	2nd	Pump	Continue pumping	NR	NR	NR	18	146
7/8 to 8/9/2005	13:30	3rd	Pump	Continue pumping	NR	NR	NR	28	350
8/9 to 9/16/2005	11:35	3rd			36.46	36.54	0.08	8	240
12/5/2005	13:15	4th			31.92	34.71	2.79	NR	NR
12/8/2005	14:00	4th	Pump	Start	NR	NR	NR	NR	NR
12/22/2005	15:30	4th		stop	NR	NR	NR	5	120
12/29/2005	14:00	4th	Bailer	Hand bailed	NR	NR	NR	0.5	4.5
3/16/2006	13:00	1st.			NR	NR	NR	NR	NR
3/16/2006	14:30	1st.	Pump	Start	32.23	34.48	2.25	NR	NR

RW-1 HYDROCARBON RECOVERY LOG - Continued

Measurement Date	Time	Quarter	Method	Status	Depth to Product (ft)	Depth to Water (ft)	Product Thickness Level (ft)	Product Bailed/Purged (gal)	Water Purged (gal)
3/23/2006	14:30	1st.		Stop	NR	NR	NR	NR	NR
3/27/2006	15:30	1st.	Pump	Start	NR	NR	NR	NR	NR
3/31/2006	11:30	1st.	Pump	Continue pumping	NR	NR	NR	7	174
4/3/2006	11:30	2nd		Stop	NR	NR	NR	1	38
4/4/2006	11:00	2nd			32.75	33.08	0.33	NR	NR
6/6/2006	13:00	2nd			32.39	34.54	2.15	NR	NR
6/8/2006	15:00	2nd	Pump	Start	NR	NR	NR	NR	NR
6/29/2006	10:00	2nd		Stop	NR	NR	NR	8	365
7/31/2006	11:45	3rd			33.06	33.48	0.42	NR	NR
7/31/2006	11:45	3rd	Pump	Start pump	NR	NR	NR	NR	NR
8/3/2006	14:20	3rd		Stopped pump	NR	NR	NR	2	87
8/8/2006	9:00	3rd	Pump	Start pump	NR	NR	NR	NR	NR
8/10/2006	15:30	3rd	Pump	Start pump	NR	NR	NR	NR	NR
8/22/2006	9:00	3rd		Stopped. Pulled pump	NR	NR	NR	4.9	373
8/22/2006	9:45	3rd	Pump	Start pump	33.1	33.4	0.3	NR	NR
12/21/2006	15:55	4th	Pump	Start pump	35.2	36	0.8	0.62	70
2/21/2007	10:15	1st.	Pump	Start pump	33.42	34.6	1.18	0.63	53.5
6/5/2007	10:00	2nd		Compressor Down	32.42	32.71	0.29	NR	NR
6/5/2007	10:10	2nd		Hand Bailed	NR	NR	NR	0.05	9
6/6/2007	8:40	2nd		Hand bailed	NR	NR	NR	0.1	11
6/13/2007	14:00	2nd		Hand bailed	NR	NR	NR	0.1	12
6/14/2007	10:40	2nd		Hand bailed	NR	NR	NR	0.05	8
7/10/2007	10:08	3rd		Hand bailed	32.42	32.71	0.29	0.3	18
7/11/2007	9:25	3rd		Hand bailed	NR	NR	NR	0.21	NR
7/23/2007	10:00	3rd		Hand bailed	NR	NR	NR	0.1	NR
11/26/2007	10:50	4th		Hand bailed	30.76	36.45	5.69	0.18	37
2/18/2008	15:32	1st.		Hand Bailed - pump frozen	30.18	34.77	4.59	1.66	36
5/21/2008	14:10	2nd	Pump	Used Pump	30.33	34.57	4.24	1.39	51

RW-1 HYDROCARBON RECOVERY LOG - Continued

Measurement Date	Time	Quarter	Method	Status	Depth to Product (ft)	Depth to Water (ft)	Product Thickness Level (ft)	Product Bailed/Purged (gal)	Water Purged (gal)
9/12/2008[1]	14:30	3rd		Bladder pump malfunctioned	30.03	34.59	4.56	Not Bailed	0
11/13/2008	13:00	4th	Pump	Used Pump	30.02	34.63	4.61	0.94	65
2/11/2009	14:05	1st.	Pump	Used Pump	30.21	31.72	1.51	0.29	90
5/5/2009	11:30	2nd	Pump	Used Pump	30.22	30.8	0.58	0.41	76
8/10/2009	9:22	3rd	Pump	Used Pump	30.69	31.02	0.33	0.89	98
10/28/2009	10:55	4th	Pump	Used Pump	30.56	30.75	0.19	0.19	74
3/3/2010	9:00	1st	Pump	Used Pump	30.89	31.05	0.16	0.21	31
6/3/2010	13:10	2nd	Pump	Used Pump	30.99	31.09	0.1	0.1	32
9/20/2010	14:00	3rd	Pump	Used Pump	29.91	30.06	0.15	0.25	34
11/3/2010	9:10	4th	Pump	Used Pump	30.89	31.01	0.12	0.1	31
3/9/2011	10:19	1st	Pump	Used Pump	30.04	30.15	0.11	0.12	40
6/27/2011	8:05	2nd	Pump	Used Pump	30.52	30.63	0.11	0.1	45
10/3/2011	15:07	Annual	Pump	Used Pump	30.81	30.9	0.09	0.11	42
11/8/2011	8:30	4th	Pump	Used Pump	30.77	30.85	0.08	0.09	38

NOTES:
FT = Feet
Gal = Gallon
NR = Not Recorded
[1] *Bladder pump has torn diaphragm. Pump non-repairable. Ordered new pump*

RW-5 HYDROCARBON RECOVERY LOG
Western Refining - Gallup Refinery
2/22/05 thru 11/8/11

Measurement Date	Time	Quarter	Method	Status	Depth to Product (ft)	Depth to Water (ft)	Product Thickness Level (ft)	Product Bailed/Purged (gal)	Water Purged (gal)
2/22/2005	14:15	1st	Bailer	Start	32.92	34.01	1.09	4.5	NR
3/3/2005	14:00	1st	Bailer	Start	33.08	33.42	0.34	6	NR
6/24/2005	9:00	2nd	Bailer	Start	32.96	34.04	1.08	2.5	NR
9/16/2005	9:20	3rd	Bailer	Start	32.83	33.85	1.02	2.5	NR
12/5/2005	14:00	4th	Bailer	Start	32.52	33.21	0.69	1.5	NR
3/16/2006	14:50	1st	Bailer	Start	32.58	33	0.42	1	NR
7/26/2006	14:35	2nd	Bailer	Start	32.9	33.31	0.41	0.5	NR
10/16/2006	09:15	4th	Bailer	Start	32.73	33.42	0.69	0.25	NR
2/13/2007	09:00	1st	Bailer	Start	32.17	33.95	1.78	0.5	NR
4/30/2007	11:20	2nd	Bailer	Start	33	33.83	0.83	2.5	NR
7/10/2007	10:15	3rd	Bailer	Start	33.1	33.92	0.82	2.5	NR
11/26/2007	08:00	4th	Bailer	Start	33.01	33.91	0.9	1.75	NR
2/18/2008	15:15	1st	Bailer	Start	33.19	33.95	0.76	0.19	20
5/21/2008	14:20	2nd	Bailer	Start	32.77	33.84	1.07	0.14	18
9/12/2008	14:30	3rd	Bailer	Start	32.62	32.85	0.23	0.05	15
11/3/2008	14:00	4th	Bailer	Start	31.05	32.34	1.29	0.05	15
2/11/2009	13:40	1st	Bailer	Start	32.08	32.15	0.07	0.05	15
5/5/2009	10:02	2nd	Bailer	Start	0	31.91	0	0	0
8/10/2009	9:50	3rd	Bailer	Start	0	31.94	0	0	0
10/28/2009	10:45	4th	Bailer	Start	0	31.71	0	0	0
3/3/2010	9:35	1st	Bailer	Start	0	31.63	0	0	0
6/3/2010	13:40	2nd	Bailer	Start	0	31.37	0	0	0

RW-5 HYDROCARBON RECOVERY LOG - Continued

Measurement Date	Time	Quarter	Method	Status	Depth to Product (ft)	Depth to Water (ft)	Product Thickness Level (ft)	Product Bailed/Purged (gal)	Water Purged (gal)
9/20/2010	14:24	3rd	Bailer	Start	0	31.94	0	0	0
11/3/2010	9:30	4th	Bailer	Start	0	31.94	0	0	0
3/9/2011	10:29	1st	Bailer	Start	0	30.05	0	0	20
6/27/2011	8:40	2nd	Bailer	Start	0	28.96	0	0	20
10/4/2011	8:15	3rd	Bailer	Start	0	29.89	0	0	14
11/8/2011	9:20	4th	Bailer	Start	0	29.85	0	0	17

NOTES:
FT = Feet
Gal = Gallon
NR = Not Recorded

RW-6 HYDROCARBON RECOVERY LOG
Western Refining - Gallup Refinery
2/22/05 thru 11/8/11

Measurement Date	Time	Quarter	Method	Status	Depth to Product (ft)	Depth to Water (ft)	Product Thickness Level (ft)	Product Bailed/Purged (gal)	Water Purged (gal)
2/22/2005	14:30	1st	Bailer	Start	33.12	34.5	1.38	4.5	NR
3/3/2005	14:00	2nd	Bailer	Start	33.15	34	0.85	6	NR
6/24/2005	11:00	2nd	Bailer	Start	33.31	34.46	1.15	3.5	NR
9/16/2005	10:20	3rd	Bailer	Start	32.98	34.33	1.35	3	NR
3/16/2006	12:45	1st	Bailer	Start	32.67	33.75	1.08	2.5	NR
7/26/2006	15:00	2nd	Bailer	Start	33	34.12	1.12	1.5	NR
10/16/2006	09:55	4th	Bailer	Start	33.71	34.63	0.92	0.75	NR
2/13/2007	09:50	1st	Bailer	Start	33.29	34.5	1.21	0.75	NR
4/30/2007	11:25	2nd	Bailer	Start	34.42	34.58	0.16	0.25	NR
7/10/2007	10:08	3rd	Bailer	Start	33.29	34.58	1.29	6.78	NR
11/28/2007	08:10	4th	Bailer	Start	33.25	34.47	1.22	4.5	NR
2/18/2008	15:11	1st	Bailer	Start	33.44	34.35	0.91	0.11	20
5/21/2008	14:30	2nd	Bailer	Start	33.02	34.12	1.1	0.13	18
9/12/2008	14:35	3rd	Bailer	Start	32.12	32.83	0.71	0.09	15
11/3/2008	14:35	4th	Bailer	Start	32.46	32.69	0.23	0.04	15
2/11/2009	13:30	1st	Bailer	Start	32.19	32.35	0.16	0.12	15
5/5/2009	9:45	2nd	Bailer	Start	32.08	32.26	0.18	0.04	15
8/10/2009	9:55	3rd	Bailer	Start	32.04	32.28	0.24	0.03	15
10/28/2009	10:55	4th	Bailer	Start	31.81	32.03	0.22	0.03	12
3/3/2010	9:40	1st	Bailer	Start	31.78	32.01	0.23	0.05	15
6/3/2010	13:45	2nd	Bailer	Start	31.61	31.7	0.09	0.05	15
9/20/2010	14:30	3rd	Bailer	Start	32.04	32.28	0.24	0.03	15
11/3/2010	9:35	4th	Bailer	Start	32.01	32.1	0.09	0.02	15

RW-6 HYDROCARBON RECOVERY LOG - Continued

Measurement Date	Time	Quarter	Method	Status	Depth to Product (ft)	Depth to Water (ft)	Product Thickness Level (ft)	Product Bailed/Purged (gal)	Water Purged (gal)
3/9/2011	10:34	1st	Bailer	Start	30.24	30.26	0.02	0.04	25
6/27/2011	9:25	2nd	Bailer	Start	30.11	30.15	0.04	0.04	30
10/4/2011	9:05	3rd	Bailer	Start	29.91	29.94	0.03	0.09	30
11/8/2011	9:45	4th	Bailer	Start	29.90	29.93	0.03	0.05	25

NOTES:
FT - Feet
Gal - Gallon
NR: Not Recorded

RW-1, RW-5 AND RW-6 YTD SUMMARY
1995 thu 2011

RW-1

Year	Product Bailed/Purged (gal)	Water Purged (gal)
2005	431.5	1210.5
2006	23.52	1107
2007	1.72	148.5
2008	3.99	152
2009	1.78	338
2010	0.66	128
2011	0.42	165
TOTAL	**463.59**	**3249**

RW-5

Year	Product Bailed/Purged (gal)	Water Purged (gal)
2005	17	NA
2006	1.75	NA
2007	7.25	7.25
2008	0.48	83
2009	0.05	15
2010	0	NA
2011	0	71
TOTAL	**26.53**	**105.25**

RW-6

Year	Product Bailed/Purged (gal)	Water Purged (gal)
2005	17	NA
2006	4.75	NA
2007	12.28	NA
2008	0.37	68
2009	0.22	57
2010	0.15	60
2011	0.22	110
TOTAL	**34.77**	**185**

NOTES:
NA = Not Available

APPLICABLE STANDARDS

NMAC 20.6.2.3103

STANDARDS FOR GROUND WATER

TABLE 2a – TPH SCREENING

20.6.2.2101 GENERAL REQUIREMENTS

20.6.2.2004 - 20.6.2.2099: [RESERVED]
[12-1-95; 20.6.2.2001 - 20.6.2.2099 NMAC - Rn, 20 NMAC 6.2.I.1221-2099, 1-15-01; A, 5-18-11]

20.6.2.2100 APPLICABILITY: The requirements of Section 20.6.2.2101 and 20.6.2.2102 NMAC shall not apply to any discharge which is subject to a permit under the National Pollutant Discharge Elimination System of P. L. 92-500; provided that any discharger who is given written notice of National Pollutant Discharge Elimination System permit violation from the Administrator of the Environmental Protection Agency and who has not corrected the violation within thirty days of receipt of said notice shall be subject to Section 20.6.2.2101 and 20.6.2.2102 NMAC until in compliance with the National Pollution Discharge Elimination System permit conditions; provided further that nothing in this Part shall be construed as a deterrent to action under Section 74-6-11 NMSA, 1978.
[8-13-76; 20.6.2.2100 NMAC - Rn, 20 NMAC 6.2.II.2100, 1-15-01]

20.6.2.2101 GENERAL REQUIREMENTS:

A. Except as otherwise provided in Sections 20.6.2.2000 through 20.6.2.2201 NMAC, no person shall cause or allow effluent to discharge to a watercourse if the effluent as indicated by:

(1) any two consecutive daily composite samples;

(2) more than one daily composite sample in any thirty-day period (in which less than ten (10) daily composite samples are examined);

(3) more than ten percent (10%) of the daily composite samples in any thirty-day period (in which ten (10) or more daily composite samples are examined); or

(4) a grab sample collected during flow from an intermittent or infrequent discharge does not conform to the following:

(a)	Bio-chemical Oxygen Demand (BOD)	Less than 30 mg/l
(b)	Chemical Oxygen Demand (COD)	Less than 125 mg/l
(c)	Settleable Solids	Less than 0.5 mg/l
(d)	Fecal Coliform Bacteria	Less than 500 organisms per 100 ml
(e)	pH	Between 6.6 and 8.6

B. Upon application, the secretary may eliminate the pH requirement for any effluent source that the secretary determines does not unreasonably degrade the water into which the effluent is discharged.

C. Subsection A of this Section does not apply to the weight of constituents in the water diverted.

D. Samples shall be examined in accordance with the most current edition of Standard Methods for the Examination of Water and Wastewater published by the American Public Health Association or the most current edition of Methods for Chemical Analysis of Water and Wastes published by the Environmental Protection Agency, where applicable.
[4-20-68, 3-14-71, 10-8-71, 8-13-76, 2-20-81, 12-1-95; 20.6.2.2101 NMAC - Rn, 20 NMAC 6.2.II.2101, 1-15-01]

20.6.2.2102 RIO GRANDE BASIN--COMMUNITY SEWERAGE SYSTEMS:

A. No person shall cause or allow effluent from a community sewerage system to discharge to a watercourse in the Rio Grande Basin between the headwaters of Elephant Butte Reservoir and Angostura Diversion Dam as described in Subsection E of this Section if the effluent, as indicated by:

(1) any two consecutive daily composite samples;

(2) more than one daily composite sample in any thirty-day period (in which less than ten (10) daily composite samples are examined);

(3) more than ten percent (10%) of the daily composite samples in any thirty-day period (in which ten (10) or more daily composite samples are examined); or

(4) a grab sample collected during flow from an intermittent or infrequent discharge does not conform to the following:

(a)	Bio-chemical Oxygen Demand (BOD)	Less than 30 mg/l
(b)	Chemical Oxygen Demand (COD)	Less than 80 mg/l
(c)	Settleable Solids	Less than 0.1 mg/l
(d)	Fecal Coliform Bacteria	Less than 500 organisms per 100 ml
(e)	pH	Between 6.6 and 8.6

B. Upon application, the secretary may eliminate the pH requirement for any effluent source that the secretary determines does not unreasonably degrade the water into which the effluent is discharged.

C. Subsection A of this Section does not apply to the weight of constituents in the water diverted.

D. Samples shall be examined in accordance with the most current edition of Standard Methods for the Analysis of Water and Wastewater published by the American Public Health Association or the most current edition of Methods for Chemical Analysis of Water and Wastes published by the Environmental Protection Agency, where applicable.

E. The following is a description of the Rio Grande Basin from the headwaters of Elephant Butte Reservoir to Angostura Diversion Dam as used in this Section. Begin at San Marcial USGS gauging station, which is the headwaters of Elephant Butte Reservoir Irrigation Project, thence northwest to U.S. Highway 60, nine miles ± west of Magdalena; thence west along the northeast edge of the San Agustin Plains closed basin; thence north along the east side of the north plains closed basin to the Continental Divide; thence northly along the Continental Divide to the community of Regina on State Highway 96; thence southeasterly along the crest of the San Pedro Mountains to Cerro Toledo Peak; thence southwesterly along the Sierra de Los Valles ridge and the Borrego Mesa to Bodega Butte; thence southerly to Angostura Diversion Dam which is the upper reach of the Rio Grande in this basin; thence southeast to the crest and the crest of the Manzano Mountains and the Los Pinos Mountains; thence southerly along the divide that contributes to the Rio Grande to San Marcial gauging station to the point and place of beginning; excluding all waters upstream of Jemez Pueblo which flow into the Jemez River drainage and the Bluewater Lake. Counties included in the basin are:

(1) north portion of Socorro County;
(2) northeast corner of Catron County;
(3) east portion of Valencia County;
(4) west portion of Bernalillo County;
(5) east portion of McKinley County; and
(6) most of Sandoval County.

[3-14-71, 9-3-72, 8-13-76, 2-20-81, 12-1-95; 20.6.2.2102 NMAC - Rn, 20 NMAC 6.2.II.2102, 1-15-01]

20.6.2.2103 - 20.6.2.2199: [RESERVED]
[12-1-95; 20.6.2.2103 - 20.6.2.2199 NMAC - Rn, 20 NMAC 6.2.II.2103-2199, 1-15-01]

20.6.2.2200 WATERCOURSE PROTECTION:
[12-1-95; 20.6.2.2200 NMAC - Rn, 20 NMAC 6.2.II.2200, 1-15-01]

20.6.2.2201 DISPOSAL OF REFUSE: No person shall dispose of any refuse in a natural watercourse or in a location and manner where there is a reasonable probability that the refuse will be moved into a natural watercourse by leaching or otherwise. Solids diverted from the stream and returned thereto are not subject to abatement under this Section.
[4-20-68, 9-3-72; 20.6.2.2201 NMAC - Rn, 20 NMAC 6.2.II.2201, 1-15-01]

20.6.2.2202 - 20.6.2.2999: [RESERVED]
[12-1-95; 20.6.2.2202 - 20.6.2.2999 NMAC - Rn, 20 NMAC 6.2.II.2202-3100, 1-15-01]

20.6.2.3000 PERMITTING AND GROUND WATER STANDARDS:
[12-1-95; 20.6.2.3000 NMAC - Rn, 20 NMAC 6.2.III, 1-15-01]

20.6.2.3001 - 20.6.2.3100: [RESERVED]
[12-1-95; 20.6.2.3001 - 20.6.2.3100 NMAC - Rn, 20 NMAC 6.2.II.2202-3100, 1-15-01]

20.6.2.3101 PURPOSE:

A. The purpose of Sections 20.6.2.3000 through 20.6.2.3114 NMAC controlling discharges onto or below the surface of the ground is to protect all ground water of the state of New Mexico which has an existing concentration of 10,000 mg/l or less TDS, for present and potential future use as domestic and agricultural water supply, and to protect those segments of surface waters which are gaining because of ground water inflow, for uses designated in the New Mexico Water Quality Standards. Sections 20.6.2.3000 through 20.6.2.3114 NMAC are written so that in general:

(1) if the existing concentration of any water contaminant in ground water is in conformance with the standard of 20.6.2.3103 NMAC, degradation of the ground water up to the limit of the standard will be allowed; and

(2) if the existing concentration of any water contaminant in ground water exceeds the standard of Section 20.6.2.3103 NMAC, no degradation of the ground water beyond the existing concentration will be allowed.

B. Ground water standards are numbers that represent the pH range and maximum concentrations of water contaminants in the ground water which still allow for the present and future use of ground water resources.

C. The standards are not intended as maximum ranges and concentrations for use, and nothing herein contained shall be construed as limiting the use of waters containing higher ranges and concentrations.

[2-18-77; 20.6.2.3101 NMAC - Rn, 20 NMAC 6.2.III.3101, 1-15-01]

20.6.2.3102: [RESERVED]

[12-1-95; 20.6.2.3102 NMAC - Rn, 20 NMAC 6.2.III.3102, 1-15-01]

20.6.2.3103 STANDARDS FOR GROUND WATER OF 10,000 mg/l TDS CONCENTRATION OR LESS: The following standards are the allowable pH range and the maximum allowable concentration in ground water for the contaminants specified unless the existing condition exceeds the standard or unless otherwise provided in Subsection D of Section 20.6.2.3109 NMAC. Regardless of whether there is one contaminant or more than one contaminant present in ground water, when an existing pH or concentration of any water contaminant exceeds the standard specified in Subsection A, B, or C of this section, the existing pH or concentration shall be the allowable limit, provided that the discharge at such concentrations will not result in concentrations at any place of withdrawal for present or reasonably foreseeable future use in excess of the standards of this section. These standards shall apply to the dissolved portion of the contaminants specified with a definition of dissolved being that given in the publication "*methods for chemical analysis of water and waste of the U.S. environmental protection agency*," with the exception that standards for mercury, organic compounds and non-aqueous phase liquids shall apply to the total unfiltered concentrations of the contaminants.

A. Human Health Standards-Ground water shall meet the standards of Subsection A and B of this section unless otherwise provided. If more than one water contaminant affecting human health is present, the toxic pollutant criteria as set forth in the definition of toxic pollutant in Section 20.6.2.1101 NMAC for the combination of contaminants, or the Human Health Standard of Subsection A of Section 20.6.2.3103 NMAC for each contaminant shall apply, whichever is more stringent. Non-aqueous phase liquid shall not be present floating atop of or immersed within ground water, as can be reasonably measured.

(1) Arsenic (As).....0.1 mg/l
(2) Barium (Ba).....1.0 mg/l
(3) Cadmium (Cd).....0.01 mg/l
(4) Chromium (Cr).....0.05 mg/l
(5) Cyanide (CN).....0.2 mg/l
(6) Fluoride (F).....1.6 mg/l
(7) Lead (Pb).....0.05 mg/l
(8) Total Mercury (Hg).....0.002 mg/l
(9) Nitrate (NO_3 as N).....10.0 mg/l
(10) Selenium (Se).....0.05 mg/l
(11) Silver (Ag).....0.05 mg/l
(12) Uranium (U).....0.03 mg/l
(13) Radioactivity: Combined Radium-226 & Radium-228.....30 pCi/l
(14) Benzene.....0.01 mg/l
(15) Polychlorinated biphenyls (PCB's).....0.001 mg/l
(16) Toluene.....0.75 mg/l
(17) Carbon Tetrachloride.....0.01 mg/l
(18) 1,2-dichloroethane (EDC).....0.01 mg/l
(19) 1,1-dichloroethylene (1,1-DCE).....0.005 mg/l
(20) 1,1,2,2-tetrachloroethylene (PCE).....0.02 mg/l
(21) 1,1,2-trichloroethylene (TCE).....0.1 mg/l
(22) ethylbenzene.....0.75 mg/l
(23) total xylenes.....0.62 mg/l
(24) methylene chloride.....0.1 mg/l
(25) chloroform.....0.1 mg/l
(26) 1,1-dichloroethane.....0.025 mg/l
(27) ethylene dibromide (EDB).....0.0001 mg/l
(28) 1,1,1-trichloroethane.....0.06 mg/l
(29) 1,1,2-trichloroethane.....0.01 mg/l

(30) 1,1,2,2-tetrachloroethane.....0.01 mg/l
(31) vinyl chloride.....0.001 mg/l
(32) PAHs: total naphthalene plus monomethylnaphthalenes.....0.03 mg/l
(33) benzo-a-pyrene.....0.0007 mg/l

B. Other Standards for Domestic Water Supply

(1) Chloride (Cl) .....250.0 mg/l
(2) Copper (Cu) .....1.0 mg/l
(3) Iron (Fe) .....1.0 mg/l
(4) Manganese (Mn) .....0.2 mg/l
(6) Phenols.....0.005 mg/l
(7) Sulfate (SO_4) .....600.0 mg/l
(8) Total Dissolved Solids (TDS) .....1000.0 mg/l
(9) Zinc (Zn) .....10.0 mg/l
(10) pH.....between 6 and 9

C. Standards for Irrigation Use - Ground water shall meet the standards of Subsection A, B, and C of this section unless otherwise provided.

(1) Aluminum (Al).....5.0 mg/l
(2) Boron (B) .....0.75 mg/l
(3) Cobalt (Co) .....0.05 mg/l
(4) Molybdenum (Mo) .....1.0 mg/l
(5) Nickel (Ni) .....0.2 mg/l

[2-18-77, 1-29-82, 11-17-83, 3-3-86, 12-1-95; 20.6.2.3103 NMAC - Rn, 20 NMAC 6.2.III.3103, 1-15-01; A, 9-26-04]

[Note: For purposes of application of the amended numeric uranium standard to past and current water discharges (as of 9-26-04), the new standard will not become effective until June 1, 2007. For any new water discharges, the uranium standard is effective 9-26-04.]

20.6.2.3104 DISCHARGE PERMIT REQUIRED: Unless otherwise provided by this Part, no person shall cause or allow effluent or leachate to discharge so that it may move directly of indirectly into ground water unless he is discharging pursuant to a discharge permit issued by the secretary. When a permit has been issued, discharges must be consistent with the terms and conditions of the permit. In the event of a transfer of the ownership, control, or possession of a facility for which a discharge permit is in effect, the transferee shall have authority to discharge under such permit, provided that the transferee has complied with Section 20.6.2.3111 NMAC, regarding transfers.
[2-18-77, 12-24-87, 12-1-95; Rn & A, 20.6.2.3104 NMAC - 20 NMAC 6.2.III.3104, 1-15-01; A, 12-1-01]

20.6.2.3105 EXEMPTIONS FROM DISCHARGE PERMIT REQUIREMENT: Sections 20.6.2.3104 and 20.6.2.3106 NMAC do not apply to the following:

A. Effluent or leachate which conforms to all the listed numerical standards of Section 20.6.2.3103 NMAC and has a total nitrogen concentration of 10 mg/l or less, and does not contain any toxic pollutant. To determine conformance, samples may be taken by the agency before the effluent or leachate is discharged so that it may move directly or indirectly into ground water; provided that if the discharge is by seepage through non-natural or altered natural materials, the agency may take samples of the solution before or after seepage. If for any reason the agency does not have access to obtain the appropriate samples, this exemption shall not apply;

B. Effluent which is discharged from a sewerage system used only for disposal of household and other domestic waste which is designed to receive and which receives 2,000 gallons or less of liquid waste per day;

C. Water used for irrigated agriculture, for watering of lawns, trees, gardens or shrubs, or for irrigation for a period not to exceed five years for the revegetation of any disturbed land area, unless that water is received directly from any sewerage system;

D. Discharges resulting from the transport or storage of water diverted, provided that the water diverted has not had added to it after the point of diversion any effluent received from a sewerage system, that the source of the water diverted was not mine workings, and that the secretary has not determined that a hazard to public health may result;

E. Effluent which is discharged to a watercourse which is naturally perennial; discharges to dry arroyos and ephemeral streams are not exempt from the discharge permit requirement, except as otherwise provided in this section;

F. Those constituents which are subject to effective and enforceable effluent limitations in a National Pollutant Discharge Elimination System (NPDES) permit, where discharge onto or below the surface of the ground so that water contaminants may move directly or indirectly into ground water occurs downstream from the outfall where NPDES effluent limitations are imposed, unless the secretary determines that a hazard to public health may result. For purposes of this subsection, monitoring requirements alone do not constitute effluent limitations;

G. Discharges resulting from flood control systems;

H. Leachate which results from the direct natural infiltration of precipitation through disturbed materials, unless the secretary determines that a hazard to public health may result;

I. Leachate which results entirely from the direct natural infiltration of precipitation through undisturbed materials;

J. Leachate from materials disposed of in accordance with the Solid Waste Management Regulations (20 NMAC 9.1) adopted by the New Mexico Environmental Improvement Board;

K. Natural ground water seeping or flowing into conventional mine workings which re-enters the ground by natural gravity flow prior to pumping or transporting out of the mine and without being used in any mining process; this exemption does not apply to solution mining;

L. Effluent or leachate discharges resulting from activities regulated by a mining plan approved and permit issued by the New Mexico Coal Surface Mining Commission, provided that this exemption shall not be construed as limiting the application of appropriate ground water protection requirements by the New Mexico Coal Surface Mining Commission;

M. Effluent or leachate discharges which are regulated by the Oil Conservation Commission and the regulation of which by the Water Quality Control Commission would interfere with the exclusive authority granted under Section 70-2-12 NMSA 1978, or under other laws, to the Oil Conservation Commission.

[2-18-77, 6-26-80, 7-2-81, 12-24-87, 12-1-95; 20.6.2.3105 NMAC - Rn, 20 NMAC 6.2.III.3105, 1-15-01; A, 12-1-01]

20.6.2.3106 APPLICATION FOR DISCHARGE PERMITS AND RENEWALS:

A. Any person who, before or on June 18, 1977, is discharging any of the water contaminants listed in Section 20.6.2.3103 NMAC or any toxic pollutant so that they may move directly or indirectly into ground water shall, within 120 days of receipt of written notice from the secretary that a discharge permit is required, or such longer time as the secretary shall for good cause allow, submit a discharge plan to the secretary for approval; such person may discharge without a discharge permit until 240 days after written notification by the secretary that a discharge permit is required or such longer time as the secretary shall for good cause allow.

B. Any person who intends to begin, after June 18, 1977, discharging any of the water contaminants listed in Section 20.6.2.3103 NMAC or any toxic pollutant so that they may move directly or indirectly into ground water shall notify the secretary giving the information enumerated in Subsection B of Section 20.6.2.1201NMAC; the secretary shall, within 60 days, notify such person if a discharge permit is required; upon submission, the secretary shall review the discharge plan pursuant to Sections 20.6.2.3108 and 20.6.2.3109 NMAC. For good cause shown the secretary may allow such person to discharge without a discharge permit for a period not to exceed 120 days.

C. A proposed discharge plan shall set forth in detail the methods or techniques the discharger proposes to use or processes expected to naturally occur which will ensure compliance with this Part. At least the following information shall be included in the plan:

(1) Quantity, quality and flow characteristics of the discharge;

(2) Location of the discharge and of any bodies of water, watercourses and ground water discharge sites within one mile of the outside perimeter of the discharge site, and existing or proposed wells to be used for monitoring;

(3) Depth to and TDS concentration of the ground water most likely to be affected by the discharge;

(4) Flooding potential of the site;

(5) Location and design of site(s) and method(s) to be available for sampling, and for measurement or calculation of flow;

(6) Depth to and lithological description of rock at base of alluvium below the discharge site if such information is available;

(7) Any additional information that may be necessary to demonstrate that the discharge permit will not result in concentrations in excess of the standards of Section 20.6.2.3103 NMAC or the presence of any toxic pollutant at any place of withdrawal of water for present or reasonably foreseeable future use. Detailed information

A TPH screening guideline was calculated for each of the types of petroleum product based on the assumed composition from Table 1 for petroleum products and the direct soil standards incorporating ceiling concentrations given in the MADEP VPH/EPH Excel spreadsheet for each of the carbon fractions. Groundwater concentrations are based on the weighted sum of the noncarcinogenic toxicity of the petroleum fractions.

Method 1 from the MADEP VPH/EPH document was applied, which represents generic cleanup standards for soil and groundwater. Method 1 applies if contamination exists in only soil and groundwater. The MADEP VPH/EPH further divides groundwater into standards. Standard GW-1 applies when groundwater may be used for drinking water purposes. GW-1 standards are based upon ingestion and use of groundwater as a potable water supply. The TPH screening guidelines for sites with potable groundwater are presented in Table 2a.

Table 2a. TPH Screening Guidelines for Potable Groundwater (GW-1)

TPH			Concentration in Groundwater (mg/L)
Petroleum Product	**Residential Direct Exposure (mg/kg)**	**Industrial Direct Exposure (mg/kg)**	
Diesel #2/crankcase oil	520	1120	1.72
#3 and #6 Fuel Oil	440	890	1.34
Kerosene and jet fuel	760	1810	2.86
Mineral oil dielectric fluid	1440	3040	3.64
Unknown oil [a]	200	200	0.2
Waste Oil [b]	2500	5000	Petroleum-Related Contaminants
Gasoline	Not applicable	Not applicable	Petroleum-Related Contaminants

[a] Sites with oil from unknown sources must be tested for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and polychlorinated biphenyls (PCBs) to determine if other potentially toxic constituents are present. The TPH guidelines in Table 2 are not designed to be protective of exposure to these constituents therefore they must be tested for, and compared to, their individual NMED soil screening guidelines.

[b] Compositional assumption for waste oil developed by NMED is based on review of chromatographs of several types of waste oil. Sites with waste oil must be tested for VOCs, SVOCs, metals, and PCBs to determine if other potentially toxic constituents are present. The TPH guidelines in Table 2 are not designed to be protective of exposure to these constituents therefore they must be tested for, and compared to, their individual NMED soil screening guidelines.

The second standard is GW-2, which is applicable for sites where the depth to groundwater is less than 15 feet from the ground surface and within 30 feet of an occupied structure. The structure may be either residential or industrial. GW-2 standards are based upon "inhalation exposures that could occur to occupants of the building impacted by volatile compounds, which partition from the groundwater" (MADEP 2001). The GW-2 screening guidelines ONLY apply for the evaluation of inhalation exposures. If potential ingestion or contact with contaminated soil and/or

APPLICABLE STANDARDS

40 CFR 141.62

MAXIMUM CONTAMINANT LEVELS (MCLs)

Electronic Code of Federal Regulations
e-CFR ™

e-CFR Data is current as of June 8, 2012

Title 40: Protection of Environment
PART 141—NATIONAL PRIMARY DRINKING WATER REGULATIONS

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Subpart G—National Primary Drinking Water Regulations: Maximum Contaminant Levels and Maximum Residual Disinfectant Levels

§ 141.60 Effective dates.

(a) The effective dates for §141.61 are as follows:

(1) The effective date for paragraphs (a)(1) through (a)(8) of §141.61 is January 9, 1989.

(2) The effective date for paragraphs (a)(9) through (a)(18) and (c)(1) through (c)(18) of §141.61 is July 30, 1992.

(3) The effective date for paragraphs (a)(19) through (a)(21), (c)(19) through (c)(25), and (c)(27) through (c)(33) of §141.61 is January 17, 1994. The effective date of §141.61(c)(26) is August 17, 1992.

(b) The effective dates for §141.62 are as follows:

(1) The effective date of paragraph (b)(1) of §141.62 is October 2, 1987.

(2) The effective date for paragraphs (b)(2) and (b)(4) through (b)(10) of §141.62 is July 30, 1992.

(3) The effective date for paragraphs (b)(11) through (b)(15) of §141.62 is January 17, 1994.

(4) The effective date for §141.62(b)(16) is January 23, 2006.

[56 FR 3593, Jan. 30, 1991, as amended at 57 FR 31846, July 17, 1992; 59 FR 34324, July 1, 1994; 66FR 7063, Jan. 22, 2001]

§ 141.61 Maximum contaminant levels for organic contaminants.

(a) The following maximum contaminant levels for organic contaminants apply to community and non-transient, non-community water systems.

CAS No.	Contaminant	MCL (mg/l)
(1) 75–01–4	Vinyl chloride	0.002
(2) 71–43–2	Benzene	0.005
(3) 56–23–5	Carbon tetrachloride	0.005
(4) 107–06–2	1,2-Dichloroethane	0.005

(5) 79–01–6	Trichloroethylene	0.005
(6) 106–46–7	para-Dichlorobenzene	0.075
[illegible] 75–35–4	1,1-Dichloroethylene	0.007
(8) 71–55–6	1,1,1-Trichloroethane	0.2
(9) 156–59–2	cis-1,2-Dichloroethylene	0.07
(10) 78–87–5	1,2-Dichloropropane	0.005
(11) 100–41–4	Ethylbenzene	0.7
(12) 108–90–7	Monochlorobenzene	0.1
(13) 95–50–1	o-Dichlorobenzene	0.6
(14) 100–42–5	Styrene	0.1
(15) 127–18–4	Tetrachloroethylene	0.005
(16) 108–88–3	Toluene	1
(17) 156–60–5	trans-1,2-Dichloroethylene	0.1
(18) 1330–20–7	Xylenes (total)	10
(19) 75–09–2	Dichloromethane	0.005
(20) 120–82–1	1,2,4-Trichloro- benzene	.07
(21) 79–00–5	1,1,2-Trichloro- ethane	.005

(b) The Administrator, pursuant to section 1412 of the Act, hereby identifies as indicated in the Table [illegible] granular activated carbon (GAC), packed tower aeration (PTA), or oxidation (OX) as the best technology treatment technique, or other means available for achieving compliance with the maximum contaminant level for organic contaminants identified in paragraphs (a) and (c) of this section:

BAT for Organic Contaminants Listed in §141.61 (a) and (c)

CAS No.	Contaminant	GAC	PTA	OX
15972–60–8	Alachlor	X		
116–06–3	Aldicarb	X		
1646–88–4	Aldicarb sulfone	X		
1646–87–3	Aldicarb sulfoxide	X		
1912–24–9	Atrazine	X		
71–43–2	Benzene	X	X	
50–32–8	Benzo[a]pyrene	X		
1563–66–2	Carbofuran	X		
56–23–5	Carbon tetrachloride	X	X	
57–74–9	Chlordane	X		
75–99–0	Dalapon	X		
[illegible]–75–7	2,4-D	X		
103–23–1	Di (2-ethylhexyl) adipate	X	X	
117–81–7	Di (2-ethylhexyl) phthalate	X		
96–12–8	Dibromochloropropane (DBCP)	X	X	

95–50–1	o-Dichlorobenzene	X	X	
106–46–7	para-Dichlorobenzene	X	X	
7–06–2	1,2-Dichloroethane	X	X	
75–35–4	1,1-Dichloroethylene	X	X	
156–59–2	cis-1,2-Dichloroethylene	X	X	
156–60–5	trans-1,2-Dichloroethylene	X	X	
75–09–2	Dichloromethane		X	
78–87–5	1,2-Dichloropropane	X	X	
88–85–7	Dinoseb	X		
85–00–7	Diquat	X		
145–73–3	Endothall	X		
72–20–8	Endrin	X		
100–41–4	Ethylbenzene	X	X	
106–93–4	Ethylene Dibromide (EDB)	X	X	
1071–83–6	Gylphosate			X
76–44–8	Heptachlor	X		
1024–57–3	Heptachlor epoxide	X		
118–74–1	Hexachlorobenzene	X		
–47–3	Hexachlorocyclopentadiene	X	X	
58–89–9	Lindane	X		
72–43–5	Methoxychlor	X		
108–90–7	Monochlorobenzene	X	X	
23135–22–0	Oxamyl (Vydate)	X		
87–86–5	Pentachlorophenol	X		
1918–02–1	Picloram	X		
1336–36–3	Polychlorinated biphenyls (PCB)	X		
122–34–9	Simazine	X		
100–42–5	Styrene	X	X	
1746–01–6	2,3,7,8-TCDD (Dioxin)	X		
127–18–4	Tetrachloroethylene	X	X	
108–88–3	Toluene	X	X	
8001–35–2	Toxaphene	X		
93–72–1	2,4,5-TP (Silvex)	X		
120–82–1	1,2,4-Trichlorobenzene	X	X	
–55–6	1,1,1-Trichloroethane	X	X	
79–00–5	1,1,2-Trichloroethane	X	X	
79–01–6	Trichloroethylene	X	X	
75–01–4	Vinyl chloride		X	

1330–20–7	Xylene	X	X	

(c) The following maximum contaminant levels for synthetic organic contaminants apply to community water systems and non-transient, non-community water systems:

CAS No.	Contaminant	MCL (mg/l)
(1) 15972–60–8	Alachlor	0.002
(2) 116–06–3	Aldicarb	0.003
(3) 1646–87–3	Aldicarb sulfoxide	0.004
(4) 1646–87–4	Aldicarb sulfone	0.002
(5) 1912–24–9	Atrazine	0.003
(6) 1563–66–2	Carbofuran	0.04
(7) 57–74–9	Chlordane	0.002
(8) 96–12–8	Dibromochloropropane	0.0002
(9) 94–75–7	2,4-D	0.07
(10) 106–93–4	Ethylene dibromide	0.00005
(11) 76–44–8	Heptachlor	0.0004
(12) 1024–57–3	Heptachlor epoxide	0.0002
(13) 58–89–9	Lindane	0.0002
(14) 72–43–5	Methoxychlor	0.04
(15) 1336–36–3	Polychlorinated biphenyls	0.0005
(16) 87–86–5	Pentachlorophenol	0.001
(17) 8001–35–2	Toxaphene	0.003
(18) 93–72–1	2,4,5-TP	0.05
(19) 50–32–8	Benzo[a]pyrene	0.0002
(20) 75–99–0	Dalapon	0.2
(21) 103–23–1	Di(2-ethylhexyl) adipate	0.4
(22) 117–81–7	Di(2-ethylhexyl) phthalate	0.006
(23) 88–85–7	Dinoseb	0.007
(24) 85–00–7	Diquat	0.02
(25) 145–73–3	Endothall	0.1
(26) 72–20–8	Endrin	0.002
(27) 1071–53–6	Glyphosate	0.7
(28) 118–74–1	Hexacholorbenzene	0.001
(29) 77–47–4	Hexachlorocyclopentadiene	0.05
(30) 23135–22–0	Oxamyl (Vydate)	0.2
(31) 1918–02–1	Picloram	0.5
(32) 122–34–9	Simazine	0.004
(33) 1746–01–6	2,3,7,8-TCDD (Dioxin)	3×10^{-8}

[56 FR 3593, Jan. 30, 1991, as amended at 56 FR 30280, July 1, 1991; 57 FR 31846, July 17, 1992; 59 FR 34324, July 1, 1994]

§ 141.62 Maximum contaminant levels for inorganic contaminants.

(a) [Reserved]

(b) The maximum contaminant levels for inorganic contaminants specified in paragraphs (b) (2)–(6), (b) (10), and (b) (11)–(16) of this section apply to community water systems and non-transient, non-community water systems. The maximum contaminant level specified in paragraph (b)(1) of this section only applies to community water systems. The maximum contaminant levels specified in (b)(7), (b)(8), and (b)(9) of this section apply to community water systems; non-transient, non-community water systems; and transient non-community water systems.

Contaminant	MCL (mg/l)
(1) Fluoride	4.0
(2) Asbestos	7 Million Fibers/liter (longer than 10 µm).
(3) Barium	2
(4) Cadmium	0.005
(5) Chromium	0.1
(6) Mercury	0.002
(7) Nitrate	10 (as Nitrogen)
(8) Nitrite	1 (as Nitrogen)
(9) Total Nitrate and Nitrite	10 (as Nitrogen)
(10) Selenium	0.05
(11) Antimony	0.006
(12) Beryllium	0.004
(13) Cyanide (as free Cyanide)	0.2
(14) [Reserved]	
(15) Thallium	0.002
(16) Arsenic	0.010

(c) The Administrator, pursuant to section 1412 of the Act, hereby identifies the following as the best technology, treatment technique, or other means available for achieving compliance with the maximum contaminant levels for inorganic contaminants identified in paragraph (b) of this section, except fluoride:

BAT for Inorganic Compounds Listed in Section 141.62(b)

Chemical Name	BAT(s)
Antimony	2,7
Arsenic[4]	1, 2, 5, 6, 7, 9, 12[5]
Asbestos	2,3,8
Barium	5,6,7,9
Beryllium	1,2,5,6,7

Cadmium	2,5,6,7
Chromium	2,5,6[2],7
Cyanide	5,7,13
Mercury	2[1],4,6[1],7[1]
Nickel	5,6,7
Nitrate	5,7,9
Nitrite	5,7
Selenium	1,2[3],6,7,9
Thallium	1,5

[1]BAT only if influent Hg concentrations ≤10μg/1.

[2]BAT for Chromium III only.

[3]BAT for Selenium IV only.

[4]BATs for Arsenic V. Pre-oxidation may be required to convert Arsenic III to Arsenic V.

[5]To obtain high removals, iron to arsenic ratio must be at least 20:1.

Key to BATS in Table

1 = Activated Alumina

2 = Coagulation/Filtration (not BAT for systems < 500 service connections)

3 = Direct and Diatomite Filtration

4 = Granular Activated Carbon

5 = Ion Exchange

6 = Lime Softening (not BAT for systems <500 service connections)

7 = Reverse Osmosis

8 = Corrosion Control

9 = Electrodialysis

10 = Chlorine

11 = Ultraviolet

12 = Oxidation/Filtration

13 = Alkaline Chlorination (pH ≥8.5)

APPLICABLE STANDARDS

EPA REGIONAL SCREENING LEVELS

APRIL 2012

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = PPRTV Appendix; H = HEAST; J = New Jersey; Y = New York; O = EPA Office of Water; E = Environmental Criteria and Assessment Office; S = see user guide Section 5; L = see user guide on lead; M = mutagen; V = volatile; F = See FAQ; c = cancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; n = noncancer; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide); SSL values are based on DAF=1

Toxicity and Chemical-specific Information														Contaminant		Screening Levels												Protection of Ground Water SSLs	
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volc	muta-gen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	MCL-based SSL (mg/kg)
1.8E-02	C	5.1E-06	C	1.5E-01	I					1	0.1		ALAR	1596-84-5	2.7E+01	c	9.6E+01	c	4.8E-01	c	2.4E+00	c	3.7E+00	c		8.2E-04	
8.7E-03	I			4.0E-03	I					1	0.1		Acephate	30560-19-1	5.6E+01	c**	2.0E+02	c*					7.7E+00	c**		1.7E-03	
		2.2E-06	I			9.0E-03	I	V		1		1.1E+05	Acetaldehyde	75-07-0	1.0E+01	c**	5.2E+01	c**	1.1E+00	c**	5.6E+00	c**	2.2E+00	c**		4.5E-04	
				2.0E-02	I					1	0.1		Acetochlor	34256-82-1	1.2E+03	n	1.2E+04	n					2.7E+02	n		2.2E-01	
				9.0E-01	I	3.1E+01	A	V		1		1.1E+05	Acetone	67-64-1	6.1E+04	n	6.3E+05	nms	3.2E+04	n	1.4E+05	n	1.2E+04	n		2.4E+00	
				3.0E-03	P	6.0E-02	P	V		1		1.1E+05	Acetone Cyanohydrin	75-86-5	2.0E+02	n	2.1E+03	n	6.3E+01	n	2.6E+02	n	3.4E+01	n		6.9E-03	
						6.0E-02	I	V		1		1.3E+05	Acetonitrile	75-05-8	8.7E+02	n	3.7E+03	n	6.3E+01	n	2.6E+02	n	1.3E+02	n		2.6E-02	
				1.0E-01	I			V		1		2.5E+03	Acetophenone	98-86-2	7.8E+03	ns	1.0E+05	nms					1.5E+03	n		4.5E-01	
3.8E+00	C	1.3E-03	C							1	0.1		Acetylaminofluorene, 2-	53-96-3	1.3E-01	c	4.5E-01	c	1.9E-03	c	9.4E-03	c	1.4E-02	c		6.5E-05	
				5.0E-04	I	2.0E-05	I	V		1		2.3E+04	Acrolein	107-02-8	1.5E-01	n	6.5E-01	n	2.1E-02	n	8.8E-02	n	4.1E-02	n		8.4E-06	
5.0E-01	I	1.0E-04	I	2.0E-03	I	6.0E-03	I		M	1	0.1		Acrylamide	79-06-1	2.3E-01	c	3.4E+00	c	9.6E-03	c	1.2E-01	c	4.3E-02	c		9.1E-06	
				5.0E-01	I	1.0E-03	I			1	0.1		Acrylic Acid	79-10-7	3.0E+04	n	2.9E+05	nm	1.0E+00	n	4.4E+00	n	7.7E+03	n		1.6E+00	
5.4E-01	I	6.8E-05	I	4.0E-02	A	2.0E-03	I	V		1		1.1E+04	Acrylonitrile	107-13-1	2.4E-01	c*	1.2E+00	c*	3.6E-02	c*	1.8E-01	c*	4.5E-02	c*		9.8E-06	
						6.0E-03	P			1	0.1		Adiponitrile	111-69-3	8.5E+06	nm	3.6E+07	nm	6.3E+00	n	2.6E+01	n					
5.6E-02	C			1.0E-02	I					1	0.1		Alachlor	15972-60-8	8.7E+00	c*	3.1E+01	c					9.1E-01	c	2.0E+00	7.5E-04	1.6E-03
				1.0E-03	I					1	0.1		Aldicarb	116-06-3	6.1E+01	n	6.2E+02	n					1.5E+01	n		3.8E-03	
				1.0E-03	I					1	0.1		Aldicarb Sulfone	1646-88-4	6.1E+01	n	6.2E+02	n					1.6E+01	n		3.4E-03	
1.7E+01	I	4.9E-03	I	3.0E-05	I					1	0.1		Aldrin	309-00-2	2.9E-02	c*	1.0E-01	c	5.0E-04	c	2.5E-03	c	2.1E-04	c		3.4E-05	
				2.5E-01	I					1	0.1		Ally	74223-64-6	1.5E+04	n	1.5E+05	nm					3.8E+03	n		1.5E+00	
				5.0E-03	I	1.0E-04	X			1	0.1		Allyl Alcohol	107-18-6	3.0E+02	n	3.1E+03	n	1.0E-01	n	4.4E-01	n	7.8E+01	n		1.6E-02	
2.1E-02	C	6.0E-06	C			1.0E-03	I	V		1		1.4E+03	Allyl Chloride	107-05-1	6.8E-01	c**	3.4E+00	c**	4.1E-01	c**	2.0E+00	c**	6.3E-01	c**		2.0E-04	
				1.0E+00	P	5.0E-03	P			1			Aluminum	7429-90-5	7.7E+04	n	9.9E+05	nm	5.2E+00	n	2.2E+01	n	1.6E+04	n		2.3E+04	
				4.0E-04	I					1			Aluminum Phosphide	20859-73-8	3.1E+01	n	4.1E+02	n					6.2E+00	n			
				3.0E-04	I					1	0.1		Amdro	67485-29-4	1.8E+01	n	1.8E+02	n					4.7E+00	n		1.7E+03	
				9.0E-03	I					1	0.1		Ametryn	834-12-8	5.5E+02	n	5.5E+03	n					1.2E+02	n		1.2E-01	
2.1E+01	C	6.0E-03	C							1	0.1		Aminobiphenyl, 4-	92-67-1	2.3E-02	c	8.2E-02	c	4.1E-04	c	2.0E-03	c	2.6E-03	c		1.3E-05	
				8.0E-02	P					1	0.1		Aminophenol, m-	591-27-5	4.9E+03	n	4.9E+04	n					1.2E+03	n		4.7E-01	
				2.0E-02	P					1	0.1		Aminophenol, p-	123-30-8	1.2E+03	n	1.2E+04	n					3.1E+02	n		1.2E-01	
				2.5E-03	I					1	0.1		Amitraz	33089-61-1	1.5E+02	n	1.5E+03	n					5.9E+00	n		3.0E+00	
						1.0E-01	I			1			Ammonia	7664-41-7					1.0E+02	n	4.4E+02	n					
				2.0E-01	I					1			Ammonium Sulfamate	7773-06-0	1.6E+04	n	2.0E+05	nm					3.1E+03	n			
5.7E-03	I	1.6E-06	C	7.0E-03	P	1.0E-03	I			1	0.1		Aniline	62-53-3	8.5E+01	c**	3.0E+02	c*	1.0E+00	n	4.4E+00	n	1.2E+01	c**		3.9E-03	
4.0E-02	P			2.0E-03	X					1	0.1		Anthraquinone, 9,10-	84-65-1	1.2E+01	c*	4.3E+01	c*					1.2E+00	c*		1.2E-02	
				4.0E-04	I					0.15			Antimony (metallic)	7440-36-0	3.1E+01	n	4.1E+02	n					6.0E+00	n	6.0E+00	2.7E-01	2.7E-01
				5.0E-04	H					0.15			Antimony Pentoxide	1314-60-9	3.9E+01	n	5.1E+02	n					7.5E+00	n			
				9.0E-04	H					0.15			Antimony Potassium Tartrate	11071-15-1	7.0E+01	n	9.2E+02	n					1.3E+01	n			
				4.0E-04	H					0.15			Antimony Tetroxide	1332-81-6	3.1E+01	n	4.1E+02	n					6.0E+00	n			
						2.0E-04	I			0.15			Antimony Trioxide	1309-64-4	2.8E+05	nm	1.2E+06	nm	2.1E-01	n	8.8E-01	n					
				1.3E-02	I					1	0.1		Apollo	74115-24-5	7.9E+02	n	8.0E+03	n					1.8E+02	n		1.1E+01	
2.5E-02	I	7.1E-06	I	5.0E-02	H					1	0.1		Aramite	140-57-8	1.9E+01	c	6.9E+01	c	3.4E-01	c	1.7E+00	c	2.7E+00	c		3.0E-02	
1.5E+00	I	4.3E-03	I	3.0E-04	I	1.5E-05	C			1	0.03		Arsenic, Inorganic	7440-38-2	3.9E-01	c*	1.6E+00	c	5.7E-04	c*	2.9E-03	c*	4.5E-02	c	1.0E+01	1.3E-03	2.9E-01
				3.5E-06	C	5.0E-05	I			1			Arsine	7784-42-1	2.7E-01	n	3.6E+00	n	5.2E-02	n	2.2E-01	n	5.4E-02	n			
				9.0E-03	I					1	0.1		Assure	76578-14-8	5.5E+02	n	5.5E+03	n					9.3E+01	n		1.4E+00	
				5.0E-02	I					1	0.1		Asulam	3337-71-1	3.1E+03	n	3.1E+04	n					7.8E+02	n		2.0E-01	
2.3E-01	C			3.5E-02	I					1	0.1		Atrazine	1912-24-9	2.1E+00	c	7.5E+00	c					2.6E-01	c	3.0E+00	1.7E-04	1.9E-03
8.8E-01	C	2.5E-04	C							1	0.1		Auramine	492-80-8	5.5E-01	c	2.0E+00	c	9.7E-03	c	4.9E-02	c	6.7E-02	c		6.1E-04	
				4.0E-04	I					1	0.1		Avermectin B1	65195-55-3	2.4E+01	n	2.5E+02	n					6.3E+00	n		1.1E+01	
1.1E-01	I	3.1E-05	I					V		1			Azobenzene	103-33-3	5.1E+00	c	2.3E+01	c	7.8E-02	c	4.0E-01	c	1.0E-01	c		8.0E-04	
				2.0E-01	I	5.0E-04	H			0.07			Barium	7440-39-3	1.5E+04	n	1.9E+05	nm	5.2E-01	n	2.2E+00	n	2.9E+03	n	2.0E+03	1.2E+02	8.2E+01
				4.0E-03	I					1	0.1		Baygon	114-26-1	2.4E+02	n	2.5E+03	n					6.1E+01	n		2.0E-02	
				3.0E-02	I					1	0.1		Bayleton	43121-43-3	1.8E+03	n	1.8E+04	n					4.3E+02	n		3.4E-01	
				2.5E-02	I					1	0.1		Baythroid	68359-37-5	1.5E+03	n	1.5E+04	n					8.7E+01	n		2.3E+01	
				3.0E-01	I					1	0.1		Benefin	1861-40-1	1.8E+04	n	1.8E+05	nm					1.2E+03	n		4.1E+01	
				5.0E-02	I					1	0.1		Benomyl	17804-35-2	3.1E+03	n	3.1E+04	n					7.5E+02	n		6.6E-01	
				3.0E-02	I					1	0.1		Bentazon	25057-89-0	1.8E+03	n	1.8E+04	n					4.4E+02	n		9.6E-02	
				1.0E-01	I			V		1		1.2E+03	Benzaldehyde	100-52-7	7.8E+03	ns	1.0E+05	nms					1.5E+03	n		3.3E-01	
5.5E-02	I	7.8E-06	I	4.0E-03	I	3.0E-02	I	V		1		1.8E+03	Benzene	71-43-2	1.1E+00	c*	5.4E+00	c*	3.1E-01	c	1.6E+00	c*	3.9E-01	c*	5.0E+00	2.0E-04	2.6E-03
				2.0E-04	X					1	0.1		Benzenediamine-2-methyl sulfate, 1,4-	6369-59-1	1.2E+01	n	1.2E+02	n					3.1E+00	n		8.7E-04	
				1.0E-03	P			V		1		1.3E+03	Benzenethiol	108-98-5	7.8E+01	n	1.0E+03	n					1.3E+01	n		8.6E-03	
2.3E+02	I	6.7E-02	I	3.0E-03	I				M	1	0.1		Benzidine	92-87-5	5.0E-04	c	7.5E-03	c	1.4E-05	c	1.8E-04	c	9.2E-05	c		2.4E-07	
				4.0E+00	I					1	0.1		Benzoic Acid	65-85-0	2.4E+05	nm	2.5E+06	nm					5.8E+04	n		1.4E+01	
1.3E+01	I							V		1		3.2E+02	Benzotrichloride	98-07-7	4.9E-02	c	2.2E-01	c					2.6E-03	c		5.6E-06	
				1.0E-01	P					1	0.1		Benzyl Alcohol	100-51-6	6.1E+03	n	6.2E+04	n					1.5E+03	n		3.7E-01	
1.7E-01	I	4.9E-05	C	2.0E-03	P	1.0E-03	P	V		1		1.5E+03	Benzyl Chloride	100-44-7	1.0E+00	c*	4.9E+00	c*	5.0E-02	c*	2.5E-01	c*	7.7E-02	c*		8.4E-05	
		2.4E-03	I	2.0E-03	I	2.0E-05	I			0.007			Beryllium and compounds	7440-41-7	1.6E+02	n	2.0E+03	n	1.0E-03	c*	5.1E-03	c*	1.6E+01	n	4.0E+00	1.3E+01	3.2E+00

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = PPRTV Appendix; H = HEAST; J = New Jersey; Y = New York; O = EPA Office of Water; E = Environmental Criteria and Assessment Office; S = see user guide Section 5; L = see user guide on lead; M = mutagen; V = volatile; F = See FAQ; c = cancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; n = noncancer; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide); SSL values are based on DAF=1

Toxicity and Chemical-specific Information														Contaminant		Screening Levels												Protection of Ground Water SSLs	
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	muta-gen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	MCL-based SSL (mg/kg)
				1.0E-04	I					1	0.1		Bidrin	141-66-2	6.1E+00	n	6.2E+01	n					1.6E+00	n		3.6E-04	
				9.0E-03	P					1	0.1		Bifenox	42576-02-3	5.5E+02	n	5.5E+03	n					7.5E+01	n		5.7E-01	
				1.5E-02	I					1	0.1		Biphenthrin	82657-04-3	9.2E+02	n	9.2E+03	n					2.3E+02	n		1.1E+03	
8.0E-03	X			5.0E-02	I	4.0E-04	X	V		1		2.1E+02	Biphenyl, 1,1'-	92-52-4	5.1E+01	n	2.1E+02	n	4.2E-01	n	1.8E+00	n	8.3E-01	n		8.7E-03	
7.0E-02	H	1.0E-05	H	4.0E-02	I			V		1		1.0E+03	Bis(2-chloro-1-methylethyl) ether	108-60-1	4.6E+00	c	2.2E+01	c	2.4E-01	c	1.2E+00	c	3.1E-01	c		1.1E-04	
				3.0E-03	P					1	0.1		Bis(2-chloroethoxy)methane	111-91-1	1.8E+02	n	1.8E+03	n					4.7E+01	n		1.1E-02	
1.1E+00	I	3.3E-04	I					V		1		5.1E+03	Bis(2-chloroethyl)ether	111-44-4	2.1E-01	c	1.0E+00	c	7.4E-03	c	3.7E-02	c	1.2E-02	c		3.1E-06	
1.4E-02	I	2.4E-06	C	2.0E-02	I					1	0.1		Bis(2-ethylhexyl)phthalate	117-81-7	3.5E+01	c*	1.2E+02	c	1.0E+00	c	5.1E+00	c	7.1E-02	c*	6.0E+00	1.7E-02	1.4E+00
2.2E+02	I	6.2E-02	I					V		1		4.2E+03	Bis(chloromethyl)ether	542-88-1	7.7E-05	c	3.9E-04	c	3.9E-05	c	2.0E-04	c	6.2E-05	c		1.5E-08	
				5.0E-02	I					1	0.1		Bisphenol A	80-05-7	3.1E+03	n	3.1E+04	n					5.8E+02	n		4.4E+01	
				2.0E-01	I	2.0E-02	H			1			Boron And Borates Only	7440-42-8	1.6E+04	n	2.0E+05	nm	2.1E+01	n	8.8E+01	n	3.1E+03	n		9.9E+00	
				4.0E-02	C	1.3E-02	C			1			Boron Trifluoride	7637-07-2	3.1E+03	n	4.1E+04	n	1.4E+01	n	5.7E+01	n	6.2E+02	n			
7.0E-01	I			4.0E-03	I					1			Bromate	15541-45-4	9.1E-01	c	4.1E+00	c					9.6E-02	c	1.0E+01	7.4E-04	7.7E-02
2.0E+00	X	6.0E-04	X					V		1		2.4E+03	Bromo-2-chloroethane, 1-	107-04-0	2.4E-02	c	1.2E-01	c	4.1E-03	c	2.0E-02	c	6.5E-03	c		1.8E-06	
				8.0E-03	I	6.0E-02	I	V		1		6.8E+02	Bromobenzene	108-86-1	3.0E+02	n	1.8E+03	ns	6.3E+01	n	2.6E+02	n	5.4E+01	n		3.6E-02	
						4.0E-02	X	V		1		4.0E+03	Bromochloromethane	74-97-5	1.6E+02	n	6.8E+02	n	4.2E+01	n	1.8E+02	n	8.3E+01	n		2.1E-02	
6.2E-02	I	3.7E-05	C	2.0E-02	I			V		1		9.3E+02	Bromodichloromethane	75-27-4	2.7E-01	c	1.4E+00	c	6.6E-02	c	3.3E-01	c	1.2E-01	c	8.0E+01(F)	3.2E-05	2.2E-02
7.9E-03	I	1.1E-06	I	2.0E-02	I					1	0.1		Bromoform	75-25-2	6.2E+01	c*	2.2E+02	c*	2.2E+00	c	1.1E+01	c	7.9E+00	c*	8.0E+01(F)	2.1E-03	2.1E-02
				1.4E-03	I	5.0E-03	I	V		1		3.6E+03	Bromomethane	74-83-9	7.3E+00	n	3.2E+01	n	5.2E+00	n	2.2E+01	n	7.0E+00	n		1.8E-03	
				5.0E-03	H					1	0.1		Bromophos	2104-96-3	3.1E+02	n	3.1E+03	n					2.6E+01	n		1.1E-01	
				2.0E-02	I					1	0.1		Bromoxynil	1689-84-5	1.2E+03	n	1.2E+04	n					3.1E+02	n		2.7E-01	
				2.0E-02	I					1	0.1		Bromoxynil Octanoate	1689-99-2	1.2E+03	n	1.2E+04	n					1.0E+02	n		8.7E-01	
3.4E+00	C	3.0E-05	I			2.0E-03	I	V		1		6.7E+02	Butadiene, 1,3-	106-99-0	5.4E-02	c*	2.6E-01	c*	8.1E-02	c*	4.1E-01	c*	1.6E-02	c		8.6E-06	
				1.0E-01	I					1	0.1		Butanol, N-	71-36-3	6.1E+03	n	6.2E+04	n					1.5E+03	n		3.2E-01	
1.9E-03	P			2.0E-01	I					1	0.1		Butyl Benzyl Phthlate	85-68-7	2.6E+02	c*	9.1E+02	c					1.4E+01	c*		2.0E-01	
				2.0E+00	P	3.0E+01	P			1	0.1		Butyl alcohol, sec-	78-92-2	1.2E+05	nm	1.2E+06	nm	3.1E+04	n	1.3E+05	n	3.1E+04	n		6.3E+00	
				5.0E-02	I					1	0.1		Butylate	2008-41-5	3.1E+03	n	3.1E+04	n					3.4E+02	n		3.3E-01	
2.0E-04	C	5.7E-08	C							1	0.1		Butylated hydroxyanisole	25013-16-5	2.4E+03	c	8.6E+03	c	4.3E+01	c	2.2E+02	c	3.4E+02	c		6.3E-01	
				5.0E-02	P			V		1		1.1E+02	Butylbenzene, n-	104-51-8	3.9E+03	ns	5.1E+04	ns					7.8E+02	n		2.5E+00	
				1.0E+00	I					1	0.1		Butylphthalyl Butylglycolate	85-70-1	6.1E+04	n	6.2E+05	nm					1.6E+04	n		3.5E+02	
				2.0E-02	A					1	0.1		Cacodylic Acid	75-60-5	1.2E+03	n	1.2E+04	n					3.1E+02	n			
		1.8E-03	I	1.0E-03	I	2.0E-05	C			0.025	0.001		Cadmium (Diet)	7440-43-9	7.0E+01	n	8.0E+02	n									
		1.8E-03	I	5.0E-04	I	2.0E-05	C			0.05	0.001		Cadmium (Water)	7440-43-9					1.4E-03	c*	6.8E-03	c*	6.9E+00	n	5.0E+00	5.2E-01	3.8E-01
				5.0E-01	I					1	0.1		Caprolactam	105-60-2	3.1E+04	n	3.1E+05	nm					7.7E+03	n		1.9E+00	
1.5E-01	C	4.3E-05	C	2.0E-03	I					1	0.1		Captafol	2425-06-1	3.2E+00	c*	1.1E+01	c	5.7E-02	c	2.9E-01	c	3.5E-01	c*		6.1E-04	
2.3E-03	C	6.6E-07	C	1.3E-01	I					1	0.1		Captan	133-06-2	2.1E+02	c*	7.5E+02	c	3.7E+00	c	1.9E+01	c	2.7E+01	c*		1.9E-02	
				1.0E-01	I					1	0.1		Carbaryl	63-25-2	6.1E+03	n	6.2E+04	n					1.4E+03	n		1.3E+00	
				5.0E-03	I					1	0.1		Carbofuran	1563-66-2	3.1E+02	n	3.1E+03	n					7.3E+01	n	4.0E+01	2.8E-02	1.6E-02
				1.0E-01	I	7.0E-01	I	V		1		7.4E+02	Carbon Disulfide	75-15-0	8.2E+02	ns	3.7E+03	ns	7.3E+02	n	3.1E+03	n	7.2E+02	n		2.1E-01	
7.0E-02	I	6.0E-06	I	4.0E-03	I	1.0E-01	I	V		1		4.6E+02	Carbon Tetrachloride	56-23-5	6.1E-01	c	3.0E+00	c	4.1E-01	c	2.0E+00	c	3.9E-01	c	5.0E+00	1.5E-04	1.9E-03
				1.0E-02	I					1	0.1		Carbosulfan	55285-14-8	6.1E+02	n	6.2E+03	n					1.6E+02	n		3.8E+00	
				1.0E-01	I					1	0.1		Carboxin	5234-68-4	6.1E+03	n	6.2E+04	n					1.5E+03	n		8.0E-01	
						9.0E-04	I			1			Ceric oxide	1306-38-3	1.3E+06	nm	5.4E+06	nm	9.4E-01	n	3.9E+00	n					
				1.0E-01	I					1	0.1		Chloral Hydrate	302-17-0	6.1E+03	n	6.2E+04	n					1.5E+03	n		3.1E-01	
				1.5E-02	I					1	0.1		Chloramben	133-90-4	9.2E+02	n	9.2E+03	n					2.3E+02	n		5.7E-02	
4.0E-01	H									1	0.1		Chloranil	118-75-2	1.2E+00	c	4.3E+00	c					1.7E-01	c		1.4E-04	
3.5E-01	I	1.0E-04	I	5.0E-04	I	7.0E-04	I			1	0.04		Chlordane	12789-03-6	1.6E+00	c*	6.5E+00	c*	2.4E-02	c*	1.2E-01	c*	2.7E-02	c*	2.0E+00	1.8E-03	1.4E-01
1.0E+01	I	4.6E-03	C	3.0E-04	I					1	0.1		Chlordecone (Kepone)	143-50-0	4.9E-02	c	1.7E-01	c	5.3E-04	c	2.7E-03	c	3.0E-03	c		1.1E-04	
				7.0E-04	A					1	0.1		Chlorfenvinphos	470-90-6	4.3E+01	n	4.3E+02	n					8.6E+00	n		2.3E-02	
				2.0E-02	I					1	0.1		Chlorimuron, Ethyl-	90982-32-4	1.2E+03	n	1.2E+04	n					3.0E+02	n		1.0E-01	
				1.0E-01	I	1.5E-04	A			1			Chlorine	7782-50-5	7.5E+03	n	9.1E+04	n	1.5E-01	n	6.4E-01	n	1.6E+03	n		7.0E-01	
				3.0E-02	I	2.0E-04	I			1			Chlorine Dioxide	10049-04-4	2.3E+03	n	3.0E+04	n	2.1E-01	n	8.8E-01	n	4.7E+02	n			
				3.0E-02	I					1			Chlorite (Sodium Salt)	7758-19-2	2.3E+03	n	3.1E+04	n					4.7E+02	n	1.0E+03		
						5.0E+01	I	V		1		1.2E+03	Chloro-1,1-difluoroethane, 1-	75-68-3	5.8E+04	ns	2.4E+05	nms	5.2E+04	n	2.2E+05	n	1.0E+05	n		5.2E+01	
		3.0E-04	I	2.0E-02	H	2.0E-02	I	V		1		7.5E+02	Chloro-1,3-butadiene, 2-	126-99-8	9.4E-03	c	4.7E-02	c	8.1E-03	c	4.1E-02	c	1.6E-02	c		8.5E-06	
4.6E-01	H									1	0.1		Chloro-2-methylaniline HCl, 4-	3165-93-3	1.1E+00	c	3.7E+00	c					1.3E-01	c		7.4E-05	
1.0E-01	P	7.7E-05	C	3.0E-03	X					1	0.1		Chloro-2-methylaniline, 4-	95-69-2	4.9E+00	c*	1.7E+01	c	3.2E-02	c	1.6E-01	c	6.7E-01	c*		3.8E-04	
2.7E-01	X							V		1	0.1	2.8E+04	Chloroacetaldehyde, 2-	107-20-0	1.8E+00	c	6.4E+00	c					2.5E-01	c		5.0E-05	
				2.0E-03	H					1	0.1		Chloroacetic Acid	79-11-8	1.2E+02	n	1.2E+03	n					3.1E+01	n	6.0E+01	6.3E-03	1.2E-02
						3.0E-05	I			1	0.1		Chloroacetophenone, 2-	532-27-4	4.3E+04	n	1.8E+05	nm	3.1E-02	n	1.3E-01	n					
2.0E-01	P			4.0E-03	I					1	0.1		Chloroaniline, p-	106-47-8	2.4E+00	c	8.6E+00	c					3.2E-01	c		1.3E-04	
				2.0E-02	I	5.0E-02	P	V		1		7.6E+02	Chlorobenzene	108-90-7	2.9E+02	n	1.4E+03	ns	5.2E+01	n	2.2E+02	n	7.2E+01	n	1.0E+02	4.9E-02	6.8E-02
1.1E-01	C	3.1E-05	C	2.0E-02	I					1	0.1		Chlorobenzilate	510-15-6	4.4E+00	c	1.6E+01	c	7.8E-02	c	4.0E-01	c	2.7E-01	c		8.8E-04	
				3.0E-02	X					1	0.1		Chlorobenzoic Acid, p-	74-11-3	1.8E+03	n	1.8E+04	n					3.9E+02	n		9.9E-02	
				3.0E-03	P	3.0E-01	P	V		1		1.2E+02	Chlorobenzotrifluoride, 4-	98-56-6	2.1E+02	ns	2.3E+03	ns	3.1E+02	n	1.3E+03	n	2.6E+01	n		9.3E-02	

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Toxicity and Chemical-specific Information															Contaminant		Screening Levels											Protection of Ground Water SSLs	
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	voc	muta-gen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	MCL-based SSL (mg/kg)
				4.0E-02	P			V		1		7.3E+02	Chlorobutane, 1-	109-69-3	3.1E+03	ns	4.1E+04	ns					4.8E+02	n		2.0E-01	
						5.0E+01	I	V		1		1.7E+03	Chlorodifluoromethane	75-45-6	5.3E+04	ns	2.2E+05	nms	5.2E+04	n	2.2E+05	n	1.0E+05	n		4.3E+01	
3.1E-02	C	2.3E-05	I	1.0E-02	I	9.8E-02	A	V		1		2.5E+03	Chloroform	67-66-3	2.9E-01	c	1.5E+00	c	1.1E-01	c	5.3E-01	c	1.9E-01	c	8.0E+01(F)	5.3E-05	2.2E-02
						9.0E-02	I	V		1		1.3E+03	Chloromethane	74-87-3	1.2E+02	n	5.0E+02	n	9.4E+01	n	3.9E+02	n	1.9E+02	n		4.9E-02	
2.4E+00	C	6.9E-04	C					V		1		2.6E+04	Chloromethyl Methyl Ether	107-30-2	1.9E-02	c	9.4E-02	c	3.5E-03	c	1.8E-02	c	5.6E-03	c		1.2E-06	
				8.0E-02	I			V		1		1.8E+02	Chloronaphthalene, Beta-	91-58-7	6.3E+03	ns	8.2E+04	ns					5.5E+02	n		2.9E+00	
3.0E-01	P			3.0E-03	P	1.0E-05	X			1	0.1		Chloronitrobenzene, o-	88-73-3	1.6E+00	c	5.7E+00	c	1.0E-02	n	4.4E-02	n	2.0E-01	c		1.9E-04	
6.3E-03	P			1.0E-03	P	6.0E-04	P			1	0.1		Chloronitrobenzene, p-	100-00-5	6.1E+01	n	2.7E+02	c**	6.3E-01	n	2.6E+00	n	9.4E+00	c**		8.7E-03	
				5.0E-03	I			V		1		2.2E+04	Chlorophenol, 2-	95-57-8	3.9E+02	n	5.1E+03	n					7.1E+01	n		5.7E-02	
						4.0E-04	C	V		1		6.2E+02	Chloropicrin	76-06-2	2.1E+00	n	8.8E+00	n	4.2E-01	n	1.8E+00	n	8.3E-01	n		2.5E-04	
3.1E-03	C	8.9E-07	C	1.5E-02	I					1	0.1		Chlorothalonil	1897-45-6	1.6E+02	c**	5.6E+02	c*	2.7E+00	c	1.4E+01	c	1.9E+01	c*		4.3E-02	
				2.0E-02	I			V		1		9.1E+02	Chlorotoluene, o-	95-49-8	1.6E+03	ns	2.0E+04	ns					1.8E+02	n		1.7E-01	
				2.0E-02	X			V		1		2.5E+02	Chlorotoluene, p-	106-43-4	1.6E+03	ns	2.0E+04	ns					1.9E+02	n		1.8E-01	
2.4E+02	C	6.9E-02	C							1	0.1		Chlorozotocin	54749-90-5	2.0E-03	c	7.2E-03	c	3.5E-05	c	1.8E-04	c	2.8E-04	c		6.2E-08	
				2.0E-01	I					1	0.1		Chlorpropham	101-21-3	1.2E+04	n	1.2E+05	nm					2.2E+03	n		1.9E+00	
				1.0E-03	A					1	0.1		Chlorpyrifos	2921-88-2	6.1E+01	n	6.2E+02	n					6.2E+00	n		9.2E-02	
				1.0E-02	H					1	0.1		Chlorpyrifos Methyl	5598-13-0	6.1E+02	n	6.2E+03	n					8.9E+01	n		4.1E-01	
				5.0E-02	I					1	0.1		Chlorsulfuron	64902-72-3	3.1E+03	n	3.1E+04	n					7.7E+02	n		6.5E-01	
				8.0E-04	H					1	0.1		Chlorthiophos	60238-56-4	4.9E+01	n	4.9E+02	n					2.0E+00	n		5.2E-02	
				1.5E+00	I					0.013			Chromium(III), Insoluble Salts	16065-83-1	1.2E+05	nm	1.5E+06	nm					1.6E+04	n		2.8E+07	
5.0E-01	J	8.4E-02	S	3.0E-03	I	1.0E-04	I		M	0.025			Chromium(VI)	18540-29-9	2.9E-01	c	5.6E+00	c	1.1E-05	c	1.5E-04	c	3.1E-02	c		5.9E-04	
										0.013			Chromium, Total	7440-47-3											1.0E+02		1.8E+05
		9.0E-03	P	3.0E-04	P	6.0E-06	P			1			Cobalt	7440-48-4	2.3E+01	n	3.0E+02	n	2.7E-04	c*	1.4E-03	c*	4.7E+00	n		2.1E-01	
		6.2E-04	I						M	1	0.1		Coke Oven Emissions	8007-45-2					1.5E-03	c	2.0E-02	c					
				4.0E-02	H					1			Copper	7440-50-8	3.1E+03	n	4.1E+04	n					6.2E+02	n	1.3E+03	2.2E+01	4.6E+01
				5.0E-02	I	6.0E-01	C			1	0.1		Cresol, m-	108-39-4	3.1E+03	n	3.1E+04	n	6.3E+02	n	2.6E+03	n	7.2E+02	n		5.7E-01	
				5.0E-02	I	6.0E-01	C			1	0.1		Cresol, o-	95-48-7	3.1E+03	n	3.1E+04	n	6.3E+02	n	2.6E+03	n	7.2E+02	n		5.8E-01	
				1.0E-01	A	6.0E-01	C			1	0.1		Cresol, p-	106-44-5	6.1E+03	n	6.2E+04	n	6.3E+02	n	2.6E+03	n	1.4E+03	n		1.1E+00	
				1.0E-01	A					1	0.1		Cresol, p-chloro-m-	59-50-7	6.1E+03	n	6.2E+04	n					1.1E+03	n		1.3E+00	
				1.0E-01	A	6.0E-01	C			1	0.1		Cresols	1319-77-3	6.1E+03	n	6.2E+04	n	6.3E+02	n	2.6E+03	n	1.4E+03	n		1.2E+00	
1.9E+00	H			1.0E-03	P			V		1		1.7E+04	Crotonaldehyde, trans-	123-73-9	3.4E-01	c	1.5E+00	c					3.5E-02	c		7.1E-06	
				1.0E-01	I	4.0E-01	I	V		1		2.7E+02	Cumene	98-82-8	2.1E+03	ns	1.1E+04	ns	4.2E+02	n	1.8E+03	n	3.9E+02	n		6.4E-01	
2.2E-01	C	6.3E-05	C							1	0.1		Cupferron	135-20-6	2.2E+00	c	7.8E+00	c	3.9E-02	c	1.9E-01	c	3.1E-01	c		5.3E-04	
8.4E-01	H			2.0E-03	H					1	0.1		Cyanazine	21725-46-2	5.8E-01	c	2.1E+00	c					7.6E-02	c		3.5E-05	
													Cyanides														
				1.0E-03	I					1			~Calcium Cyanide	592-01-8	7.8E+01	n	1.0E+03	n					1.6E+01	n			
				5.0E-03	I					1			~Copper Cyanide	544-92-3	3.9E+02	n	5.1E+03	n					7.8E+01	n			
				6.0E-04	I			V		1		1.0E+07	~Cyanide (CN-)	57-12-5	4.7E+01	n	6.1E+02	n					9.3E+00	n	2.0E+02	9.4E-02	2.0E+00
				1.0E-03	I			V		1			~Cyanogen	460-19-5	7.8E+01	n	1.0E+03	n					1.6E+01	n			
				9.0E-02	I			V		1			~Cyanogen Bromide	506-68-3	7.0E+03	n	9.2E+04	n					1.4E+03	n			
				5.0E-02	I			V		1			~Cyanogen Chloride	506-77-4	3.9E+03	n	5.1E+04	n					7.8E+02	n			
				6.0E-04	I	8.0E-04	I	V		1			~Hydrogen Cyanide	74-90-8	4.7E+01	n	6.1E+02	n	8.3E-01	n	3.5E+00	n	1.4E+00	n			
				2.0E-03	I					1			~Potassium Cyanide	151-50-8	1.6E+02	n	2.0E+03	n					3.1E+01	n			
				5.0E-03	I					0.04			~Potassium Silver Cyanide	506-61-6	3.9E+02	n	5.1E+03	n					5.9E+01	n			
				1.0E-01	I					0.04			~Silver Cyanide	506-64-9	7.8E+03	n	1.0E+05	nm					1.3E+03	n			
				1.0E-03	I					1			~Sodium Cyanide	143-33-9	7.8E+01	n	1.0E+03	n					1.6E+01	n	2.0E+02		
				2.0E-04	P			V		1		4.6E+03	~Thiocyanate	463-56-9	1.6E+01	n	2.0E+02	n					3.1E+00	n		6.6E-04	
				5.0E-02	I					1			~Zinc Cyanide	557-21-1	3.9E+03	n	5.1E+04	n					7.8E+02	n			
						6.0E+00	I	V		1		1.2E+02	Cyclohexane	110-82-7	7.0E+03	ns	2.9E+04	ns	6.3E+03	n	2.6E+04	n	1.3E+04	n		1.3E+01	
2.3E-02	H									1	0.1		Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	87-84-3	2.1E+01	c	7.5E+01	c					2.1E+00	c		1.2E-02	
				5.0E+00	I	7.0E-01	P			1	0.1		Cyclohexanone	108-94-1	3.1E+05	nm	3.1E+06	nm	7.3E+02	n	3.1E+03	n	7.7E+04	n		1.8E+01	
				2.0E-01	I					1	0.1		Cyclohexylamine	108-91-8	1.2E+04	n	1.2E+05	nm					3.0E+03	n		7.9E-01	
				5.0E-03	I					1	0.1		Cyhalothrin/karate	68085-85-8	3.1E+02	n	3.1E+03	n					7.8E+01	n		5.3E+01	
				1.0E-02	I					1	0.1		Cypermethrin	52315-07-8	6.1E+02	n	6.2E+03	n					1.6E+02	n		2.5E+01	
				7.5E-03	I					1	0.1		Cyromazine	66215-27-8	4.6E+02	n	4.6E+03	n					1.2E+02	n		3.0E-02	
2.4E-01	I	6.9E-05	C							1	0.1		DDD	72-54-8	2.0E+00	c	7.2E+00	c	3.5E-02	c	1.8E-01	c	2.8E-01	c		6.6E-02	
3.4E-01	I	9.7E-05	C							1	0.1		DDE, p,p'-	72-55-9	1.4E+00	c	5.1E+00	c	2.5E-02	c	1.3E-01	c	2.0E-01	c		4.6E-02	
3.4E-01	I	9.7E-05	I	5.0E-04	I					1	0.03		DDT	50-29-3	1.7E+00	c*	7.0E+00	c*	2.5E-02	c	1.3E-01	c	2.0E-01	c*		6.7E-02	
				1.0E-02	I					1	0.1		Dacthal	1861-32-1	6.1E+02	n	6.2E+03	n					9.3E+01	n		1.1E-01	
				3.0E-02	I					1	0.1		Dalapon	75-99-0	1.8E+03	n	1.8E+04	n					4.7E+02	n	2.0E+02	9.7E-02	4.1E-02
7.0E-04	I			7.0E-03	I					1	0.1		Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209)	1163-19-5	4.3E+02	n	2.5E+03	c**					9.6E+01	c**		5.3E+01	
				4.0E-05	I					1	0.1		Demeton	8065-48-3	2.4E+00	n	2.5E+01	n					5.2E-01	n			
1.2E-03	I			6.0E-01	I					1	0.1		Di(2-ethylhexyl)adipate	103-23-1	4.1E+02	c*	1.4E+03	c					5.6E+01	c	4.0E+02	4.0E+00	2.9E+01
6.1E-02	H									1	0.1		Diallate	2303-16-4	8.0E+00	c	2.8E+01	c					4.6E-01	c		6.8E-04	
				7.0E-04	A					1	0.1		Diazinon	333-41-5	4.3E+01	n	4.3E+02	n					7.9E+00	n		4.9E-02	

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Toxicity and Chemical-specific Information														Contaminant		Screening Levels										Protection of Ground Water SSLs	
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volc	muta-gen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	MCL-based SSL (mg/kg)
8.0E-01	P	6.0E-03	P	2.0E-04	P	2.0E-04	I	V	M	1		9.8E+02	Dibromo-3-chloropropane, 1,2-	96-12-8	5.4E-03	c	6.9E-02	c	1.6E-04	c	2.0E-03	c	3.2E-04	c	2.0E-01	1.4E-07	8.6E-05
				1.0E-02	I					1	0.1		Dibromobenzene, 1,4-	106-37-6	6.1E+02	n	6.2E+03	n					9.8E+01	n		9.3E-02	
8.4E-02	I	2.7E-05	C	2.0E-02	I			V		1	0.1	8.0E+02	Dibromochloromethane	124-48-1	6.8E-01	c	3.3E+00	c	9.0E-02	c	4.5E-01	c	1.5E-01	c	8.0E+01(F)	3.9E-05	2.1E-02
2.0E+00	I	6.0E-04	I	9.0E-03	I	9.0E-03	I	V		1		1.3E+03	Dibromoethane, 1,2-	106-93-4	3.4E-02	c	1.7E-01	c	4.1E-03	c	2.0E-02	c	6.5E-03	c	5.0E-02	1.8E-06	1.4E-05
				1.0E-02	H	4.0E-03	X	V		1		2.8E+03	Dibromomethane (Methylene Bromide)	74-95-3	2.5E+01	n	1.1E+02	n	4.2E+00	n	1.8E+01	n	7.9E+00	n		1.9E-03	
				1.0E-01	I					1	0.1		Dibutyl Phthalate	84-74-2	6.1E+03	n	6.2E+04	n					6.7E+02	n		1.7E+00	
				3.0E-04	P					1	0.1		Dibutyltin Compounds	NA	1.8E+01	n	1.8E+02	n					4.7E+00	n			
				3.0E-02	I					1	0.1		Dicamba	1918-00-9	1.8E+03	n	1.8E+04	n					4.4E+02	n		1.1E-01	
		4.2E-03	P					V		1		5.2E+02	Dichloro-2-butene, 1,4-	764-41-0	6.9E-03	c	3.5E-02	c	5.8E-04	c	2.9E-03	c	1.2E-03	c		5.4E-07	
		4.2E-03	P					V		1	0.1	5.2E+02	Dichloro-2-butene, cis-1,4-	1476-11-5	6.9E-03	c	3.5E-02	c	5.8E-04	c	2.9E-03	c	1.2E-03	c		5.4E-07	
		4.2E-03	P					V		1	0.1	7.6E+02	Dichloro-2-butene, trans-1,4-	110-57-6	6.9E-03	c	3.5E-02	c	5.8E-04	c	2.9E-03	c	1.2E-03	c		5.4E-07	
5.0E-02	I			4.0E-03	I					1	0.1		Dichloroacetic Acid	79-43-6	9.7E+00	c*	3.4E+01	c*					1.3E+00	c*	6.0E+01	2.7E-04	1.2E-02
				9.0E-02	I	2.0E-01	H	V		1		3.8E+02	Dichlorobenzene, 1,2-	95-50-1	1.9E+03	ns	9.8E+03	ns	2.1E+02	n	8.8E+02	n	2.8E+02	n	6.0E+02	2.7E-01	5.8E-01
5.4E-03	C	1.1E-05	C	7.0E-02	A	8.0E-01	I	V		1			Dichlorobenzene, 1,4-	106-46-7	2.4E+00	c	1.2E+01	c	2.2E-01	c	1.1E+00	c	4.2E-01	c	7.5E+01	4.0E-04	7.2E-02
4.5E-01	I	3.4E-04	C							1	0.1		Dichlorobenzidine, 3,3'-	91-94-1	1.1E+00	c	3.8E+00	c	7.2E-03	c	3.6E-02	c	1.1E-01	c		7.1E-04	
				9.0E-03	X					1	0.1		Dichlorobenzophenone, 4,4'-	90-98-2	5.5E+02	n	5.5E+03	n					1.4E+02	n		8.5E-01	
				2.0E-01	I	1.0E-01	X	V		1		8.5E+02	Dichlorodifluoromethane	75-71-8	9.4E+01	n	4.0E+02	n	1.0E+02	n	4.4E+02	n	1.9E+02	n		3.0E-01	
5.7E-03	C	1.6E-06	C	2.0E-01	P			V		1		1.7E+03	Dichloroethane, 1,1-	75-34-3	3.3E+00	c	1.7E+01	c	1.5E+00	c	7.7E+00	c	2.4E+00	c		6.8E-04	
9.1E-02	I	2.6E-05	I	6.0E-03	X	7.0E-03	P	V		1		3.0E+03	Dichloroethane, 1,2-	107-06-2	4.3E-01	c*	2.2E+00	c*	9.4E-02	c*	4.7E-01	c*	1.5E-01	c*	5.0E+00	4.2E-05	1.4E-03
				5.0E-02	I	2.0E-01	I	V		1		1.2E+03	Dichloroethylene, 1,1-	75-35-4	2.4E+02	n	1.1E+03	n	2.1E+02	n	8.8E+02	n	2.6E+02	n	7.0E+00	9.3E-02	2.5E-03
				9.0E-03	H			V		1		1.3E+03	Dichloroethylene, 1,2- (Mixed Isomers)	540-59-0	7.0E+02	n	9.2E+03	ns					1.3E+02	n		3.7E-02	
				2.0E-03	I			V		1		2.4E+03	Dichloroethylene, 1,2-cis-	156-59-2	1.6E+02	n	2.0E+03	n					2.8E+01	n	7.0E+01	8.2E-03	2.1E-02
				2.0E-02	I	6.0E-02	P	V		1		1.7E+03	Dichloroethylene, 1,2-trans-	156-60-5	1.5E+02	n	6.9E+02	n	6.3E+01	n	2.6E+02	n	8.6E+01	n	1.0E+02	2.5E-02	2.9E-02
				3.0E-03	I					1	0.1		Dichlorophenol, 2,4-	120-83-2	1.8E+02	n	1.8E+03	n					3.5E+01	n		4.1E-02	
				1.0E-02	I					1	0.05		Dichlorophenoxy Acetic Acid, 2,4-	94-75-7	6.9E+02	n	7.7E+03	n					1.3E+02	n	7.0E+01	3.5E-02	1.8E-02
				8.0E-03	I					1	0.1		Dichlorophenoxy)butyric Acid, 4-(2,4-	94-82-6	4.9E+02	n	4.9E+03	n					9.1E+01	n		3.6E-02	
3.6E-02	C	1.0E-05	C	9.0E-02	A	4.0E-03	I	V		1		1.4E+03	Dichloropropane, 1,2-	78-87-5	9.4E-01	c*	4.7E+00	c*	2.4E-01	c*	1.2E+00	c*	3.8E-01	c*	5.0E+00	1.3E-04	1.7E-03
				2.0E-02	P			V		1		1.5E+03	Dichloropropane, 1,3-	142-28-9	1.6E+03	ns	2.0E+04	ns					2.9E+02	n		9.9E-02	
				3.0E-03	I					1	0.1		Dichloropropanol, 2,3-	616-23-9	1.8E+02	n	1.8E+03	n					4.7E+01	n		9.9E-03	
1.0E-01	I	4.0E-06	I	3.0E-02	I	2.0E-02	I	V		1		1.6E+03	Dichloropropene, 1,3-	542-75-6	1.7E+00	c*	8.3E+00	c*	6.1E-01	c*	3.1E+00	c*	4.1E-01	c*		1.5E-04	
2.9E-01	I	8.3E-05	C	5.0E-04	I	5.0E-04	I			1	0.1		Dichlorvos	62-73-7	1.7E+00	c*	5.9E+00	c*	2.9E-02	c*	1.5E-01	c*	2.3E-01	c*		7.0E-05	
				8.0E-03	P	7.0E-03	P	V		1		1.3E+02	Dicyclopentadiene	77-73-6	3.1E+01	n	1.3E+02	ns	7.3E+00	n	3.1E+01	n	1.2E+01	n		4.3E-02	
1.6E+01	I	4.6E-03	I	5.0E-05	I					1	0.1		Dieldrin	60-57-1	3.0E-02	c	1.1E-01	c	5.3E-04	c	2.7E-03	c	1.5E-03	c		6.1E-05	
		3.0E-04	C			5.0E-03	I			1	0.1		Diesel Engine Exhaust	NA					8.1E-03	c	4.1E-02	c					
						3.0E-03	C			1	0.1		Diethanolamine	111-42-2	4.3E+06	nm	1.8E+07	nm	3.1E+00	n	1.3E+01	n					
				8.0E-01	I					1	0.1		Diethyl Phthalate	84-66-2	4.9E+04	n	4.9E+05	nm					1.1E+04	n		4.7E+00	
				3.0E-02	P	1.0E-04	P			1	0.1		Diethylene Glycol Monobutyl Ether	112-34-5	1.8E+03	n	1.8E+04	n	1.0E-01	n	4.4E-01	n	4.7E+02	n		1.0E-01	
				6.0E-02	P	3.0E-04	P			1	0.1		Diethylene Glycol Monoethyl Ether	111-90-0	3.6E+03	n	3.6E+04	n	3.1E-01	n	1.3E+00	n	9.4E+02	n		1.9E-01	
				1.0E-03	P					1	0.1		Diethylformamide	617-84-5	6.1E+01	n	6.2E+02	n					1.6E+01	n		3.2E-03	
3.5E+02	C	1.0E-01	C							1	0.1		Diethylstilbestrol	56-53-1	1.4E-03	c	4.9E-03	c	2.4E-05	c	1.2E-04	c	4.3E-05	c		2.4E-05	
				8.0E-02	I					1	0.1		Difenzoquat	43222-48-6	4.9E+03	n	4.9E+04	n					1.2E+03	n			
				2.0E-02	I					1	0.1		Diflubenzuron	35367-38-5	1.2E+03	n	1.2E+04	n					2.2E+02	n		2.5E-01	
						4.0E+01	I	V		1		1.4E+03	Difluoroethane, 1,1-	75-37-6	5.2E+04	ns	2.2E+05	nms	4.2E+04	n	1.8E+05	n	8.3E+04	n		2.8E+01	
4.4E-02	C	1.3E-05	C					V		1	0.1	1.5E+01	Dihydrosafrole	94-58-6	2.4E-01	c	1.2E+00	c	1.9E-01	c	9.4E-01	c	3.0E-01	c		3.7E-04	
						7.0E-01	P	V		1		2.3E+03	Diisopropyl Ether	108-20-3	2.4E+03	ns	1.0E+04	ns	7.3E+02	n	3.1E+03	n	1.5E+03	n		3.7E-01	
				8.0E-02	I			V		1		5.3E+02	Diisopropyl Methylphosphonate	1445-75-6	6.3E+03	ns	8.2E+04	ns					1.2E+03	n		3.5E-01	
				2.0E-02	I					1	0.1		Dimethipin	55290-64-7	1.2E+03	n	1.2E+04	n					3.1E+02	n		6.9E-02	
				2.0E-04	I					1	0.1		Dimethoate	60-51-5	1.2E+01	n	1.2E+02	n					3.1E+00	n		7.0E-04	
1.4E-02	H									1	0.1		Dimethoxybenzidine, 3,3'-	119-90-4	3.5E+01	c	1.2E+02	c					4.7E+00	c		5.7E-03	
1.7E-03	P			6.0E-02	P					1	0.1		Dimethyl methylphosphonate	756-79-6	2.9E+02	c*	1.0E+03	c*					3.9E+01	c*		8.3E-03	
4.6E+00	C	1.3E-03	C							1	0.1		Dimethylamino azobenzene [p-]	60-11-7	1.1E-01	c	3.7E-01	c	1.9E-03	c	9.4E-03	c	4.3E-03	c		1.8E-05	
5.8E-01	H									1	0.1		Dimethylaniline HCl, 2,4-	21436-96-4	8.4E-01	c	3.0E+00	c					1.1E-01	c		6.2E-05	
2.0E-01	P			2.0E-03	X					1	0.1		Dimethylaniline, 2,4-	95-68-1	2.4E+00	c*	8.6E+00	c					3.2E-01	c*		1.8E-04	
				2.0E-03	I			V		1		8.3E+02	Dimethylaniline, N,N-	121-69-7	1.6E+02	n	2.0E+03	ns					2.7E+01	n		9.8E-03	
1.1E+01	P									1	0.1		Dimethylbenzidine, 3,3'-	119-93-7	4.4E-02	c	1.6E-01	c					5.6E-03	c		3.7E-05	
				1.0E-01	P	3.0E-02	I			1	0.1		Dimethylformamide	68-12-2	6.1E+03	n	6.2E+04	n	3.1E+01	n	1.3E+02	n	1.6E+03	n		3.2E-01	
				1.0E-04	X	2.0E-06	X			1	0.1		Dimethylhydrazine, 1,1-	57-14-7	6.1E+00	n	6.1E+01	n	2.1E-03	n	8.8E-03	n	1.6E+00	n		3.5E-04	
5.5E+02	C	1.6E-01	C							1	0.1		Dimethylhydrazine, 1,2-	540-73-8	8.8E-04	c	3.1E-03	c	1.5E-05	c	7.7E-05	c	1.2E-04	c		2.8E-08	
				2.0E-02	I					1	0.1		Dimethylphenol, 2,4-	105-67-9	1.2E+03	n	1.2E+04	n					2.7E+02	n		3.2E-01	
				6.0E-04	I					1	0.1		Dimethylphenol, 2,6-	576-26-1	3.7E+01	n	3.7E+02	n					8.1E+00	n		9.8E-03	
				1.0E-03	I					1	0.1		Dimethylphenol, 3,4-	95-65-8	6.1E+01	n	6.2E+02	n					1.4E+01	n		1.6E-02	
				1.0E-01	I			V		1		5.5E+00	Dimethylterephthalate	120-61-6	7.8E+03	ns	1.0E+05	nms					1.4E+03	n		3.8E-01	
4.5E-02	C	1.3E-05	C					V		1	0.1	1.1E+03	Dimethylvinylchloride	513-37-1	2.0E-01	c	1.0E+00	c	1.9E-01	c	9.4E-01	c	3.0E-01	c		1.8E-04	
				8.0E-05	X					1	0.1		Dinitro-o-cresol, 4,6-	534-52-1	4.9E+00	n	4.9E+01	n					1.2E+00	n		2.0E-03	
				2.0E-03	I					1	0.1		Dinitro-o-cyclohexyl Phenol, 4,6-	131-89-5	1.2E+02	n	1.2E+03	n					1.7E+01	n		5.7E-01	

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = PPRTV Appendix; H = HEAST; J = New Jersey; Y = New York; O = EPA Office of Water; E = Environmental Criteria and Assessment Office; S = see user guide Section 5; L = see user guide on lead; M = mutagen; V = volatile; F = See FAQ; c = cancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; n = noncancer; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide); SSL values are based on DAF=1

Toxicity and Chemical-specific Information														Contaminant		Screening Levels										Protection of Ground Water SSLs	
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	voc	muta-gen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	MCL-based SSL (mg/kg)
				1.0E-04	P					1	0.1		Dinitrobenzene, 1,2-	528-29-0	6.1E+00	n	6.2E+01	n					1.5E+00	n		1.4E-03	
				1.0E-04	I					1	0.1		Dinitrobenzene, 1,3-	99-65-0	6.1E+00	n	6.2E+01	n					1.5E+00	n		1.4E-03	
				1.0E-04	P					1	0.1		Dinitrobenzene, 1,4-	100-25-4	6.1E+00	n	6.2E+01	n					1.5E+00	n		1.4E-03	
				2.0E-03	I					1	0.1		Dinitrophenol, 2,4-	51-28-5	1.2E+02	n	1.2E+03	n					3.0E+01	n		3.4E-02	
6.8E-01	I									1	0.1		Dinitrotoluene Mixture, 2,4/2,6-	25321-14-6	7.2E-01	c	2.5E+00	c					9.2E-02	c		1.3E-04	
3.1E-01	C	8.9E-05	C	2.0E-03	I					1	0.102		Dinitrotoluene, 2,4-	121-14-2	1.6E+00	c*	5.5E+00	c	2.7E-02	c	1.4E-01	c	2.0E-01	c		2.8E-04	
				1.0E-03	P					1	0.099		Dinitrotoluene, 2,6-	606-20-2	6.1E+01	n	6.2E+02	n					1.5E+01	n		2.0E-02	
				2.0E-03	S					1	0.006		Dinitrotoluene, 2-Amino-4,6-	35572-78-2	1.5E+02	n	2.0E+03	n					3.0E+01	n		2.3E-02	
				2.0E-03	S					1	0.009		Dinitrotoluene, 4-Amino-2,6-	19406-51-0	1.5E+02	n	1.9E+03	n					3.0E+01	n		2.3E-02	
				1.0E-03	I					1	0.1		Dinoseb	88-85-7	6.1E+01	n	6.2E+02	n					1.1E+01	n	7.0E+00	9.8E-02	6.2E-02
1.0E-01	I	7.7E-06	C	3.0E-02	I	3.0E+00	C			1	0.1		Dioxane, 1,4-	123-91-1	4.9E+00	c	1.7E+01	c	3.2E-01	c	1.6E+00	c	6.7E-01	c		1.4E-04	
													Dioxins														
6.2E+03	I	1.3E+00	I							1	0.03		~Hexachlorodibenzo-p-dioxin, Mixture	NA	9.4E-05	c	3.9E-04	c	1.9E-06	c	9.4E-06	c	1.1E-05	c		1.5E-05	
1.3E+05	C	3.8E+01	C	7.0E-10	I	4.0E-08	C			1	0.03		~TCDD, 2,3,7,8-	1746-01-6	4.5E-06	c*	1.8E-05	c*	6.4E-08	c	3.2E-07	c	5.2E-07	c*	3.0E-05	2.6E-07	1.5E-05
				3.0E-02	I					1	0.1		Diphenamid	957-51-7	1.8E+03	n	1.8E+04	n					4.7E+02	n		4.6E+00	
				8.0E-04	X					1	0.1		Diphenyl Sulfone	127-63-9	4.9E+01	n	4.9E+02	n					1.1E+01	n		2.8E-02	
				2.5E-02	I					1	0.1		Diphenylamine	122-39-4	1.5E+03	n	1.5E+04	n					2.4E+02	n		4.4E-01	
8.0E-01	I	2.2E-04	I							1	0.1		Diphenylhydrazine, 1,2-	122-66-7	6.1E-01	c	2.2E+00	c	1.1E-02	c	5.6E-02	c	6.7E-02	c		2.2E-04	
				2.2E-03	I					1	0.1		Diquat	85-00-7	1.3E+02	n	1.4E+03	n					3.4E+01	n	2.0E+01	6.5E-01	3.7E-01
7.4E+00	C	2.1E-03	C							1	0.1		Direct Black 38	1937-37-7	6.6E-02	c	2.3E-01	c	1.2E-03	c	5.8E-03	c	9.1E-03	c		4.4E+00	
7.4E+00	C	2.1E-03	C							1	0.1		Direct Blue 6	2602-46-2	6.6E-02	c	2.3E-01	c	1.2E-03	c	5.8E-03	c	9.1E-03	c		1.4E+01	
6.7E+00	C	1.9E-03	C							1	0.1		Direct Brown 95	16071-86-6	7.3E-02	c	2.6E-01	c	1.3E-03	c	6.5E-03	c	1.0E-02	c			
				4.0E-05	I					1	0.1		Disulfoton	298-04-4	2.4E+00	n	2.5E+01	n					3.8E-01	n		7.1E-04	
				1.0E-02	I			V		1	0.1	2.9E+03	Dithiane, 1,4-	505-29-3	6.1E+02	n	6.2E+03	ns					1.5E+02	n		7.6E-02	
				2.0E-03	I					1	0.1		Diuron	330-54-1	1.2E+02	n	1.2E+03	n					2.8E+01	n		1.2E-02	
				4.0E-03	I					1	0.1		Dodine	2439-10-3	2.4E+02	n	2.5E+03	n					6.2E+01	n		3.2E-01	
				2.5E-02	I			V		1		4.1E+02	EPTC	759-94-4	2.0E+03	ns	2.6E+04	ns					2.9E+02	n		1.5E-01	
				6.0E-03	I					1	0.1		Endosulfan	115-29-7	3.7E+02	n	3.7E+03	n					7.8E+01	n		1.1E+00	
				2.0E-02	I					1	0.1		Endothall	145-73-3	1.2E+03	n	1.2E+04	n					3.0E+02	n	1.0E+02	7.1E-02	2.4E-02
				3.0E-04	I					1	0.1		Endrin	72-20-8	1.8E+01	n	1.8E+02	n					1.7E+00	n	2.0E+00	6.8E-02	8.1E-02
9.9E-03	I	1.2E-06	I	6.0E-03	P	1.0E-03	I	V		1		1.1E+04	Epichlorohydrin	106-89-8	2.0E+01	n	8.8E+01	n	1.0E+00	n	4.4E+00	n	2.0E+00	n		4.5E-04	
						2.0E-02	I	V		1		1.5E+04	Epoxybutane, 1,2-	106-88-7	1.7E+02	n	7.2E+02	n	2.1E+01	n	8.8E+01	n	4.2E+01	n		9.2E-03	
				5.0E-03	I					1	0.1		Ethephon	16672-87-0	3.1E+02	n	3.1E+03	n					7.8E+01	n		1.6E-02	
				5.0E-04	I					1	0.1		Ethion	563-12-2	3.1E+01	n	3.1E+02	n					3.2E+00	n		6.3E-03	
				1.0E-01	P	6.0E-02	P			1	0.1		Ethoxyethanol Acetate, 2-	111-15-9	6.1E+03	n	6.2E+04	n	6.3E+01	n	2.6E+02	n	1.5E+03	n		3.2E-01	
				4.0E-01	H	2.0E-01	I			1	0.1		Ethoxyethanol, 2-	110-80-5	2.4E+04	n	2.5E+05	nm	2.1E+02	n	8.8E+02	n	6.2E+03	n		1.3E+00	
				9.0E-01	I			V		1		1.1E+04	Ethyl Acetate	141-78-6	7.0E+04	ns	9.2E+05	nms					1.4E+04	n		2.9E+00	
4.8E-02	H							V		1		2.5E+03	Ethyl Acrylate	140-88-5	1.3E+01	c	6.0E+01	c					1.4E+00	c		3.0E-04	
						1.0E+01	I	V		1		2.1E+03	Ethyl Chloride	75-00-3	1.5E+04	ns	6.1E+04	ns	1.0E+04	n	4.4E+04	n	2.1E+04	n		5.9E+00	
				2.0E-01	I			V		1		1.0E+04	Ethyl Ether	60-29-7	1.6E+04	ns	2.0E+05	nms					3.1E+03	n		6.8E-01	
				9.0E-02	H	3.0E-01	P	V		1		1.1E+03	Ethyl Methacrylate	97-63-2	1.5E+03	ns	7.5E+03	ns	3.1E+02	n	1.3E+03	n	4.2E+02	n		9.9E-02	
				1.0E-05	I					1	0.1		Ethyl-p-nitrophenyl Phosphonate	2104-64-5	6.1E-01	n	6.2E+00	n					6.6E-02	n		2.1E-03	
1.1E-02	C	2.5E-06	C	1.0E-01	I	1.0E+00	I	V		1		4.8E+02	Ethylbenzene	100-41-4	5.4E+00	c	2.7E+01	c	9.7E-01	c	4.9E+00	c	1.3E+00	c	7.0E+02	1.5E-03	7.8E-01
				3.0E-02	P					1	0.1		Ethylene Cyanohydrin	109-78-4	1.8E+03	n	1.8E+04	n					4.7E+02	n		9.5E-02	
				9.0E-02	P					1	0.1		Ethylene Diamine	107-15-3	5.5E+03	n	5.5E+04	n					1.4E+03	n		3.2E-01	
				2.0E+00	I	4.0E-01	C			1	0.1		Ethylene Glycol	107-21-1	1.2E+05	nm	1.2E+06	nm	4.2E+02	n	1.8E+03	n	3.1E+04	n		6.3E+00	
				1.0E-01	I	1.6E+00	I			1	0.1		Ethylene Glycol Monobutyl Ether	111-76-2	6.1E+03	n	6.2E+04	n	1.7E+03	n	7.0E+03	n	1.5E+03	n		3.2E-01	
3.1E-01	C	8.8E-05	C			3.0E-02	C	V		1		1.2E+05	Ethylene Oxide	75-21-8	1.7E-01	c	8.3E-01	c	2.8E-02	c	1.4E-01	c	4.4E-02	c		9.1E-06	
4.5E-02	C	1.3E-05	C	8.0E-05	I					1	0.1		Ethylene Thiourea	96-45-7	4.9E+00	n	3.8E+01	c**	1.9E-01	c	9.4E-01	c	1.2E+00	n		2.8E-04	
6.5E+01	C	1.9E-02	C					V		1	0.1	1.5E+05	Ethyleneimine	151-56-4	2.3E-03	c	1.0E-02	c	1.3E-04	c	6.5E-04	c	2.1E-04	c		4.5E-08	
				3.0E+00	I					1	0.1		Ethylphthalyl Ethyl Glycolate	84-72-0	1.8E+05	nm	1.8E+06	nm					4.5E+04	n		1.0E+02	
				8.0E-03	I					1	0.1		Express	101200-48-0	4.9E+02	n	4.9E+03	n					1.3E+02	n		4.9E-02	
				2.5E-04	I					1	0.1		Fenamiphos	22224-92-6	1.5E+01	n	1.5E+02	n					3.4E+00	n		3.3E-03	
				2.5E-02	I					1	0.1		Fenpropathrin	39515-41-8	1.5E+03	n	1.5E+04	n					4.6E+01	n		2.1E+00	
				1.3E-02	I					1	0.1		Fluometuron	2164-17-2	7.9E+02	n	8.0E+03	n					1.9E+02	n		1.4E-01	
				4.0E-02	C	1.3E-02	C			1			Fluoride	16984-48-8	3.1E+03	n	4.1E+04	n	1.4E+01	n	5.7E+01	n	6.2E+02	n		9.3E+01	
				6.0E-02	I	1.3E-02	C			1			Fluorine (Soluble Fluoride)	7782-41-4	4.7E+03	n	6.1E+04	n	1.4E+01	n	5.7E+01	n	9.3E+02	n	4.0E+03	1.4E+02	6.0E+02
				8.0E-02	I					1	0.1		Fluridone	59756-60-4	4.9E+03	n	4.9E+04	n					1.1E+03	n		1.3E+02	
				2.0E-02	I					1	0.1		Flurprimidol	56425-91-3	1.2E+03	n	1.2E+04	n					2.6E+02	n		1.2E+00	
				6.0E-02	I					1	0.1		Flutolanil	66332-96-5	3.7E+03	n	3.7E+04	n					7.2E+02	n		3.9E+00	
				1.0E-02	I					1	0.1		Fluvalinate	69409-94-5	6.1E+02	n	6.2E+03	n					1.6E+02	n		2.3E+02	
3.5E-03	I			1.0E-01	I					1	0.1		Folpet	133-07-3	1.4E+02	c*	4.9E+02	c					1.7E+01	c*		4.1E-03	
1.9E-01	I									1	0.1		Fomesafen	72178-02-0	2.6E+00	c	9.1E+00	c					3.4E-01	c		1.1E-03	
				2.0E-03	I					1	0.1		Fonofos	944-22-9	1.2E+02	n	1.2E+03	n					1.8E+01	n		3.5E-02	
		1.3E-05	I	2.0E-01	I	9.8E-03	A			1	0.1		Formaldehyde	50-00-0	1.2E+04	n	1.2E+05	nm	1.9E-01	c*	9.4E-01	c*	3.1E+03	n		6.2E-01	

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = PPRTV Appendix; H = HEAST; J = New Jersey; Y = New York; O = EPA Office of Water; E = Environmental Criteria and Assessment Office; S = see user guide Section 5; L = see user guide on lead; M = mutagen; V = volatile; F = See FAQ; c = cancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; n = noncancer; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide); SSL values are based on DAF=1

Toxicity and Chemical-specific Information																Contaminant		Screening Levels												Protection of Ground Water SSLs	
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	voc	muta-gen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	MCL-based SSL (mg/kg)
				9.0E-01	P	3.0E-04	X			1	0.1		Formic Acid	64-18-6	4.9E+04	n	4.2E+05	nm	3.1E-01	n	1.3E+00	n	1.4E+04	n		2.8E+00	
				3.0E+00	I					1	0.1		Fosetyl-AL	39148-24-8	1.8E+05	nm	1.8E+06	nm					4.7E+04	n			
													Furans														
				1.0E-03	X			V		1		1.7E+02	~Dibenzofuran	132-64-9	7.8E+01	n	1.0E+03	ns					5.8E+00	n		1.1E-01	
				1.0E-03	I			V		1		6.2E+03	~Furan	110-00-9	7.8E+01	n	1.0E+03	n					1.5E+01	n		5.7E-03	
				9.0E-01	I	2.0E+00	I	V		1	0.1	1.7E+05	~Tetrahydrofuran	109-99-9	1.8E+04	n	9.5E+04	n	2.1E+03	n	8.8E+03	n	3.2E+03	n		7.1E-01	
3.8E+00	H									1	0.1		Furazolidone	67-45-8	1.3E-01	c	4.5E-01	c					1.8E-02	c		3.4E-05	
				3.0E-03	I	5.0E-02	H			1	0.1		Furfural	98-01-1	1.8E+02	n	1.8E+03	n	5.2E+01	n	2.2E+02	n	4.6E+01	n		9.9E-03	
1.5E+00	C	4.3E-04	C							1	0.1		Furium	531-82-8	3.2E-01	c	1.1E+00	c	5.7E-03	c	2.9E-02	c	4.4E-02	c		5.9E-05	
3.0E-02	I	8.6E-06	C							1	0.1		Furmecyclox	60568-05-0	1.6E+01	c	5.7E+01	c	2.8E-01	c	1.4E+00	c	9.6E-01	c		1.0E-03	
				4.0E-04	I					1	0.1		Glufosinate, Ammonium	77182-82-2	2.4E+01	n	2.5E+02	n					6.3E+00	n		1.4E-03	
						8.0E-05	C			1	0.1		Glutaraldehyde	111-30-8	1.1E+05	nm	4.8E+05	nm	8.3E-02	n	3.5E-01	n					
				4.0E-04	I	1.0E-03	H			1	0.1		Glycidyl	765-34-4	2.4E+01	n	2.5E+02	n	1.0E+00	n	4.4E+00	n	6.3E+00	n		1.3E-03	
				1.0E-01	I					1	0.1		Glyphosate	1071-83-6	6.1E+03	n	6.2E+04	n					1.6E+03	n	7.0E+02	3.2E-01	1.4E-01
				3.0E-03	I					1	0.1		Goal	42874-03-3	1.8E+02	n	1.8E+03	n					2.4E+01	n		1.9E+00	
				3.0E-03	A	1.0E-02	A			1	0.1		Guthion	86-50-0	1.8E+02	n	1.8E+03	n	1.0E+01	n	4.4E+01	n	4.3E+01	n		1.3E-02	
				5.0E-05	I					1	0.1		Haloxyfop, Methyl	69806-40-2	3.1E+00	n	3.1E+01	n					5.8E-01	n		6.4E-03	
				1.3E-02	I					1	0.1		Harmony	79277-27-3	7.9E+02	n	8.0E+03	n					2.0E+02	n		6.1E-02	
4.5E+00	I	1.3E-03	I	5.0E-04	I					1	0.1		Heptachlor	76-44-8	1.1E-01	c	3.8E-01	c	1.9E-03	c	9.4E-03	c	1.8E-03	c	4.0E-01	1.4E-04	3.3E-02
9.1E+00	I	2.6E-03	I	1.3E-05	I					1	0.1		Heptachlor Epoxide	1024-57-3	5.3E-02	c*	1.9E-01	c*	9.4E-04	c	4.7E-03	c	3.3E-03	c*	2.0E-01	6.8E-05	4.1E-03
				2.0E-03	I					1	0.1		Hexabromobenzene	87-82-1	1.2E+02	n	1.2E+03	n					3.1E+01	n		1.8E-01	
				2.0E-04	I					1	0.1		Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153)	68631-49-2	1.2E+01	n	1.2E+02	n					3.1E+00	n			
1.6E+00	I	4.6E-04	I	8.0E-04	I					1	0.1		Hexachlorobenzene	118-74-1	3.0E-01	c	1.1E+00	c	5.3E-03	c	2.7E-02	c	4.2E-02	c	1.0E+00	5.3E-04	1.3E-02
7.8E-02	I	2.2E-05	I	1.0E-03	P					1	0.1		Hexachlorobutadiene	87-68-3	6.2E+00	c**	2.2E+01	c*	1.1E-01	c	5.6E-01	c	2.6E-01	c*		5.0E-04	
6.3E+00	I	1.8E-03	I	8.0E-03	A					1	0.1		Hexachlorocyclohexane, Alpha-	319-84-6	7.7E-02	c	2.7E-01	c	1.4E-03	c	6.8E-03	c	6.2E-03	c		3.6E-05	
1.8E+00	I	5.3E-04	I							1	0.1		Hexachlorocyclohexane, Beta-	319-85-7	2.7E-01	c	9.6E-01	c	4.6E-03	c	2.3E-02	c	2.2E-02	c		1.3E-04	
1.1E+00	C	3.1E-04	C	3.0E-04	I					1	0.04		Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	5.2E-01	c*	2.1E+00	c	7.8E-03	c	4.0E-02	c	3.6E-02	c*	2.0E-01	2.1E-04	1.2E-03
1.8E+00	I	5.1E-04	I							1	0.1		Hexachlorocyclohexane, Technical	608-73-1	2.7E-01	c	9.6E-01	c	4.8E-03	c	2.4E-02	c	2.2E-02	c		1.3E-04	
				6.0E-03	I	2.0E-04	I			1	0.1		Hexachlorocyclopentadiene	77-47-4	3.7E+02	n	3.7E+03	n	2.1E-01	n	8.8E-01	n	2.2E+01	n	5.0E+01	7.0E-02	1.6E-01
4.0E-02	I	1.1E-05	C	7.0E-04	I	3.0E-02	I			1	0.1		Hexachloroethane	67-72-1	1.2E+01	c**	4.3E+01	c*	2.2E-01	c	1.1E+00	c	7.9E-01	c**		4.8E-04	
				3.0E-04	I					1	0.1		Hexachlorophene	70-30-4	1.8E+01	n	1.8E+02	n					4.7E+00	n		6.3E+00	
1.1E-01	I			3.0E-03	I					1	0.015		Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	5.6E+00	c*	2.4E+01	c					6.1E-01	c*		2.3E-04	
						1.0E-05	I	V		1		5.2E+03	Hexamethylene Diisocyanate, 1,6-	822-06-0	3.4E+00	n	1.4E+01	n	1.0E-02	n	4.4E-02	n	2.1E-02	n		2.1E-04	
				4.0E-04	P					1	0.1		Hexamethylphosphoramide	680-31-9	2.4E+01	n	2.5E+02	n					6.2E+00	n		1.4E-03	
				6.0E-02	H	7.0E-01	I	V		1		1.4E+02	Hexane, N-	110-54-3	5.7E+02	ns	2.6E+03	ns	7.3E+02	n	3.1E+03	n	2.5E+02	n		1.8E+00	
				2.0E+00	P					1	0.1		Hexanedioic Acid	124-04-9	1.2E+05	nm	1.2E+06	nm					3.1E+04	n		7.7E+00	
				5.0E-03	I	3.0E-02	I	V		1		3.3E+03	Hexanone, 2-	591-78-6	2.1E+02	n	1.4E+03	n	3.1E+01	n	1.3E+02	n	3.4E+01	n		7.9E-03	
				3.3E-02	I					1	0.1		Hexazinone	51235-04-2	2.0E+03	n	2.0E+04	n					5.0E+02	n		2.3E-01	
3.0E+00	I	4.9E-03	I			3.0E-05	P			1			Hydrazine	302-01-2	2.1E-01	c	9.5E-01	c	5.0E-04	c*	2.5E-03	c*	2.2E-02	c			
3.0E+00	I	4.9E-03	I							1			Hydrazine Sulfate	10034-93-2	2.1E-01	c	9.5E-01	c	5.0E-04	c	2.5E-03	c	2.2E-02	c			
						2.0E-02	I			1			Hydrogen Chloride	7647-01-0	2.8E+07	nm	1.2E+08	nm	2.1E+01	n	8.8E+01	n					
				4.0E-02	C	1.4E-02	C			1			Hydrogen Fluoride	7664-39-3	3.1E+03	n	4.1E+04	n	1.5E+01	n	6.1E+01	n	6.2E+02	n			
						2.0E-03	I			1			Hydrogen Sulfide	7783-06-4	2.8E+06	nm	1.2E+07	nm	2.1E+00	n	8.8E+00	n					
6.0E-02	P			4.0E-02	P					1	0.1		Hydroquinone	123-31-9	8.1E+00	c	2.9E+01	c					1.1E+00	c		7.5E-04	
				1.3E-02	I					1	0.1		Imazalil	35554-44-0	7.9E+02	n	8.0E+03	n					1.4E+02	n		2.5E+00	
				2.5E-01	I					1	0.1		Imazaquin	81335-37-7	1.5E+04	n	1.5E+05	nm					3.8E+03	n		1.9E+01	
				1.0E-02	A					1			Iodine	7553-56-2	7.8E+02	n	1.0E+04	n					1.6E+02	n		9.4E+00	
				4.0E-02	I					1	0.1		Iprodione	36734-19-7	2.4E+03	n	2.5E+04	n					5.7E+02	n		1.7E-01	
				7.0E-01	P					1			Iron	7439-89-6	5.5E+04	n	7.2E+05	nm					1.1E+04	n		2.7E+02	
				3.0E-01	I					1	0.1		Isobutyl Alcohol	78-83-1	1.8E+04	n	1.8E+05	nm					4.6E+03	n		9.5E-01	
9.5E-04	I			2.0E-01	I	2.0E+00	C			1	0.1		Isophorone	78-59-1	5.1E+02	c*	1.8E+03	c*	2.1E+03	n	8.8E+03	n	6.7E+01	c*		2.2E-02	
				1.5E-02	I					1	0.1		Isopropalin	33820-53-0	9.2E+02	n	9.2E+03	n					2.3E+02	n		5.4E+00	
						7.0E+00	C			1	0.1		Isopropanol	67-63-0	9.9E+09	nm	4.2E+10	nm	7.3E+03	n	3.1E+04	n					
				1.0E-01	I					1	0.1		Isopropyl Methyl Phosphonic Acid	1832-54-8	6.1E+03	n	6.2E+04	n					1.6E+03	n		3.4E-01	
				5.0E-02	I					1	0.1		Isoxaben	82558-50-7	3.1E+03	n	3.1E+04	n					5.6E+02	n		1.5E+00	
						3.0E-01	A	V		1			JP-7	NA	4.3E+08	nm	1.8E+09	nm	3.1E+02	n	1.3E+03	n	6.3E+02	n			
				7.5E-02	I					1	0.1		Kerb	23950-58-5	4.6E+03	n	4.6E+04	n					9.0E+02	n		9.1E-01	
				2.0E-03	I					1	0.1		Lactofen	77501-63-4	1.2E+02	n	1.2E+03	n					1.9E+01	n		8.7E-01	
													Lead Compounds														
2.8E-01	C	8.0E-05	C							1	0.1		~Lead acetate	301-04-2	1.7E+00	c	6.2E+00	c	3.0E-02	c	1.5E-01	c	2.4E-01	c			
										1			~Lead and Compounds	7439-92-1	4.0E+02	L	8.0E+02	L	1.5E-01	L			L		L	1.5E+01		1.4E+01
3.8E-02	C	1.1E-05	C							1	0.1		~Lead subacetate	1335-32-6	1.3E+01	c	4.5E+01	c	2.2E-01	c	1.1E+00	c	1.8E+00	c			
				1.0E-07	I					1	0.1		~Tetraethyl Lead	78-00-2	6.1E-03	n	6.2E-02	n					9.9E-04	n		3.5E-06	
				2.0E-03	I					1	0.1		Linuron	330-55-2	1.2E+02	n	1.2E+03	n					2.6E+01	n		2.3E-02	
				2.0E-03	P					1			Lithium	7439-93-2	1.6E+02	n	2.0E+03	n					3.1E+01	n		9.3E+00	

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Toxicity and Chemical-specific Information														Contaminant		Screening Levels												Protection of Ground Water SSLs	
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volc	muta-gen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	MCL-based SSL (mg/kg)
				2.0E-01	I					1	0.1		Londax	83055-99-6	1.2E+04	n	1.2E+05	nm					3.1E+03	n		7.9E-01	
				5.0E-04	I					1	0.1		MCPA	94-74-6	3.1E+01	n	3.1E+02	n					5.7E+00	n		1.5E-03	
				1.0E-02	I					1	0.1		MCPB	94-81-5	6.1E+02	n	6.2E+03	n					1.6E+02	n		6.2E-02	
				1.0E-03	I					1	0.1		MCPP	93-65-2	6.1E+01	n	6.2E+02	n					1.2E+01	n		3.5E-03	
				2.0E-02	I					1	0.1		Malathion	121-75-5	1.2E+03	n	1.2E+04	n					3.0E+02	n		7.9E-02	
				1.0E-01	I	7.0E-04	C			1	0.1		Maleic Anhydride	108-31-6	6.1E+03	n	6.1E+04	n	7.3E-01	n	3.1E+00	n	1.5E+03	n		3.0E-01	
				5.0E-01	I					1	0.1		Maleic Hydrazide	123-33-1	3.1E+04	n	3.1E+05	nm					7.8E+03	n		1.6E+00	
				1.0E-04	P					1	0.1		Malononitrile	109-77-3	6.1E+00	n	6.2E+01	n					1.6E+00	n		3.2E-04	
				3.0E-02	H					1	0.1		Mancozeb	8018-01-7	1.8E+03	n	1.8E+04	n					4.7E+02	n		6.6E-01	
				5.0E-03	I					1	0.1		Maneb	12427-38-2	3.1E+02	n	3.1E+03	n					7.8E+01	n		1.1E-01	
				1.4E-01	I	5.0E-05	I			1			Manganese (Diet)	7439-96-5														
				2.4E-02	S	5.0E-05	I			0.04			Manganese (Non-diet)	7439-96-5	1.8E+03	n	2.3E+04	n	5.2E-02	n	2.2E-01	n	3.2E+02	n		2.1E+01	
				9.0E-05	H					1	0.1		Mephosfolan	950-10-7	5.5E+00	n	5.5E+01	n					1.4E+00	n		2.1E-03	
				3.0E-02	I					1	0.1		Mepiquat Chloride	24307-26-4	1.8E+03	n	1.8E+04	n					4.7E+02	n		1.6E-01	
													Mercury Compounds															
				3.0E-04	I	3.0E-05	C			0.07			~Mercuric Chloride (and other Mercury salts)	7487-94-7	2.3E+01	n	3.1E+02	n	3.1E-02	n	1.3E-01	n	4.3E+00	n	2.0E+00		
						3.0E-04	I	V		1		3.1E+00	~Mercury (elemental)	7439-97-6	1.0E+01	ns	4.3E+01	ns	3.1E-01	n	1.3E+00	n	6.3E-01	n	2.0E+00	3.3E-02	1.0E-01
				1.0E-04	I					1			~Methyl Mercury	22967-92-6	7.8E+00	n	1.0E+02	n					1.6E+00	n			
				8.0E-05	I					1	0.1		~Phenylmercuric Acetate	62-38-4	4.9E+00	n	4.9E+01	n					1.2E+00	n		3.9E-04	
				3.0E-05	I					1	0.1		Merphos	150-50-5	1.8E+00	n	1.8E+01	n					4.7E-01	n		4.6E-02	
				3.0E-05	I					1	0.1		Merphos Oxide	78-48-8	1.8E+00	n	1.8E+01	n					6.1E-02	n		3.0E-04	
				6.0E-02	I					1	0.1		Metalaxyl	57837-19-1	3.7E+03	n	3.7E+04	n					9.2E+02	n		2.5E-01	
				1.0E-04	I	7.0E-04	H	V		1		4.6E+03	Methacrylonitrile	126-98-7	3.2E+00	n	1.8E+01	n	7.3E-01	n	3.1E+00	n	7.5E-01	n		1.7E-04	
				5.0E-05	I					1	0.1		Methamidophos	10265-92-6	3.1E+00	n	3.1E+01	n					7.8E-01	n		1.6E-04	
				5.0E-01	I	4.0E+00	C			1	0.1		Methanol	67-56-1	3.1E+04	n	3.1E+05	nm	4.2E+03	n	1.8E+04	n	7.8E+03	n		1.6E+00	
				1.0E-03	I					1	0.1		Methidathion	950-37-8	6.1E+01	n	6.2E+02	n					1.5E+01	n		3.7E-03	
				2.5E-02	I					1	0.1		Methomyl	16752-77-5	1.5E+03	n	1.5E+04	n					3.9E+02	n		8.5E-02	
4.9E-02	C	1.4E-05	C							1	0.1		Methoxy-5-nitroaniline, 2-	99-59-2	9.9E+00	c	3.5E+01	c	1.7E-01	c	8.8E-01	c	1.3E+00	c		4.6E-04	
				5.0E-03	I					1	0.1		Methoxychlor	72-43-5	3.1E+02	n	3.1E+03	n					2.7E+01	n	4.0E+01	1.5E+00	2.2E+00
				8.0E-03	P	1.0E-03	P			1	0.1		Methoxyethanol Acetate, 2-	110-49-6	4.9E+02	n	4.9E+03	n	1.0E+00	n	4.4E+00	n	1.3E+02	n		2.6E-02	
				5.0E-03	P	2.0E-02	I			1	0.1		Methoxyethanol, 2-	109-86-4	3.1E+02	n	3.1E+03	n	2.1E+01	n	8.8E+01	n	7.8E+01	n		1.6E-02	
				1.0E+00	X			V		1		2.9E+04	Methyl Acetate	79-20-9	7.8E+04	ns	1.0E+06	nms					1.6E+04	n		3.2E+00	
				3.0E-02	H			V		1		6.8E+03	Methyl Acrylate	96-33-3	2.3E+03	n	3.1E+04	ns					4.6E+02	n		9.8E-02	
				6.0E-01	I	5.0E+00	I	V		1		2.8E+04	Methyl Ethyl Ketone (2-Butanone)	78-93-3	2.8E+04	n	2.0E+05	nms	5.2E+03	n	2.2E+04	n	4.9E+03	n		1.0E+00	
		1.0E-03	X	1.0E-03	P	2.0E-05	X			1	0.1		Methyl Hydrazine	60-34-4	6.1E+01	n	6.1E+02	n	2.4E-03	c**	1.2E-02	c**	1.6E+01	n		3.5E-03	
				8.0E-02	H	3.0E+00	I	V		1		3.4E+03	Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1	5.3E+03	ns	5.3E+04	ns	3.1E+03	n	1.3E+04	n	1.0E+03	n		2.3E-01	
						1.0E-03	C	V		1	0.1	1.7E+04	Methyl Isocyanate	624-83-9	5.0E+00	n	2.1E+01	n	1.0E+00	n	4.4E+00	n	2.1E+00	n		5.9E-04	
				1.4E+00	I	7.0E-01	I	V		1		2.4E+03	Methyl Methacrylate	80-62-6	4.8E+03	ns	2.1E+04	ns	7.3E+02	n	3.1E+03	n	1.4E+03	n		3.0E-01	
				2.5E-04	I					1	0.1		Methyl Parathion	298-00-0	1.5E+01	n	1.5E+02	n					3.4E+00	n		5.7E-03	
				6.0E-02	X					1	0.1		Methyl Phosphonic Acid	993-13-5	3.7E+03	n	3.7E+04	n					9.4E+02	n		1.9E-01	
				6.0E-03	H	4.0E-02	H	V		1		3.8E+02	Methyl Styrene (Mixed Isomers)	25013-15-4	2.5E+02	n	1.6E+03	ns	4.2E+01	n	1.8E+02	n	3.1E+01	n		5.0E-02	
9.9E-02	C	2.8E-05	C							1	0.1		Methyl methanesulfonate	66-27-3	4.9E+00	c	1.7E+01	c	8.7E-02	c	4.4E-01	c	6.8E-01	c		1.4E-04	
1.8E-03	C	2.6E-07	C			3.0E+00	I	V		1		8.9E+03	Methyl tert-Butyl Ether (MTBE)	1634-04-4	4.3E+01	c	2.2E+02	c	9.4E+00	c	4.7E+01	c	1.2E+01	c		2.8E-03	
				2.0E-04	X					1	0.1		Methyl-1,4-benzenediamine dihydrochloride, 2-	615-45-2	1.2E+01	n	1.2E+02	n					3.1E+00	n		1.9E-03	
9.0E-03	P			2.0E-02	X					1	0.1		Methyl-5-Nitroaniline, 2-	99-55-8	5.4E+01	c*	1.9E+02	c*					7.0E+00	c*		3.9E-03	
8.3E+00	C	2.4E-03	C							1	0.1		Methyl-N-nitro-N-nitrosoguanidine, N-	70-25-7	5.9E-02	c	2.1E-01	c	1.0E-03	c	5.1E-03	c	8.1E-03	c		2.8E-06	
1.3E-01	C	3.7E-05	C							1	0.1		Methylaniline Hydrochloride, 2-	636-21-5	3.7E+00	c	1.3E+01	c	6.6E-02	c	3.3E-01	c	5.0E-01	c		2.1E-04	
				1.0E-02	A					1	0.1		Methylarsonic acid	124-58-3	6.1E+02	n	6.2E+03	n					1.6E+02	n			
				2.0E-04	X					1	0.1		Methylbenzene,1-4-diamine monohydrochloride, 2-	74612-12-7	1.2E+01	n	1.2E+02	n					3.1E+00	n			
				2.0E-04	X					1	0.1		Methylbenzene-1,4-diamine sulfate, 2-	615-50-9	1.2E+01	n	1.2E+02	n					3.1E+00	n			
2.2E+01	C	6.3E-03	C						M	1	0.1		Methylcholanthrene, 3-	56-49-5	5.2E-03	c	7.8E-02	c	1.5E-04	c	1.9E-03	c	9.8E-04	c		1.9E-03	
2.0E-03	I	1.0E-08	I	6.0E-03	I	6.0E-01	I	V	M	1		3.3E+03	Methylene Chloride	75-09-2	5.6E+01	c**	9.6E+02	c**	9.6E+01	c**	1.2E+03	c**	9.9E+00	c**	5.0E+00	2.5E-03	1.3E-03
1.0E-01	P	4.3E-04	C	2.0E-03	P				M	1	0.1		Methylene-bis(2-chloroaniline), 4,4'-	101-14-4	1.2E+00	c	1.7E+01	c*	2.2E-03	c	2.9E-02	c	1.4E-01	c		1.6E-03	
4.6E-02	I	1.3E-05	C							1	0.1		Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	101-61-1	1.1E+01	c	3.7E+01	c	1.9E-01	c	9.4E-01	c	6.0E-01	c		3.3E-03	
1.6E+00	C	4.6E-04	C			2.0E-02	C			1	0.1		Methylenebisbenzenamine, 4,4'-	101-77-9	3.0E-01	c	1.1E+00	c	5.3E-03	c	2.7E-02	c	4.1E-02	c		1.8E-04	
						6.0E-04	I			1	0.1		Methylenediphenyl Diisocyanate	101-68-8	8.5E+05	nm	3.6E+06	nm	6.3E-01	n	2.6E+00	n					
				7.0E-02	H			V		1		5.0E+02	Methylstyrene, Alpha-	98-83-9	5.5E+03	ns	7.2E+04	ns					5.8E+02	n		9.3E-01	
				1.5E-01	I					1	0.1		Metolachlor	51218-45-2	9.2E+03	n	9.2E+04	n					2.1E+03	n		2.5E+00	
				2.5E-02	I					1	0.1		Metribuzin	21087-64-9	1.5E+03	n	1.5E+04	n					3.8E+02	n		1.2E-01	
				3.0E+00	P			V		1	0.1	3.4E-01	Mineral oils	8012-95-1	1.8E+05	nms	1.8E+06	nms					4.7E+04	n		1.9E+03	
1.8E+01	C	5.1E-03	C	2.0E-04	I					1	0.1		Mirex	2385-85-5	2.7E-02	c	9.6E-02	c	4.8E-04	c	2.4E-03	c	3.7E-03	c		2.7E-03	
				2.0E-03	I					1	0.1		Molinate	2212-67-1	1.2E+02	n	1.2E+03	n					2.3E+01	n		1.3E-02	
				5.0E-03	I					1			Molybdenum	7439-98-7	3.9E+02	n	5.1E+03	n					7.8E+01	n		1.6E+00	
				1.0E-01	I					1			Monochloramine	10599-90-3	7.8E+03	n	1.0E+05	nm					1.6E+03	n			
				2.0E-03	P					1	0.1		Monomethylaniline	100-61-8	1.2E+02	n	1.2E+03	n					3.0E+01	n		1.1E-02	

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Toxicity and Chemical-specific Information													Contaminant		Screening Levels										Protection of Ground Water SSLs	
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volc	muta-gen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	MCL-based SSL (mg/kg)
				3.0E-04	X					1	0.1		N,N'-Diphenyl-1,4-benzenediamine	74-31-7	1.8E+01	n	1.8E+02	n					2.7E+00	n		2.8E-01	
				2.0E-03	I					1	0.1		Naled	300-76-5	1.2E+02	n	1.2E+03	n					3.1E+01	n		1.4E-02	
				3.0E-02	X	1.0E-01	P	V		1			Naphtha, High Flash Aromatic (HFAN)	64724-95-6	2.3E+03	n	3.1E+04	n	1.0E+02	n	4.4E+02	n	1.4E+02	n			
1.8E+00	C	0.0E+00	C							1	0.1		Naphthylamine, 2-	91-59-8	2.7E-01	c	9.6E-01	c					3.3E-02	c		1.7E-04	
				1.0E-01	I					1	0.1		Napropamide	15299-99-7	6.1E+03	n	6.2E+04	n					1.3E+03	n		8.3E+00	
				5.0E-02	C	5.0E-05	C			0.04			Nickel Carbonyl	13463-39-3	3.7E+03	n	4.4E+04	n	5.2E-02	n	2.2E-01	n	6.7E+02	n			
				5.0E-02	C	1.0E-04	C			1			Nickel Oxide	1313-99-1	3.8E+03	n	4.7E+04	n	1.0E-01	n	4.4E-01	n	7.8E+02	n			
		2.4E-04	I	5.0E-02	C	5.0E-05	C			0.04			Nickel Refinery Dust	NA	3.7E+03	n	4.4E+04	n	1.0E-02	c**	5.1E-02	c**	7.6E+02	n		1.1E+02	
		2.6E-04	C	2.0E-02	I	9.0E-05	A			0.04			Nickel Soluble Salts	7440-02-0	1.5E+03	n	2.0E+04	n	9.4E-03	c*	4.7E-02	c**	3.0E+02	n		2.0E+01	
1.7E+00	C	4.8E-04	I	5.0E-02	C	5.0E-05	C			0.04			Nickel Subsulfide	12035-72-2	3.8E-01	c	1.7E+00	c	5.1E-03	c*	2.6E-02	c**	3.9E-02	c			
				1.6E+00	I					1			Nitrate	14797-55-8	1.3E+05	nm	1.6E+06	nm					2.5E+04	n	1.0E+04		
				1.0E-01	I					1			Nitrite	14797-65-0	7.8E+03	n	1.0E+05	nm					1.6E+03	n	1.0E+03		
				1.0E-02	X	5.0E-05	X			1	0.1		Nitroaniline, 2-	88-74-4	6.1E+02	n	6.0E+03	n	5.2E-02	n	2.2E-01	n	1.5E+02	n		6.2E-02	
2.0E-02	P			4.0E-03	P	6.0E-03	P			1	0.1		Nitroaniline, 4-	100-01-6	2.4E+01	c*	8.6E+01	c*	6.3E+00	n	2.6E+01	n	3.3E+00	c*		1.4E-03	
		4.0E-05	I	2.0E-03	I	9.0E-03	I	V		1		3.1E+03	Nitrobenzene	98-95-3	4.8E+00	c*	2.4E+01	c*	6.1E-02	c	3.1E-01	c	1.2E-01	c*		7.9E-05	
				3.0E+03	P					1	0.1		Nitrocellulose	9004-70-0	1.8E+08	nm	1.8E+09	nm					4.7E+07	n		1.0E+04	
				7.0E-02	H					1	0.1		Nitrofurantoin	67-20-9	4.3E+03	n	4.3E+04	n					1.1E+03	n		4.7E-01	
1.3E+00	C	3.7E-04	C							1	0.1		Nitrofurazone	59-87-0	3.7E-01	c	1.3E+00	c	6.6E-03	c	3.3E-02	c	5.2E-02	c		4.6E-05	
1.7E-02	P			1.0E-04	P					1	0.1		Nitroglycerin	55-63-0	6.1E+00	n	6.2E+01	n					1.5E+00	n		6.6E-04	
				1.0E-01	I					1	0.1		Nitroguanidine	556-88-7	6.1E+03	n	6.2E+04	n					1.6E+03	n		3.8E-01	
		9.0E-06	P			2.0E-02	P	V		1		1.8E+04	Nitromethane	75-52-5	4.9E+00	c*	2.5E+01	c*	2.7E-01	c*	1.4E+00	c*	5.4E-01	c*		1.2E-04	
		2.7E-03	H			2.0E-02	I	V		1		4.9E+03	Nitropropane, 2-	79-46-9	1.3E-02	c	6.4E-02	c	9.0E-04	c	4.5E-03	c	1.8E-03	c		4.7E-07	
2.7E+01	C	7.7E-03	C						M	1	0.1		Nitroso-N-ethylurea, N-	759-73-9	4.3E-03	c	6.4E-02	c	1.2E-04	c	1.6E-03	c	7.9E-04	c		1.9E-07	
1.2E+02	C	3.4E-02	C						M	1	0.1		Nitroso-N-methylurea, N-	684-93-5	9.6E-04	c	1.4E-02	c	2.8E-05	c	3.6E-04	c	1.8E-04	c		4.0E-08	
5.4E+00	I	1.6E-03	I					V		1		7.1E+03	Nitroso-di-N-butylamine, N-	924-16-3	8.7E-02	c	4.0E-01	c	1.5E-03	c	7.7E-03	c	2.4E-03	c		4.8E-06	
7.0E+00	I	2.0E-03	C							1	0.1		Nitroso-di-N-propylamine, N-	621-64-7	6.9E-02	c	2.5E-01	c	1.2E-03	c	6.1E-03	c	9.3E-03	c		7.0E-06	
2.8E+00	I	8.0E-04	C							1	0.1		Nitrosodiethanolamine, N-	1116-54-7	1.7E-01	c	6.2E-01	c	3.0E-03	c	1.5E-02	c	2.4E-02	c		4.8E-06	
1.5E+02	I	4.3E-02	I						M	1	0.1		Nitrosodiethylamine, N-	55-18-5	7.7E-04	c	1.1E-02	c	2.2E-05	c	2.9E-04	c	1.4E-04	c		5.2E-08	
5.1E+01	I	1.4E-02	I	8.0E-06	P	4.0E-05	X		M	1	0.1		Nitrosodimethylamine, N-	62-75-9	2.3E-03	c	3.4E-02	c	6.9E-05	c	8.8E-04	c	4.2E-04	c		1.0E-07	
4.9E-03	I	2.6E-06	C							1	0.1		Nitrosodiphenylamine, N-	86-30-6	9.9E+01	c	3.5E+02	c	9.4E-01	c	4.7E+00	c	1.0E+01	c		5.7E-02	
2.2E+01	I	6.3E-03	C							1	0.1		Nitrosomethylethylamine, N-	10595-95-6	2.2E-02	c	7.8E-02	c	3.9E-04	c	1.9E-03	c	3.0E-03	c		8.7E-07	
6.7E+00	C	1.9E-03	C							1	0.1		Nitrosomorpholine [N-]	59-89-2	7.3E-02	c	2.6E-01	c	1.3E-03	c	6.5E-03	c	1.0E-02	c		2.5E-06	
9.4E+00	C	2.7E-03	C							1	0.1		Nitrosopiperidine [N-]	100-75-4	5.2E-02	c	1.8E-01	c	9.0E-04	c	4.5E-03	c	7.1E-03	c		3.8E-06	
2.1E+00	I	6.1E-04	I							1	0.1		Nitrosopyrrolidine, N-	930-55-2	2.3E-01	c	8.2E-01	c	4.0E-03	c	2.0E-02	c	3.2E-02	c		1.2E-05	
				1.0E-04	X					1	0.1		Nitrotoluene, m-	99-08-1	6.1E+00	n	6.2E+01	n					1.3E+00	n		1.2E-03	
2.2E-01	P			9.0E-04	P			V		1		1.5E+03	Nitrotoluene, o-	88-72-2	2.9E+00	c*	1.3E+01	c*					2.7E-01	c*		2.5E-04	
1.6E-02	P			4.0E-03	P					1	0.1		Nitrotoluene, p-	99-99-0	3.0E+01	c**	1.1E+02	c*					3.7E+00	c*		3.4E-03	
				3.0E-04	X	2.0E-01	P	V		1		6.9E+00	Nonane, n-	111-84-2	2.1E+01	ns	2.3E+02	ns	2.1E+02	n	8.8E+02	n	4.6E+00	n		6.6E-02	
				4.0E-02	I					1	0.1		Norflurazon	27314-13-2	2.4E+03	n	2.5E+04	n					6.0E+02	n		3.9E+00	
				7.0E-04	I					1	0.1		Nustar	85509-19-9	4.3E+01	n	4.3E+02	n					8.3E+00	n		1.4E+00	
				3.0E-03	I					1	0.1		Octabromodiphenyl Ether	32536-52-0	1.8E+02	n	1.8E+03	n					4.7E+01	n		9.3E+00	
				5.0E-02	I					1	0.006		Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	2691-41-0	3.8E+03	n	4.9E+04	n					7.8E+02	n		9.9E-01	
				2.0E-03	H					1	0.1		Octamethylpyrophosphoramide	152-16-9	1.2E+02	n	1.2E+03	n					3.1E+01	n		7.5E-03	
				5.0E-02	I					1	0.1		Oryzalin	19044-88-3	3.1E+03	n	3.1E+04	n					6.2E+02	n		1.1E+00	
				5.0E-03	I					1	0.1		Oxadiazon	19666-30-9	3.1E+02	n	3.1E+03	n					3.5E+01	n		3.6E-01	
				2.5E-02	I					1	0.1		Oxamyl	23135-22-0	1.5E+03	n	1.5E+04	n					3.9E+02	n	2.0E+02	8.6E-02	4.4E-02
				1.3E-02	I					1	0.1		Paclobutrazol	76738-62-0	7.9E+02	n	8.0E+03	n					1.7E+02	n		3.6E-01	
				4.5E-03	I					1	0.1		Paraquat Dichloride	1910-42-5	2.7E+02	n	2.8E+03	n					7.0E+01	n		9.7E-01	
				6.0E-03	H					1	0.1		Parathion	56-38-2	3.7E+02	n	3.7E+03	n					6.5E+01	n		3.3E-01	
				5.0E-02	H					1	0.1		Pebulate	1114-71-2	3.1E+03	n	3.1E+04	n					4.2E+02	n		3.3E-01	
				4.0E-02	I					1	0.1		Pendimethalin	40487-42-1	2.4E+03	n	2.5E+04	n					1.3E+02	n		1.5E+00	
				2.0E-03	I					1	0.1		Pentabromodiphenyl Ether	32534-81-9	1.2E+02	n	1.2E+03	n					3.1E+01	n		1.4E+00	
				1.0E-04	I					1	0.1		Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99)	60348-60-9	6.1E+00	n	6.2E+01	n					1.6E+00	n		6.8E-02	
				8.0E-04	I					1	0.1		Pentachlorobenzene	608-93-5	4.9E+01	n	4.9E+02	n					2.3E+00	n		1.7E-02	
9.0E-02	P									1	0.1		Pentachloroethane	76-01-7	5.4E+00	c	1.9E+01	c					5.6E-01	c		2.7E-04	
2.6E-01	H			3.0E-03	I					1	0.1		Pentachloronitrobenzene	82-68-8	1.9E+00	c*	6.6E+00	c					1.0E-01	c		1.3E-03	
4.0E-01	I	5.1E-06	C	5.0E-03	I					1	0.25		Pentachlorophenol	87-86-5	8.9E-01	c	2.7E+00	c	4.8E-01	c	2.4E+00	c	1.7E-01	c	1.0E+00	1.7E-03	1.0E-02
4.0E-03	X			2.0E-03	P					1	0.1		Pentaerythritol tetranitrate (PETN)	78-11-5	1.2E+02	c**	4.3E+02	c**					1.6E+01	c**		2.4E-02	
						1.0E+00	P	V		1		3.9E+02	Pentane, n-	109-66-0	8.7E+02	ns	3.7E+03	ns	1.0E+03	n	4.4E+03	n	2.1E+03	n		1.0E+01	
													Perchlorates														
				7.0E-04	I					1			~Ammonium Perchlorate	7790-98-9	5.5E+01	n	7.2E+02	n					1.1E+01	n			
				7.0E-04	I					1			~Lithium Perchlorate	7791-03-9	5.5E+01	n	7.2E+02	n					1.1E+01	n			
				7.0E-04	I					1			~Perchlorate and Perchlorate Salts	14797-73-0	5.5E+01	n	7.2E+02	n					1.1E+01	n	1.5E+01(F)		
				7.0E-04	I					1			~Potassium Perchlorate	7778-74-7	5.5E+01	n	7.2E+02	n					1.1E+01	n			
				7.0E-04	I					1			~Sodium Perchlorate	7601-89-0	5.5E+01	n	7.2E+02	n					1.1E+01	n			

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = PPRTV Appendix; H = HEAST; J = New Jersey; Y = New York; O = EPA Office of Water; E = Environmental Criteria and Assessment Office; S = see user guide Section 5; L = see user guide on lead; M = mutagen; V = volatile; F = See FAQ; c = cancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; n = noncancer; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide); SSL values are based on DAF=1

Toxicity and Chemical-specific Information												Contaminant		Screening Levels											Protection of Ground Water SSLs	
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	voc	muta-gen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	MCL-based SSL (mg/kg)
				5.0E-02	I					1	0.1		Permethrin	52645-53-1	3.1E+03	n	3.1E+04	n					7.8E+02	n		1.9E+02	
2.2E-03	C	6.3E-07	C							1	0.1		Phenacetin	62-44-2	2.2E+02	c	7.8E+02	c	3.9E+00	c	1.9E+01	c	3.0E+01	c		8.3E-03	
				2.5E-01	I					1	0.1		Phenmedipham	13684-63-4	1.5E+04	n	1.5E+05	nm					3.0E+03	n		1.6E+01	
				3.0E-01	I	2.0E-01	C			1	0.1		Phenol	108-95-2	1.8E+04	n	1.8E+05	nm	2.1E+02	n	8.8E+02	n	4.5E+03	n		2.6E+00	
				5.0E-04	X					1	0.1		Phenothiazine	92-84-2	3.1E+01	n	3.1E+02	n					3.2E+00	n		1.0E-02	
				6.0E-03	I					1	0.1		Phenylenediamine, m-	108-45-2	3.7E+02	n	3.7E+03	n					9.4E+01	n		2.5E-02	
4.7E-02	H									1	0.1		Phenylenediamine, o-	95-54-5	1.0E+01	c	3.7E+01	c					1.4E+00	c		3.8E-04	
				1.9E-01	H					1	0.1		Phenylenediamine, p-	106-50-3	1.2E+04	n	1.2E+05	nm					3.0E+03	n		7.9E-01	
1.9E-03	H									1	0.1		Phenylphenol, 2-	90-43-7	2.5E+02	c	8.9E+02	c					2.6E+01	c		3.5E-01	
				2.0E-04	H					1	0.1		Phorate	298-02-2	1.2E+01	n	1.2E+02	n					2.3E+00	n		2.6E-03	
						3.0E-04	I	V		1		1.6E+03	Phosgene	75-44-5	3.3E-01	n	1.4E+00	n	3.1E-01	n	1.3E+00	n					
				2.0E-02	I					1	0.1		Phosmet	732-11-6	1.2E+03	n	1.2E+04	n					2.9E+02	n		6.4E-02	
													Phosphates, Inorganic														
				4.9E+01	P					1			~Aluminum metaphosphate	13776-88-0	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Ammonium polyphosphate	68333-79-9	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Calcium pyrophosphate	7790-76-3	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Diammonium phosphate	7783-28-0	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Dicalcium phosphate	7757-93-9	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Dimagnesium phosphate	7782-75-4	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Dipotassium phosphate	7758-11-4	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Disodium phosphate	7558-79-4	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Monoaluminum phosphate	13530-50-2	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Monoammonium phosphate	7722-76-1	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Monocalcium phosphate	7758-23-8	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Monomagnesium phosphate	7757-86-0	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Monopotassium phosphate	7778-77-0	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Monosodium phosphate	7558-80-7	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Polyphosphoric acid	8017-16-1	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Potassium tripolyphosphate	13845-36-8	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Sodium acid pyrophosphate	7758-16-9	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Sodium aluminum phosphate (acidic)	7785-88-8	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Sodium aluminum phosphate (anhydrous)	10279-59-1	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Sodium aluminum phosphate (tetrahydrate)	10305-76-7	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Sodium hexametaphosphate	10124-56-8	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Sodium polyphosphate	68915-31-1	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Sodium trimetaphosphate	7785-84-4	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Sodium tripolyphosphate	7758-29-4	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Tetrapotassium phosphate	7320-34-5	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Tetrasodium pyrophosphate	7722-88-5	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate)	15136-87-5	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Tricalcium phosphate	7758-87-4	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Trimagnesium phosphate	7757-87-1	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Tripotassium phosphate	7778-53-2	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				4.9E+01	P					1			~Trisodium phosphate	7601-54-9	3.8E+06	nm	5.0E+07	nm					7.6E+05	n			
				3.0E-04	I	3.0E-04	I			1			Phosphine	7803-51-2	2.3E+01	n	3.1E+02	n	3.1E-01	n	1.3E+00	n	4.7E+00	n			
				4.9E+01	P	1.0E-02	I			1			Phosphoric Acid	7664-38-2	3.0E+06	nm	2.7E+07	nm	1.0E+01	n	4.4E+01	n	7.6E+05	n			
				2.0E-05	I					1			Phosphorus, White	7723-14-0	1.6E+00	n	2.0E+01	n					3.1E-01	n		1.1E-03	
				1.0E+00	H					1	0.1		Phthalic Acid, P-	100-21-0	6.1E+04	n	6.2E+05	nm					1.5E+04	n		5.3E+00	
				2.0E+00	I	2.0E-02	C			1	0.1		Phthalic Anhydride	85-44-9	1.2E+05	nm	1.2E+06	nm	2.1E+01	n	8.8E+01	n	3.0E+04	n		6.6E+00	
				7.0E-02	I					1	0.1		Picloram	1918-02-1	4.3E+03	n	4.3E+04	n					1.1E+03	n	5.0E+02	2.9E-01	1.4E-01
				1.0E-04	X					1	0.1		Picramic Acid (2-Amino-4,6-dinitrophenol)	96-91-3	6.1E+00	n	6.2E+01	n					1.5E+00	n		1.0E-03	
				1.0E-02	I					1	0.1		Pirimiphos, Methyl	29232-93-7	6.1E+02	n	6.2E+03	n					9.1E+01	n		8.7E-02	
3.0E+01	C	8.6E-03	C	7.0E-06	H					1	0.1		Polybrominated Biphenyls	59536-65-1	1.6E-02	c*	5.7E-02	c*	2.8E-04	c	1.4E-03	c	2.2E-03	c*			
													Polychlorinated Biphenyls (PCBs)														
7.0E-02	S	2.0E-05	S	7.0E-05	I					1	0.14		~Aroclor 1016	12674-11-2	3.9E+00	n	2.1E+01	c**	1.2E-01	c	6.1E-01	c	9.6E-01	c**		9.2E-02	
2.0E+00	S	5.7E-04	S					V		1	0.14	7.6E+02	~Aroclor 1221	11104-28-2	1.4E-01	c	5.4E-01	c	4.3E-03	c	2.1E-02	c	4.3E-03	c		7.4E-05	
2.0E+00	S	5.7E-04	S					V		1	0.14	7.3E+01	~Aroclor 1232	11141-16-5	1.4E-01	c	5.4E-01	c	4.3E-03	c	2.1E-02	c	4.3E-03	c		7.4E-05	
2.0E+00	S	5.7E-04	S							1	0.14		~Aroclor 1242	53469-21-9	2.2E-01	c	7.4E-01	c	4.3E-03	c	2.1E-02	c	3.4E-02	c		5.3E-03	
2.0E+00	S	5.7E-04	S							1	0.14		~Aroclor 1248	12672-29-6	2.2E-01	c	7.4E-01	c	4.3E-03	c	2.1E-02	c	3.4E-02	c		5.2E-03	
2.0E+00	S	5.7E-04	S	2.0E-05	I					1	0.14		~Aroclor 1254	11097-69-1	2.2E-01	c**	7.4E-01	c*	4.3E-03	c	2.1E-02	c	3.4E-02	c**		8.8E-03	
2.0E+00	S	5.7E-04	S							1	0.14		~Aroclor 1260	11096-82-5	2.2E-01	c	7.4E-01	c	4.3E-03	c	2.1E-02	c	3.4E-02	c		2.4E-02	
3.9E+00	E	1.1E-03	E	3.3E-05	E	1.3E-03	E			1	0.14		~Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	1.1E-01	c*	3.8E-01	c*	2.1E-03	c	1.1E-02	c	1.7E-02	c*		1.2E-02	
3.9E+00	E	1.1E-03	E	3.3E-05	E	1.3E-03	E			1	0.14		~Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	1.1E-01	c*	3.8E-01	c*	2.1E-03	c	1.1E-02	c	1.7E-02	c*		7.2E-03	
3.9E+00	E	1.1E-03	E	3.3E-05	E	1.3E-03	E			1	0.14		~Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157)	69782-90-7	1.1E-01	c*	3.8E-01	c*	2.1E-03	c	1.1E-02	c	1.7E-02	c*		7.4E-03	
3.9E+00	E	1.1E-03	E	3.3E-05	E	1.3E-03	E			1	0.14		~Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	1.1E-01	c*	3.8E-01	c*	2.1E-03	c	1.1E-02	c	1.7E-02	c*		7.4E-03	

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Toxicity and Chemical-specific Information												Contaminant		Screening Levels											Protection of Ground Water SSLs	
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol c	muta-gen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	MCL-based SSL (mg/kg)
3.9E+03	E	1.1E+00	E	3.3E-08	E	1.3E-06	E			1	0.14		~Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	1.1E-04	c*	3.8E-04	c*	2.1E-06	c	1.1E-05	c	1.7E-05	c*		7.2E-06	
3.9E+00	E	1.1E-03	E	3.3E-05	E	1.3E-03	E			1	0.14		~Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.1E-01	c*	3.8E-01	c*	2.1E-03	c	1.1E-02	c	1.7E-02	c*		4.5E-03	
3.9E+00	E	1.1E-03	E	3.3E-05	E	1.3E-03	E			1	0.14		~Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.1E-01	c*	3.8E-01	c*	2.1E-03	c	1.1E-02	c	1.7E-02	c*		4.4E-03	
3.9E+00	E	1.1E-03	E	3.3E-05	E	1.3E-03	E			1	0.14		~Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.1E-01	c*	3.8E-01	c*	2.1E-03	c	1.1E-02	c	1.7E-02	c*		4.5E-03	
3.9E+00	E	1.1E-03	E	3.3E-05	E	1.3E-03	E			1	0.14		~Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.1E-01	c*	3.8E-01	c*	2.1E-03	c	1.1E-02	c	1.7E-02	c*		4.5E-03	
1.3E+04	E	3.8E+00	E	1.0E-08	E	4.0E-07	E			1	0.14		~Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.4E-05	c*	1.1E-04	c*	6.4E-07	c	3.2E-06	c	5.2E-06	c*		1.3E-06	
2.0E+00	I	5.7E-04	I							1	0.14		~Polychlorinated Biphenyls (high risk)	1336-36-3	2.2E-01	c	7.4E-01	c	4.3E-03	c	2.1E-02	c					
4.0E-01	I	1.0E-04	I							1	0.14		~Polychlorinated Biphenyls (low risk)	1336-36-3					2.4E-02	c	1.2E-01	c	1.7E-01	c	5.0E-01	2.6E-02	7.8E-02
7.0E-02	I	2.0E-05	I							1	0.14		~Polychlorinated Biphenyls (lowest risk)	1336-36-3					1.2E-01	c	6.1E-01	c					
1.3E+01	E	3.8E-03	E	1.0E-05	E	4.0E-04	E			1	0.14		~Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	3.4E-02	c*	1.1E-01	c*	6.4E-04	c	3.2E-03	c	5.2E-03	c*		8.1E-04	
3.9E+01	E	1.1E-02	E	3.3E-06	E	1.3E-04	E			1	0.14		~Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	1.1E-02	c*	3.8E-02	c*	2.1E-04	c	1.1E-03	c	1.7E-03	c*		2.7E-04	
						6.0E-04	I			1	0.1		Polymeric Methylene Diphenyl Diisocyanate (PMDI)	9016-87-9	8.5E+05	nm	3.6E+06	nm	6.3E-01	n	2.6E+00	n					
													Polynuclear Aromatic Hydrocarbons (PAHs)														
				6.0E-02	I			V		1	0.13		~Acenaphthene	83-32-9	3.4E+03	n	3.3E+04	n					4.0E+02	n		4.1E+00	
				3.0E-01	I			V		1	0.13		~Anthracene	120-12-7	1.7E+04	n	1.7E+05	nm					1.3E+03	n		4.2E+01	
7.3E-01	E	1.1E-04	C						M	1	0.13		~Benz[a]anthracene	56-55-3	1.5E-01	c	2.1E+00	c	8.7E-03	c	1.1E-01	c	2.9E-02	c		1.0E-02	
1.2E+00	C	1.1E-04	C							1	0.13		~Benzo(j)fluoranthene	205-82-3	3.8E-01	c	1.3E+00	c	2.2E-02	c	1.1E-01	c	5.6E-02	c		6.7E-02	
7.3E+00	I	1.1E-03	C						M	1	0.13		~Benzo[a]pyrene	50-32-8	1.5E-02	c	2.1E-01	c	8.7E-04	c	1.1E-02	c	2.9E-03	c	2.0E-01	3.5E-03	2.4E-01
7.3E-01	E	1.1E-04	C						M	1	0.13		~Benzo[b]fluoranthene	205-99-2	1.5E-01	c	2.1E+00	c	8.7E-03	c	1.1E-01	c	2.9E-02	c		3.5E-02	
7.3E-02	E	1.1E-04	C						M	1	0.13		~Benzo[k]fluoranthene	207-08-9	1.5E+00	c	2.1E+01	c	8.7E-03	c	1.1E-01	c	2.9E-01	c		3.5E-01	
7.3E-03	E	1.1E-05	C						M	1	0.13		~Chrysene	218-01-9	1.5E+01	c	2.1E+02	c	8.7E-02	c	1.1E+00	c	2.9E+00	c		1.1E+00	
7.3E+00	E	1.2E-03	C						M	1	0.13		~Dibenz[a,h]anthracene	53-70-3	1.5E-02	c	2.1E-01	c	8.0E-04	c	1.0E-02	c	2.9E-03	c		1.1E-02	
1.2E+01	C	1.1E-03	C							1	0.13		~Dibenzo(a,e)pyrene	192-65-4	3.8E-02	c	1.3E-01	c	2.2E-03	c	1.1E-02	c	5.6E-03	c		7.3E-02	
2.5E+02	C	7.1E-02	C						M	1	0.13		~Dimethylbenz(a)anthracene, 7,12-	57-97-6	4.3E-04	c	6.2E-03	c	1.4E-05	c	1.7E-04	c	8.6E-05	c		8.5E-05	
				4.0E-02	I					1	0.13		~Fluoranthene	206-44-0	2.3E+03	n	2.2E+04	n					6.3E+02	n		7.0E+01	
				4.0E-02	I			V		1	0.13		~Fluorene	86-73-7	2.3E+03	n	2.2E+04	n					2.2E+02	n		4.0E+00	
7.3E-01	E	1.1E-04	C						M	1	0.13		~Indeno[1,2,3-cd]pyrene	193-39-5	1.5E-01	c	2.1E+00	c	8.7E-03	c	1.1E-01	c	2.9E-02	c		1.2E-01	
2.9E-02	P			7.0E-02	A			V		1	0.13	3.9E+02	~Methylnaphthalene, 1-	90-12-0	1.6E+01	c	5.3E+01	c					9.7E-01	c		5.1E-03	
				4.0E-03	I			V		1	0.13	3.7E+02	~Methylnaphthalene, 2-	91-57-6	2.3E+02	n	2.2E+03	ns					2.7E+01	n		1.4E-01	
		3.4E-05	C	2.0E-02	I	3.0E-03	I	V		1	0.13		~Naphthalene	91-20-3	3.6E+00	c*	1.8E+01	c*	7.2E-02	c*	3.6E-01	c*	1.4E-01	c*		4.7E-04	
1.2E+00	C	1.1E-04	C							1	0.13		~Nitropyrene, 4-	57835-92-4	3.8E-01	c	1.3E+00	c	2.2E-02	c	1.1E-01	c	1.6E-02	c		2.8E-03	
				3.0E-02	I			V		1	0.13		~Pyrene	129-00-0	1.7E+03	n	1.7E+04	n					8.7E+01	n		9.5E+00	
1.5E-01	I			9.0E-03	I					1	0.1		Prochloraz	67747-09-5	3.2E+00	c	1.1E+01	c					3.2E-01	c		1.6E-03	
				6.0E-03	H					1	0.1		Profluralin	26399-36-0	3.7E+02	n	3.7E+03	n					1.9E+01	n		1.2E+00	
				1.5E-02	I					1	0.1		Prometon	1610-18-0	9.2E+02	n	9.2E+03	n					1.9E+02	n		9.2E-02	
				4.0E-03	I					1	0.1		Prometryn	7287-19-6	2.4E+02	n	2.5E+03	n					4.5E+01	n		6.9E-02	
				1.3E-02	I					1	0.1		Propachlor	1918-16-7	7.9E+02	n	8.0E+03	n					1.9E+02	n		1.2E-01	
				5.0E-03	I					1	0.1		Propanil	709-98-8	3.1E+02	n	3.1E+03	n					6.3E+01	n		3.5E-02	
				2.0E-02	I					1	0.1		Propargite	2312-35-8	1.2E+03	n	1.2E+04	n					1.2E+02	n		8.8E+00	
				2.0E-03	I					1	0.1		Propargyl Alcohol	107-19-7	1.2E+02	n	1.2E+03	n					3.1E+01	n		6.4E-03	
				2.0E-02	I					1	0.1		Propazine	139-40-2	1.2E+03	n	1.2E+04	n					2.6E+02	n		2.3E-01	
				2.0E-02	I					1	0.1		Propham	122-42-9	1.2E+03	n	1.2E+04	n					2.7E+02	n		1.7E-01	
				1.3E-02	I					1	0.1		Propiconazole	60207-90-1	7.9E+02	n	8.0E+03	n					1.6E+02	n		5.3E-01	
						8.0E-03	I	V		1		3.3E+04	Propionaldehyde	123-38-6	8.0E+01	n	3.4E+02	n	8.3E+00	n	3.5E+01	n	1.7E+01	n		3.4E-03	
				1.0E-01	X	1.0E+00	X	V		1	0.1	2.6E+02	Propyl benzene	103-65-1	3.4E+03	ns	2.1E+04	ns	1.0E+03	n	4.4E+03	n	5.3E+02	n		9.9E-01	
						3.0E+00	C	V		1	0.1	3.5E+02	Propylene	115-07-1	2.4E+03	ns	1.0E+04	ns	3.1E+03	n	1.3E+04	n	6.3E+03	n		6.0E+00	
				2.0E+01	P					1	0.1		Propylene Glycol	57-55-6	1.2E+06	nm	1.2E+07	nm					3.1E+05	n		6.3E+01	
						2.7E-04	A			1	0.1		Propylene Glycol Dinitrate	6423-43-4	3.9E+05	nm	1.6E+06	nm	2.8E-01	n	1.2E+00	n					
				7.0E-01	H					1	0.1		Propylene Glycol Monoethyl Ether	1569-02-4	4.3E+04	n	4.3E+05	nm					1.1E+04	n		2.2E+00	
				7.0E-01	H	2.0E+00	I			1	0.1		Propylene Glycol Monomethyl Ether	107-98-2	4.3E+04	n	4.3E+05	nm	2.1E+03	n	8.8E+03	n	1.1E+04	n		2.2E+00	
2.4E-01	I	3.7E-06	I			3.0E-02	I	V		1		7.8E+04	Propylene Oxide	75-56-9	2.0E+00	c	9.0E+00	c	6.6E-01	c*	3.3E+00	c*	2.3E-01	c		4.8E-05	
				2.5E-01	I					1	0.1		Pursuit	81335-77-5	1.5E+04	n	1.5E+05	nm					3.9E+03	n		3.4E+00	
				2.5E-02	I					1	0.1		Pydrin	51630-58-1	1.5E+03	n	1.5E+04	n					3.9E+02	n		2.5E+02	
				1.0E-03	I			V		1		5.3E+05	Pyridine	110-86-1	7.8E+01	n	1.0E+03	n					1.5E+01	n		5.3E-03	
				5.0E-04	I					1	0.1		Quinalphos	13593-03-8	3.1E+01	n	3.1E+02	n					3.8E+00	n		3.2E-02	
3.0E+00	I									1	0.1		Quinoline	91-22-5	1.6E-01	c	5.7E-01	c					2.1E-02	c		6.8E-05	
						3.0E-02	A			1			Refractory Ceramic Fibers	NA	4.3E+07	nm	1.8E+08	nm	3.1E+01	n	1.3E+02	n					
				3.0E-02	I					1	0.1		Resmethrin	10453-86-8	1.8E+03	n	1.8E+04	n					4.8E+01	n		3.0E+01	
				5.0E-02	H					1	0.1		Ronnel	299-84-3	3.1E+03	n	3.1E+04	n					3.0E+02	n		2.7E+00	
				4.0E-03	I					1	0.1		Rotenone	83-79-4	2.4E+02	n	2.5E+03	n					4.7E+01	n		2.4E+01	
2.2E-01	C	6.3E-05	C						M	1	0.1		Safrole	94-59-7	5.2E-01	c	7.8E+00	c	1.5E-02	c	1.9E-01	c	6.2E-02	c		3.8E-05	
				2.5E-02	I					1	0.1		Savey	78587-05-0	1.5E+03	n	1.5E+04	n					8.1E+01	n		3.6E-01	
				5.0E-03	I					1			Selenious Acid	7783-00-8	3.9E+02	n	5.1E+03	n					7.8E+01	n			
				5.0E-03	I	2.0E-02	C			1			Selenium	7782-49-2	3.9E+02	n	5.1E+03	n	2.1E+01	n	8.8E+01	n	7.8E+01	n	5.0E+01	4.0E-01	2.6E-01
				5.0E-03	C	2.0E-02	C			1			Selenium Sulfide	7446-34-6	3.9E+02	n	5.1E+03	n	2.1E+01	n	8.8E+01	n	7.8E+01	n			

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Toxicity and Chemical-specific Information														Contaminant		Screening Levels										Protection of Ground Water SSLs	
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volc	muta-gen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	MCL-based SSL (mg/kg)
				9.0E-02	I					1	0.1		Sethoxydim	74051-80-2	5.5E+03	n	5.5E+04	n					7.8E+02	n		6.9E+00	
						3.0E-03	C			1			Silica (crystalline, respirable)	7631-86-9	4.3E+06	nm	1.8E+07	nm	3.1E+00	n	1.3E+01	n					
				5.0E-03	I					0.04			Silver	7440-22-4	3.9E+02	n	5.1E+03	n					7.1E+01	n		6.0E-01	
1.2E-01	H			5.0E-03	I					1	0.1		Simazine	122-34-9	4.1E+00	c*	1.4E+01	c					5.2E-01	c	4.0E+00	2.6E-04	2.0E-03
				1.3E-02	I					1	0.1		Sodium Acifluorfen	62476-59-9	7.9E+02	n	8.0E+03	n					2.0E+02	n		1.6E+00	
				4.0E-03	I					1			Sodium Azide	26628-22-8	3.1E+02	n	4.1E+03	n					6.2E+01	n			
2.7E-01	H			3.0E-02	I					1	0.1		Sodium Diethyldithiocarbamate	148-18-5	1.8E+00	c	6.4E+00	c					2.5E-01	c			
				5.0E-02	A	1.3E-02	C			1			Sodium Fluoride	7681-49-4	3.9E+03	n	5.1E+04	n	1.4E+01	n	5.7E+01	n	7.8E+02	n			
				2.0E-05	I					1	0.1		Sodium Fluoroacetate	62-74-8	1.2E+00	n	1.2E+01	n					3.1E-01	n		6.3E-05	
				1.0E-03	H					1			Sodium Metavanadate	13718-26-8	7.8E+01	n	1.0E+03	n					1.6E+01	n			
2.4E-02	H			3.0E-02	I					1	0.1		Stirofos (Tetrachlorovinphos)	961-11-5	2.0E+01	c*	7.2E+01	c					2.4E+00	c		7.0E-03	
				6.0E-01	I					1			Strontium, Stable	7440-24-6	4.7E+04	n	6.1E+05	nm					9.3E+03	n		3.3E+02	
				3.0E-04	I					1	0.1		Strychnine	57-24-9	1.8E+01	n	1.8E+02	n					4.6E+00	n		5.1E-02	
				2.0E-01	I	1.0E+00	I	V		1		8.7E+02	Styrene	100-42-5	6.3E+03	ns	3.6E+04	ns	1.0E+03	n	4.4E+03	n	1.1E+03	n	1.0E+02	1.2E+00	1.1E-01
				1.0E-03	P	2.0E-03	P			1	0.1		Sulfolane	126-33-0	6.1E+01	n	6.2E+02	n	2.1E+00	n	8.8E+00	n	1.6E+01	n		3.4E-03	
				8.0E-04	P					1	0.1		Sulfonylbis(4-chlorobenzene), 1,1'-	80-07-9	4.9E+01	n	4.9E+02	n					1.3E+01	n		7.4E-02	
						1.0E-03	C			1			Sulfuric Acid	7664-93-9	1.4E+06	nm	6.0E+06	nm	1.0E+00	n	4.4E+00	n					
				2.5E-02	I					1	0.1		Systhane	88671-89-0	1.5E+03	n	1.5E+04	n					3.5E+02	n		4.3E+00	
				3.0E-02	H					1	0.1		TCMTB	21564-17-0	1.8E+03	n	1.8E+04	n					3.7E+02	n		2.6E+00	
				7.0E-02	I					1	0.1		Tebuthiuron	34014-18-1	4.3E+03	n	4.3E+04	n					1.1E+03	n		3.0E-01	
				2.0E-02	H					1	0.1		Temephos	3383-96-8	1.2E+03	n	1.2E+04	n					3.1E+02	n		6.0E+01	
				1.3E-02	I					1	0.1		Terbacil	5902-51-2	7.9E+02	n	8.0E+03	n					2.0E+02	n		5.9E-02	
				2.5E-05	H					1	0.1		Terbufos	13071-79-9	1.5E+00	n	1.5E+01	n					1.8E-01	n		3.9E-04	
				1.0E-03	I					1	0.1		Terbutryn	886-50-0	6.1E+01	n	6.2E+02	n					1.0E+01	n		1.4E-02	
				1.0E-04	I					1	0.1		Tetrabromodiphenyl ether, 2,2',4,4'- (BDE-47)	5436-43-1	6.1E+00	n	6.2E+01	n					1.6E+00	n		4.2E-02	
				3.0E-04	I					1	0.1		Tetrachlorobenzene, 1,2,4,5-	95-94-3	1.8E+01	n	1.8E+02	n					1.2E+00	n		5.8E-03	
2.6E-02	I	7.4E-06	I	3.0E-02	I			V		1		6.8E+02	Tetrachloroethane, 1,1,1,2-	630-20-6	1.9E+00	c	9.3E+00	c	3.3E-01	c	1.7E+00	c	5.0E-01	c		1.9E-04	
2.0E-01	I	5.8E-05	C	2.0E-02	I			V		1		1.9E+03	Tetrachloroethane, 1,1,2,2-	79-34-5	5.6E-01	c	2.8E+00	c	4.2E-02	c	2.1E-01	c	6.6E-02	c		2.6E-05	
2.1E-03	I	2.6E-07	I	6.0E-03	I	4.0E-02	I	V		1		1.7E+02	Tetrachloroethylene	127-18-4	2.2E+01	c**	1.1E+02	c**	9.4E+00	c**	4.7E+01	c**	9.7E+00	c**	5.0E+00	4.4E-03	2.3E-03
				3.0E-02	I					1	0.1		Tetrachlorophenol, 2,3,4,6-	58-90-2	1.8E+03	n	1.8E+04	n					1.7E+02	n		1.1E+00	
2.0E+01	H									1	0.1		Tetrachlorotoluene, p- alpha, alpha, alpha-	5216-25-1	2.4E-02	c	8.6E-02	c					3.4E-03	c		1.1E-05	
				5.0E-04	I					1	0.1		Tetraethyl Dithiopyrophosphate	3689-24-5	3.1E+01	n	3.1E+02	n					5.3E+00	n		3.9E-03	
						8.0E+01	I	V		1		1.1E+03	Tetrafluoroethane, 1,1,1,2-	811-97-2	1.1E+05	nms	4.6E+05	nms	8.3E+04	n	3.5E+05	n	1.7E+05	n		9.3E+01	
				4.0E-03	P					1	0.1		Tetryl (Trinitrophenylmethylnitramine)	479-45-8	2.4E+02	n	2.5E+03	n					6.3E+01	n		5.9E-01	
				1.0E-05	X					1			Thallium (Soluble Salts)	7440-28-0	7.8E-01	n	1.0E+01	n					1.6E-01	n	2.0E+00	1.1E-02	1.4E-01
				1.0E-02	I					1	0.1		Thiobencarb	28249-77-6	6.1E+02	n	6.2E+03	n					1.2E+02	n		4.2E-01	
				7.0E-02	X					1	0.008		Thiodiglycol	111-48-8	5.4E+03	n	6.8E+04	n					1.1E+03	n		2.2E-01	
				3.0E-04	H					1	0.1		Thiofanox	39196-18-4	1.8E+01	n	1.8E+02	n					4.1E+00	n		1.4E-03	
				8.0E-02	I					1	0.1		Thiophanate, Methyl	23564-05-8	4.9E+03	n	4.9E+04	n					1.2E+03	n		1.1E+00	
				5.0E-03	I					1	0.1		Thiram	137-26-8	3.1E+02	n	3.1E+03	n					7.6E+01	n		1.1E-01	
				6.0E-01	H					1			Tin	7440-31-5	4.7E+04	n	6.1E+05	nm					9.3E+03	n		2.3E+03	
						1.0E-04	A			1			Titanium Tetrachloride	7550-45-0	1.4E+05	nm	6.0E+05	nm	1.0E-01	n	4.4E-01	n					
				8.0E-02	I	5.0E+00	I	V		1		8.2E+02	Toluene	108-88-3	5.0E+03	ns	4.5E+04	ns	5.2E+03	n	2.2E+04	n	8.6E+02	n	1.0E+03	5.9E-01	6.9E-01
1.8E-01	X			1.0E-04	X					1	0.1		Toluene-2,5-diamine	95-70-5	2.7E+00	c**	9.6E+00	c**					3.7E-01	c**		1.2E-04	
1.9E-01	H									1	0.1		Toluidine, p-	106-49-0	2.6E+00	c	9.1E+00	c					3.4E-01	c		1.4E-04	
1.1E+00	I	3.2E-04	I							1	0.1		Toxaphene	8001-35-2	4.4E-01	c	1.6E+00	c	7.6E-03	c	3.8E-02	c	1.3E-02	c	3.0E+00	2.1E-03	4.6E-01
				7.5E-03	I					1	0.1		Tralomethrin	66841-25-6	4.6E+02	n	4.6E+03	n					1.2E+02	n		4.5E+01	
				3.0E-04	A					1	0.1		Tri-n-butyltin	688-73-3	1.8E+01	n	1.8E+02	n					4.7E+00	n		1.0E-01	
				1.3E-02	I					1	0.1		Triallate	2303-17-5	7.9E+02	n	8.0E+03	n					8.7E+01	n		1.9E-01	
				1.0E-02	I					1	0.1		Triasulfuron	82097-50-5	6.1E+02	n	6.2E+03	n					1.6E+02	n		1.6E-01	
				5.0E-03	I					1	0.1		Tribromobenzene, 1,2,4-	615-54-3	3.1E+02	n	3.1E+03	n					7.8E+01	n		1.1E-01	
9.0E-03	P			1.0E-02	P					1	0.1		Tributyl Phosphate	126-73-8	5.4E+01	c*	1.9E+02	c*					4.5E+00	c*		2.2E-02	
				3.0E-04	P					1	0.1		Tributyltin Compounds	NA	1.8E+01	n	1.8E+02	n					4.7E+00	n			
				3.0E-04	I					1	0.1		Tributyltin Oxide	56-35-9	1.8E+01	n	1.8E+02	n					4.4E+00	n		2.3E+02	
				3.0E+01	I	3.0E+01	H	V		1		9.1E+02	Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	4.3E+04	ns	1.8E+05	nms	3.1E+04	n	1.3E+05	n	5.3E+04	n		1.3E+02	
7.0E-02	I			2.0E-02	I					1	0.1		Trichloroacetic Acid	76-03-9	6.9E+00	c	2.5E+01	c					9.4E-01	c	6.0E+01	1.9E-04	1.2E-02
2.9E-02	H									1	0.1		Trichloroaniline HCl, 2,4,6-	33663-50-2	1.7E+01	c	5.9E+01	c					2.3E+00	c		6.4E-03	
7.0E-03	X			3.0E-05	X					1	0.1		Trichloroaniline, 2,4,6-	634-93-5	1.8E+00	n	1.8E+01	n					3.0E-01	n		2.7E-03	
				8.0E-04	X			V		1	0.1	1.5E+02	Trichlorobenzene, 1,2,3-	87-61-6	4.9E+01	n	4.9E+02	ns					5.2E+00	n		1.5E-02	
2.9E-02	P			1.0E-02	I	2.0E-03	P	V		1		4.0E+02	Trichlorobenzene, 1,2,4-	120-82-1	2.2E+01	c**	9.9E+01	c**	2.1E+00	n	8.8E+00	n	9.9E-01	c**	7.0E+01	2.9E-03	2.0E-01
				2.0E+00	I	5.0E+00	I	V		1		6.4E+02	Trichloroethane, 1,1,1-	71-55-6	8.7E+03	ns	3.8E+04	ns	5.2E+03	n	2.2E+04	n	7.5E+03	n	2.0E+02	2.6E+00	7.0E-02
5.7E-02	I	1.6E-05	I	4.0E-03	I	2.0E-04	X	V		1		2.2E+03	Trichloroethane, 1,1,2-	79-00-5	1.1E+00	c**	5.3E+00	c**	1.5E-01	c**	7.7E-01	c**	2.4E-01	c**	5.0E+00	7.7E-05	1.6E-03
4.6E-02	I	4.1E-06	I	5.0E-04	I	2.0E-03	I	V	M	1		6.9E+02	Trichloroethylene	79-01-6	9.1E-01	c**	6.4E+00	c**	4.3E-01	c**	3.0E+00	c**	4.4E-01	c**	5.0E+00	1.6E-04	1.8E-03
				3.0E-01	I	7.0E-01	H	V		1		1.2E+03	Trichlorofluoromethane	75-69-4	7.9E+02	n	3.4E+03	ns	7.3E+02	n	3.1E+03	n	1.1E+03	n		6.9E-01	
				1.0E-01	I					1	0.1		Trichlorophenol, 2,4,5-	95-95-4	6.1E+03	n	6.2E+04	n					8.9E+02	n		3.3E+00	

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = PPRTV Appendix; H = HEAST; J = New Jersey; Y = New York; O = EPA Office of Water; E = Environmental Criteria and Assessment Office; S = see user guide Section 5; L = see user guide on lead; M = mutagen; V = volatile; F = See FAQ; c = cancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; n = noncancer; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide); SSL values are based on DAF=1

Toxicity and Chemical-specific Information															Contaminant		Screening Levels												Protection of Ground Water SSLs	
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	voc	muta-gen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	MCL-based SSL (mg/kg)
1.1E-02	I	3.1E-06	I	1.0E-03	P					1	0.1		Trichlorophenol, 2,4,6-	88-06-2	4.4E+01	c**	1.6E+02	c**	7.8E-01	c	4.0E+00	c	3.5E+00	c**		1.3E-02	
				1.0E-02	I					1	0.1		Trichlorophenoxyacetic Acid, 2,4,5-	93-76-5	6.1E+02	n	6.2E+03	n					1.2E+02	n		5.2E-02	
				8.0E-03	I					1	0.1		Trichlorophenoxypropionic acid, -2,4,5	93-72-1	4.9E+02	n	4.9E+03	n					8.4E+01	n	5.0E+01	4.6E-02	2.8E-02
				5.0E-03	I			V		1		1.3E+03	Trichloropropane, 1,1,2-	598-77-6	3.9E+02	n	5.1E+03	ns					7.8E+01	n		3.1E-02	
3.0E+01	I			4.0E-03	I	3.0E-04	I	V	M	1		1.4E+03	Trichloropropane, 1,2,3-	96-18-4	5.0E-03	c	9.5E-02	c	3.1E-01	n	1.3E+00	n	6.5E-04	c		2.8E-07	
				3.0E-03	X	3.0E-04	P	V		1		4.5E+02	Trichloropropene, 1,2,3-	96-19-5	7.8E-01	n	3.3E+00	n	3.1E-01	n	1.3E+00	n	6.2E-01	n		3.1E-04	
				3.0E-03	I					1	0.1		Tridiphane	58138-08-2	1.8E+02	n	1.8E+03	n					4.7E+01	n		3.3E-01	
						7.0E-03	I	V		1		2.8E+04	Triethylamine	121-44-8	1.2E+02	n	5.2E+02	n	7.3E+00	n	3.1E+01	n	1.5E+01	n		4.4E-03	
7.7E-03	I			7.5E-03	I					1	0.1		Trifluralin	1582-09-8	6.3E+01	c**	2.2E+02	c*					2.2E+00	c*		7.2E-02	
2.0E-02	P			1.0E-02	P					1	0.1		Trimethyl Phosphate	512-56-1	2.4E+01	c*	8.6E+01	c*					3.4E+00	c*		7.4E-04	
						5.0E-03	P	V		1		2.9E+02	Trimethylbenzene, 1,2,3-	526-73-8	5.3E+01	n	2.2E+02	n	5.2E+00	n	2.2E+01	n	1.0E+01	n		1.5E-02	
						7.0E-03	P	V		1		2.2E+02	Trimethylbenzene, 1,2,4-	95-63-6	6.2E+01	n	2.6E+02	ns	7.3E+00	n	3.1E+01	n	1.5E+01	n		2.1E-02	
				1.0E-02	X			V		1		1.8E+02	Trimethylbenzene, 1,3,5-	108-67-8	7.8E+02	ns	1.0E+04	ns					8.7E+01	n		1.2E-01	
				3.0E-02	I					1	0.019		Trinitrobenzene, 1,3,5-	99-35-4	2.2E+03	n	2.7E+04	n					4.6E+02	n		1.7E+00	
3.0E-02	I			5.0E-04	I					1	0.032		Trinitrotoluene, 2,4,6-	118-96-7	1.9E+01	c**	7.9E+01	c**					2.2E+00	c**		1.3E-02	
				2.0E-02	P					1	0.1		Triphenylphosphine Oxide	791-28-6	1.2E+03	n	1.2E+04	n					2.8E+02	n		1.2E+00	
2.0E-02	P			7.0E-03	P					1	0.1		Tris(2-chloroethyl)phosphate	115-96-8	2.4E+01	c*	8.6E+01	c*					3.3E+00	c*		3.2E-03	
3.2E-03	P			1.0E-01	P					1	0.1		Tris(2-ethylhexyl)phosphate	78-42-2	1.5E+02	c*	5.4E+02	c					2.1E+01	c*		1.0E+02	
				3.0E-03	I					1			Uranium (Soluble Salts)	NA	2.3E+02	n	3.1E+03	n					4.7E+01	n	3.0E+01	2.1E+01	1.4E+01
1.0E+00	C	2.9E-04	C						M	1	0.1		Urethane	51-79-6	1.2E-01	c	1.7E+00	c	3.3E-03	c	4.2E-02	c	2.1E-02	c		4.8E-06	
		8.3E-03	P	9.0E-03	I	7.0E-06	P			0.026			Vanadium Pentoxide	1314-62-1	4.0E+02	c**	2.0E+03	c**	2.9E-04	c*	1.5E-03	c*	1.1E+02	n			
				5.0E-03	S					1			Vanadium and Compounds	NA	3.9E+02	n	5.2E+03	n					7.8E+01	n		7.8E+01	
				1.0E-03	I					1	0.1		Vernolate	1929-77-7	6.1E+01	n	6.2E+02	n					8.3E+00	n		6.6E-03	
				2.5E-02	I					1	0.1		Vinclozolin	50471-44-8	1.5E+03	n	1.5E+04	n					3.4E+02	n		2.6E-01	
				1.0E+00	H	2.0E-01	I	V		1		2.8E+03	Vinyl Acetate	108-05-4	9.7E+02	n	4.1E+03	ns	2.1E+02	n	8.8E+02	n	4.1E+02	n		8.7E-02	
		3.2E-05	H			3.0E-03	I	V		1		0.0E+00	Vinyl Bromide	593-60-2	1.1E-01	c*s	5.6E-01	c*s	7.6E-02	c*	3.8E-01	c*	1.5E-01	c*		4.4E-05	
7.2E-01	I	4.4E-06	I	3.0E-03	I	1.0E-01	I	V	M	1		3.9E+03	Vinyl Chloride	75-01-4	6.0E-02	c	1.7E+00	c	1.6E-01	c	2.8E+00	c	1.5E-02	c	2.0E+00	5.3E-06	6.9E-04
				3.0E-04	I					1	0.1		Warfarin	81-81-2	1.8E+01	n	1.8E+02	n					4.4E+00	n		4.6E-03	
				2.0E-01	S	1.0E-01	S	V		1		3.9E+02	Xylene, P-	106-42-3	6.0E+02	ns	2.6E+03	ns	1.0E+02	n	4.4E+02	n	1.9E+02	n		1.8E-01	
				2.0E-01	S	1.0E-01	S	V		1		3.9E+02	Xylene, m-	108-38-3	5.9E+02	ns	2.5E+03	ns	1.0E+02	n	4.4E+02	n	1.9E+02	n		1.8E-01	
				2.0E-01	S	1.0E-01	S	V		1		4.3E+02	Xylene, o-	95-47-6	6.9E+02	ns	3.0E+03	ns	1.0E+02	n	4.4E+02	n	1.9E+02	n		1.9E-01	
				2.0E-01	I	1.0E-01	I	V		1		2.6E+02	Xylenes	1330-20-7	6.3E+02	ns	2.7E+03	ns	1.0E+02	n	4.4E+02	n	1.9E+02	n	1.0E+04	1.9E-01	9.8E+00
				3.0E-04	I					1			Zinc Phosphide	1314-84-7	2.3E+01	n	3.1E+02	n					4.7E+00	n			
				3.0E-01	I					1			Zinc and Compounds	7440-66-6	2.3E+04	n	3.1E+05	nm					4.7E+03	n		2.9E+02	
				5.0E-02	I					1	0.1		Zineb	12122-67-7	3.1E+03	n	3.1E+04	n					7.8E+02	n		2.3E+00	

WESTERN REFINING - GALLUP REFINERY

1ST QUARTER 2011 - Ground Water Sampling

WELL #OW-13

GAUGE DATE	2/24/2011
GAUGE TIME	1103 hrs
DTB (feet) Depth to Bottom	100.00
DEDICATED PUMP	Y
DTW (feet) Depth to Water	23.32
DTB - DTW	76.68
1 Well Volume	0.740
3 Well Volumes	170.23
PURGE DATE	2/24/2011
PURGE TIME	1106 hrs
SAMPLE DAY	2/24/2011
SAMPLE TIME	1320 hrs
PUMP DEPTH	80 ft

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1312	8.29	12.82	0.940	0.796	0.610	2.5	55.9
(2)	1314	8.22	12.84	0.940	0.796	0.610	0.9	19.9
(3)	1316	8.21	12.77	0.939	0.796	0.610	0.8	5.9
(4)	1318	8.20	12.76	0.938	0.796	0.610	0.6	-7.1

WEATHER CONDITIONS

Cloudy, windy10-15 mph. Temp 30-35 deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 1333 hours. 3 WVs = 170 gals. Pumped approximately 145 gals. Collected water samples, labeled and placed on ice in cooler. Purge water placed in 55 gal drum and disposed of at the bundle pad upstream of the NAPIS.

WELL #OW-14

GAUGE DATE	2./24/11
GAUGE TIME	0901 hrs
DTB (feet) Depth to Bottom	45.00
DEDICATED PUMP	Y
DTW (feet) Depth to Water	25.69
DTB - DTW	19.31
1 Well Volume	0.740
3 Well Volumes	42.87
PURGE DATE	3/24/2010
PURGE TIME	0914 hrs
SAMPLE DAY	2/24/2011
SAMPLE TIME	0942 hrs
PUMP DEPTH	30 ft

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	932	7.43	13.4	1.982	1.657	1.32	2.3	-91
(2)	934	7.31	13.4	1.984	1.656	1.32	1.6	-125
(3)	936	7.25	13.4	1.983	1.656	1.32	1.3	-148
(4)	938	7.21	13.4	1.985	1.656	1.32	1.2	-165

WEATHER CONDITIONS

Cloudy, windy10-15 mph. Temp 30-35 deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge 3 WVs = 43 gals. Pumped approximately 40 gals. Collected water samples, labeled and placed on ice in cooler. Purge water collected in 55 gal drums and disposed of at the bundle pad upstream of the NAPIS .

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
55 gallon drums to catch purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

1ST QUARTER 2011 - Ground Water Sampling

WELL #OW-29

GAUGE DATE	2/24/2011
GAUGE TIME	0952 hrs
DTB (feet) Depth to Bottom	52.00
DEDICATED PUMP	Y
DTW (feet) Depth to Water	20.49
DTB - DTW	31.51
1 Well Volume	0.740
3 Well Volumes	69.95
PURGE DATE	2/24/2011
PURGE TIME	0959 hrs
SAMPLE DAY	2/24/2011
SAMPLE TIME	1043 hrs
PUMP DEPTH	40 ft

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1032	7.81	12.43	1.261	1.078	0.84	1.2	-79.9
(2)	1034	7.71	12.40	1.260	1.079	0.84	0.9	-88.3
(3)	1036	7.65	12.42	1.264	1.081	0.85	0.8	-92.7
(4)	1038	7.61	12.41	1.263	1.081	0.85	0.7	-96.1

WEATHER CONDITIONS

Cloudy, windy 10-15 mph. Temp 30-35 deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 0959 hours. Pumped approximately 60 gals. Collected water samples, labeled and placed on ice in cooler. Purge water placed in 55 gal drum and disposed of at the bundle pad upstream of the NAPIS.

WELL #OW-30

GAUGE DATE	2/24/2011
GAUGE TIME	1338 hrs
DTB (feet) Depth to Bottom	48.40
DEDICATED PUMP	Y
DTW (feet) Depth to Water	24.91
DTB - DTW	23.49
1 Well Volume	0.740
3 Well Volumes	52.15
PURGE DATE	2/24/2011
PURGE TIME	1342 hrs
SAMPLE DAY	2/24/2011
SAMPLE TIME	1421 hrs
PUMP DEPTH	35 ft

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1412	8.40	13.9	0.938	1.057	0.83	98.5	36
(2)	1414	7.70	12.7	1.282	1.091	0.85	1.1	26
(3)	1416	7.52	12.7	1.284	1.090	0.85	0.7	18
(4)	1418	7.45	12.7	1.284	1.090	0.85	0.7	13

WEATHER CONDITIONS

Partly cloudy, windy 10-15 mph. Temp 40-45 deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 1342 hours. Purged approximately 48 gals. Collected water samples, labeled and placed on ice in cooler. Purge water placed in 55 gal drum and disposed of at bundle pad upstream of the NAPIS.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
55 gallon drums to catch purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

1ST QUARTER 2011 - Ground Water Sampling

WELL #OW-50

GAUGE DATE	3/1/2011
GAUGE TIME	1304 hrs
DTB (feet) Depth to Bottom	63.00
DEDICATED PUMP	N
DTW (feet) Depth to Water	17.61
DTB - DTW	45.39
1 Well Volume	0.163
3 Well Volumes	22.20
PURGE DATE	3/1/2011
PURGE TIME	1313 hrs
SAMPLE DAY	3/1/2011
SAMPLE TIME	1340 hrs
PUMP DEPTH	50 feet

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (PPM)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1334	8.30	14.22	0.390	0.687	0.530	0.9	-65.6
(2)	1336	8.30	14.24	0.840	0.687	0.530	0.8	-69.8
(3)	1338	8.31	14.32	0.841	0.687	0.530	0.8	-72.9
(4)	1340	8.38	14.31	0.842	0.688	0.530	0.7	-74.3

WEATHER CONDITIONS

Overcast, breezy 5-10 mph. Temp 50-55 deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Lowered pump to approximately 50 feet and began with purge. Purged approximately 20 gals and collected samples. Samples were labeled and placed on ice in cooler. Pump was decontaminated and rinsed before use. Instrument was calibrated per procedure before use. Purge water placed in 55 gal drum and disposed of at the bundle pad upstream of the NAPIS. YSI instrment was calibrated before use.

WELL #OW-52

GAUGE DATE	3/1/2011
GAUGE TIME	1036 hrs
DTB (feet) Depth to Bottom	79.00
DEDICATED PUMP	N
DTW (feet) Depth to Water	16.18
DTB - DTW	62.82
1 Well Volume	0.163
3 Well Volumes	30.72
PURGE DATE	3/1/2011
PURGE TIME	1214 hrs
SAMPLE DAY	3/1/2011
SAMPLE TIME	1246 hrs
PUMP DEPTH	60 feet

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (PPM)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1238	8.17	13.8	0.794	0.7	0.500	0.7	-140
(2)	1240	8.17	13.8	0.794	0.7	0.500	0.7	-175
(3)	1242	8.18	13.8	0.794	0.7	0.500	0.7	-176
(4)	1244	8.18	13.9	0.794	0.7	0.500	1.0	-177

WEATHER CONDITIONS

Overcast, breezy 5-10 mph. Temp 50-55 deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Lowered pump to approximately 60 feet and began with purge. Purged approximately 25 gals and collected samples. Samples were labeled and placed on ice in cooler. Pump was decontaminated and rinsed before use. YSI instrument was calibrated before use. Purge water collected in 55 gal drum and disposed of at the bundle pad upstream of the NAPIS.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
55 gallon drums to catch purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

1ST QUARTER 2011 - Ground Water Sampling

NAPIS 1

GAUGE DATE	3/2/2011
GAUGE TIME	0826 hrs
DTB (feet) Depth to Bottom	14.00
DEDICATED PUMP	N
DTW (feet) Depth to Water	7.47
DTB - DTW	6.53
1 Well Volume	0.163
3 Well Volumes	3.19
PURGE DATE	3/2/2011
PURGE TIME	0830 hrs
SAMPLE DAY	3/2/2011
SAMPLE TIME	0840 hrs
PUMP DEPTH	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	829	7.46	11.04	1.502	1.332	1.05	22.1	161.6
(2)	831	7.43	10.99	1.500	1.332	1.05	22.2	161.4
(3)	833	7.41	10.94	1.499	1.332	1.05	22.3	161.2
(4)	835	7.39	10.91	1.497	1.331	1.05	22.1	161.1

WEATHER CONDITIONS

Clear day, 5-10 mph winds. Temp 40-45 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear with first two bails and turned slightly cloudy remainder of bailing. No odor detected at start and end of purging.

SAMPLE LOG

Began purge with new bailer. Bailed approximately 3 gals. Collected samples, labeled and placed in cooler on ice. Purge water collected in 5 gallon bucket and disposed of at the bundle pad upstream of the NAPIS.

NAPIS 2

GAUGE DATE	3/2/2011
GAUGE TIME	1000 hrs
DTB (feet) Depth to Bottom	14.50
DEDICATED PUMP	N
DTW (feet) Depth to Water	9.14
DTB - DTW	5.36
1 Well Volume	0.163
3 Well Volumes	2.62
PURGE DATE	3/2/2011
PURGE TIME	1005 hrs
SAMPLE DAY	3/2/2011
SAMPLE TIME	1020 hrs
PUMP DEPTH	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1012	7.98	18.7	2.012	1.488	1.18	83.8	-13
(2)	1014	7.47	21.8	1.993	1.381	1.09	22.8	-104
(3)	1016	7.38	21.0	1.97	1.386	1.09	19.0	-106
(4)	1018	7.32	20.4	1.948	1.389	1.10	17.5	-105

WEATHER CONDITIONS

Cloudy, 5-10 mph winds. Temp 45-50 Deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear with first two bails and turned slightly cloudy remainder of bailing. No odor detected at start and end of purging. Sllightly warm

SAMPLE LOG

Upon opening the well cover, noticed water inside. Bailed out water before opening well cap. Water covering the well had an oily sheen. Well is located below ground level. Began purge with new bailer. Bailed approximately 2 gals. Collected samples, labeled and placed in cooler on ice. Purge water placed in 5 gallon bucket and disposed of at the bundle pad upstream of the NAPIS.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 gallon buckets to catch purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY
1ST QUARTER 2011 - Ground Water Sampling

KA-3	
GAUGE DATE	3/2/2011
GAUGE TIME	0943 hrs
DTB (feet) Depth to Bottom	25.00
DEDICATED PUMP	N
DTW (feet) Depth to Water	8.51
DTB - DTW	16.49
1 Well Volume	0.163
3 Well Volumes	8.06
PURGE DATE	3/2/2011
PURGE TIME	0945 hrs
SAMPLE DAY	3/2/2011
SAMPLE TIME	0948 hrs
PUMP DEPTH	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	940	7.50	23.10	3.208	2.164	1.74	23.9	133.1
(2)	942	7.38	22.40	3.191	2.183	1.76	20	133.2
(3)	944	7.33	21.70	3.151	2.186	1.77	19.4	133.8
(4)	946	7.30	21.03	3.112	2.189	1.77	19.3	134.1

WEATHER CONDITIONS

Clear day, 5-10 mph winds. Temp 45-50 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

First couple of bails water is clear, thereafter water is slightly cloudy.
No odor detected at start and end of bailing, slightly warm.

SAMPLE LOG

KA-3 is located below ground level. This well had a water level inside the standpiper. Bailed out surrounding water before well plug was removed. Water covering the well had an oily sheen to it. Started purge with new bailer. Bailed approximately 6 gals of water. Samples collected and placed in cooler on ice. Purge water placed in 5 gallon bucket and disposed of at the bundle pad upstream of the NAPIS.

NAPIS 3	
GAUGE DATE	3/2/2011
GAUGE TIME	0901 hrs
DTB (feet) Depth to Bottom	30.70
DEDICATED PUMP	N
DTW (feet) Depth to Water	8.11
DTB - DTW	22.59
1 Well Volume	0.163
3 Well Volumes	11.05
PURGE DATE	3/2/2011
PURGE TIME	0905 hrs
SAMPLE DAY	3/2/2011
SAMPLE TIME	0925 hrs
PUMP DEPTH	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	914	7.95	21.37	4.305	3.007	2.48	62.4	142
(2)	916	7.95	20.9	4.259	3.006	2.48	62.3	141
(3)	918	7.94	20.5	4.227	3.007	2.48	62.0	140
(4)	920	7.95	20.0	4.193	3.016	2.49	62.9	139

WEATHER CONDITIONS

Clear day, slight breeze 5-10 mph. Temp 45-50 deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

First 4 bails, water is clear-slightly warm. Last few bails water is slightly cloudy. No odor detected at start or end of bailing.

SAMPLE LOG

New bailer used to purge approximately 8 gals of water. Samples collected and placed in cooler on ice. Purge water placed in 5 gallon bucket and disposed of at the bundle pad upstream of the NAPIS.

INSTRUMENTS USED:
YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 gallon buckets to catch purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

1ST QUARTER 2011 - Ground Water Sampling

WELL #GWM-1	
GAUGE DATE	2/16/2011
GAUGE TIME	1005 hrs
DTB (feet) Depth to Bottom	23.70
DEDICATED PUMP	N
DTW (feet) Depth to Water	17.23
DTB - DTW	6.47
1 Well Volume	0.163
3 Well Volumes	3.16
PURGE DATE	2/16/2011
PURGE TIME	1333 hrs
SAMPLE DAY	2/16/2011
SAMPLE TIME	1333 hrs
PUMP DEPTH	NA

TEST PARAMATERS

	Time (hrs)	pH	Temp Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1329	6.85	12.33	4.879	4.184	3.53	23.9	-60
(2)	1331	6.85	12.38	4.882	4.181	3.53	23.2	-67
(3)	1333	6.83	12.51	4.892	4.176	3.53	21.2	-75
(4)								

WEATHER CONDITIONS

Partly cloudy, windy10-15 mph. Temp 40-45 deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Samples collected, labeled and placed in cooler. Water bailed was contained in a 5 gallon bucket and disposed of upstream of the NAPIS in the waste water sewer.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 gallon buckets to catch purge water.

Weekly water levels were required to be checked on GWM-2 and GWM-3 due to continued presence of water. GWM-1 water level was also measured at same time.

DATE/TIME	DTW (FT)
2/24/11: 1522	15.99
3/3/11: 1346	16.31
3/10/11: 1332	16.81
3/17/2011: 1345	16.02

Signature: /s/ Cheryl Johnson, Environmental Specialist

WESTERN REFINING
GALLUP REFINERY
GROUNDWATER DISCHARGE PERMIT
GWM-3 WELL INSPECTION

Monitoring Requirement: Quarterly Start 2011

Date	Time	Quarter	DTB or DTW (ft)	Comments (Dry?)
2/16/2011	1010 hrs	1ST	16.99 ft (water)	Water present
Samples were collected for the following analysis: BTEX + MTBE, DRO/GRO extended, Major Cations and Anions. NMED was notified via e-mail of water found, actions taken.				
Water was clear in color, no odor detected. Water bailed was contained in a 5 gal bucket and disposed of upsteam of the NAPIS in the waste water collection system.				
Weather: Partly Cloudy, windy 10-15 mph winds. Temp 45-50 Deg F.				
MEASUREMENTS: DTW = 16.99 ft; DTB = 17.94; Water level of 0.95 ft; DTW at end of bailing = 17.84 ft with a remaining water level of 0.1 ft.				
Weekly checks on water levels per NMED due to water levels until further notice.				
2/24/2011	1515 hrs	1ST	12.84	Water level
3/3/2011	1345 hrs	1ST	13.78	Water level
3/10/2011	1328 hrs	1ST	14.4	Water level
3/17/2001	1352 hrs	1ST	11.51	Water level

INSTRUMENTS USED:
YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 gallon buckets to catch purge water.

NOTES:
DTB = Depth to Bottom
DTW = Depth to Water

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING
GALLUP REFINERY
GROUNDWATER DISCHARGE PERMIT
GWM-2 WELL INSPECTION

Monitoring Requirement: Quarterly Start 2011

Date	Time	Quarter	DTB or DTW (ft)	Comments (Dry?)
2/16/2011	1000 hrs	1ST	17.48 ft (water)	Normally DRY: (To top of plastic casing)
Samples were collected for the following analysis: BTEX + MTBE, DRO/GRO extended, Major Cations and Anions. NMED was notified via e-mail of water found, actions taken.				
Water was clear in color, no odor detected. Water bailed was contained in a 5 gal bucket and disposed of upsteam of the NAPIS in the waste water collection system.				
Weather: Partly Cloudy, windy 10-15 mph winds. Temp 45-50 Deg F.				

MEASUREMENTS: DTW = 17.48 ft; DTB 18.97; Water level of 1.49 ft; DTW at end of bailing = 18.83 ft with a remaining water level of 0.14 ft.

Weekly checks on water levels per NMED due to water levels until further notice.				
2/24/2011	1520 hrs	1ST	15.08	Water level
3/3/2011	1344 hrs	1ST	15.65	Water level
3/10/2011	1335 hrs	1ST	16.13	Water level
3/17/2001	1341 hrs	1ST	15.77	Water level

INSTRUMENTS USED:
YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 gallon buckets to catch purge water.

NOTES:
DTB = Depth to Bottom
DTW = Depth to Water

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

1st QUARTER 2011 - Ground Water Sampling

WELL #OW-01

GAUGE DATE	2/28/2011
GAUGE TIME	1304 hrs
DTB (feet) Depth to Bottom	94.04
DEDICATED PUMP	Y (inoperable)
DTW (feet) Depth to Water	1.84
DTB - DTW	92.20
1 Well Volume	0.740
3 Well Volumes	204.68
PURGE DATE	2/28/2011
PURGE TIME	1310 hrs
SAMPLE DAY	3/1/2011
SAMPLE TIME	0915 hrs
PUMP DEPTH	90 feet

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	908	8.97	13.10	1.035	0.870	0.67	4.7	169.6
(2)	910	8.95	13.23	1.036	0.869	0.67	4.3	167.2
(3)	912	8.94	13.31	1.040	0.870	0.67	4	163.9
(4)	914	8.95	13.34	1.040	0.870	0.67	4.1	162.0

WEATHER CONDITIONS

Clear, windy 0-5 mph. Temp 40-45 deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

2/28/11: Water is clear, no odor detected at start and end of purging.
3/1/11: Water is clear, no odor detected at start and end of purging.
DTW gauged is 30.43 feet.

SAMPLE LOG

This well use to have a dedicated pump inside well - connectors need to be replaced to place pump back in service as this well was only inspected for artesian flow. Lowered pump to approximately 90 feet and began with purge. Purged approximately 63 gals before pump lost suction. Allowed to recharge for 15 minutes - recharge rate is slow, pump will not pump water. Will allow water to recharge overnight. 3/1/11 set up pump and started with purge at 0850 hours. Purged approximately 20 gals before samples were taken at 0915 hrs. Water is clear and no odor detected. Purged water was placed in 55 gal drums and disposed of at the bundle pad upstream of the NAPIS.
Pump was decontaminated before each use with alconox water mixture and rinsed.

WELL #OW-10

GAUGE DATE	2/28/2011
GAUGE TIME	0925 hrs
DTB (feet) Depth to Bottom	68.00
DEDICATED PUMP	N
DTW (feet) Depth to Water	0.35
DTB - DTW	67.65
1 Well Volume	0.740
3 Well Volumes	150.18
PURGE DATE	2/28/2011
PURGE TIME	0935 hrs
SAMPLE DAY	2/28/2011
SAMPLE TIME	1132 hrs
PUMP DEPTH	50 feet

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1118	7.88	13.5	1.935	1.611	1.29	2.9	245
(2)	1120	7.78	13.5	1.968	1.640	1.31	2.4	241
(3)	1122	7.73	13.5	1.919	1.598	1.27	2	237
(4)	1124	7.70	13.5	1.984	1.652	1.32	1.8	233

WEATHER CONDITIONS

Clear day. Slight breeze 0-5 mph winds. 30-35 deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Lowered pump to approximately 50 feet. Purged approx 120 gals. Purged water placed in 55 gal drum and disposed of at the bundle pad upstream of the NAPIS. Samples collected and placed on ice in cooler. Portable pump flushed with alconox water mixture before use and rinsed.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
55 gallon drums to collect purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

1st Quarter Ground Water Sampling

RW-1 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	3/9/2011	Product Thickness (ft)	0.11	Clear day, breezy 5 - 10 mph winds, 45 - 50 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	10:18	Volume of Product Purged (Gallons)	0.12	
DTB (feet) Depth to Bottom	43.04	Volume of Water Purged (Gallons)	40	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	3/9/2011	Water is clear, with slight sheen and hydrocarbon odor detected when well cover was opened.
DTP (feet) Depth to Product	30.04	PURGE TIME	10:19	
DTW (feet) Depth to Water	30.15	SAMPLE DAY	N/A	
		SAMPLE TIME	N/A	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.
3/9/2011	10:19	3/9/2011	10:25	
3/9/2011	11:15	3/9/2011	11:45	

ADDITIONAL NOTES:

Lowered portable pump and began with purge at 1019 hours. Ran pump for approximately 5 minutes.
Started pump at 11:15 and shut off at 11:45 hours. Pumped a total of 40 gallons of water into 55 gallon drum.
Visible layer on top estimated to be 3/8 of inch. Estimated product recovery to be 0.12 gallons.

RW-2 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	3/9/2011	Product Thickness (ft)	0	Clear day, breezy 5 - 10 mph winds, 45 - 50 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	10:58	Volume of Product Purged (Gallons)	0	
DTB (feet) Depth to Bottom	39.80	Volume of Water Purged (Gallons)	0	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	N/A	Water is clear. No odor detected.
DTP (feet) Depth to Product	0.00	PURGE TIME	N/A	
DTW (feet) Depth to Water	30.15	SAMPLE DAY	N/A	
		SAMPLE TIME	N/A	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.

ADDITIONAL NOTES:

Gauged at 10:58 hours - no indication of SPH level in this well. No purging required.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
55 gallon drum to catch purge water.

SIGNATURE: /s/ *Cheryl Johnson* / Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

1st Quarter Ground Water Sampling

RW-5 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	3/9/2011	Product Thickness (ft)	0	Clear day, breezy 5 - 10 mph winds, 45 - 50 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	10:29	Volume of Product Purged (Gallons)	0	
DTB (feet) Depth to Bottom	39.59	Volume of Water Purged (Gallons)	20	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	N/A	Water is clear in color.
DTP (feet) Depth to Product	0.00	PURGE TIME	N/A	
DTW (feet) Depth to Water	30.05	SAMPLE DAY	N/A	
		SAMPLE TIME	N/A	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.
3/9/2011	10:37	3/9/2011	10:47	

ADDITIONAL NOTES:

Gauged well on 3/9/11 and checked for SPH levels. No indication of SPH level per meter used. Even though there is no indication of product level, went ahead and purged well of approximately 20 gallons. No visible layer was observed in any of the bailed water. There was a slight odor of hydrocarbons upon close inspection of the water but no measureable layer in each of the 5 gallon containers used to hold the bailed water.

RW-6 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	3/9/2011	Product Thickness (ft)	0.02	Clear day, breezy 5 - 10 mph winds, 45 - 50 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	10:34	Volume of Product Purged (Gallons)	0.04	
DTB (feet) Depth to Bottom	40.90	Volume of Water Purged (Gallons)	25	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	N/A	Water is clear with slight odor of hydrocarbons. Bailed water had slight sheen observed floating in water that was bailed.
DTP (feet) Depth to Product	30.24	PURGE TIME	N/A	
DTW (feet) Depth to Water	30.26	SAMPLE DAY	N/A	
		SAMPLE TIME	N/A	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.
3/9/2011	10:50	3/9/2011	10:55	
3/9/2011	11:55	3/9/2011	12:15	

ADDITIONAL NOTES:

Used disposable bailer to purge water from this well. Meter indicated there was a measureable SPH level. Bailed approximately 25 gallons of water. Each visible layer of SPH was estimated and volume to estimated at approximately 0.04 gallons total of product recovery.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 gallon buckets to catch purge water.

SIGNATURE: /s/ *Cheryl Johnson* / Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2nd QUARTER 2011 - Ground Water Sampling

WELL #OW-13

GAUGE DATE	6/20/2011
GAUGE TIME	1255
DTB (feet) Depth to Bottom	100.00
DEDICATED PUMP	Y
DTW (feet) Depth to Water	23.19
DTB - DTW	76.81
1 Well Volume	0.740
3 Well Volumes	170.52
PURGE DATE	6/20/2011
PURGE TIME	1301
SAMPLE DAY	6/20/2011
SAMPLE TIME	1356
PUMP DEPTH	80 ft

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	13:51	8.10	13.41	0.962	0.803	0.620	1.8	3.0
(2)	13:53	8.12	13.36	0.958	0.802	0.620	1.5	-4.0
(3)	13:55	8.13	13.31	0.958	0.803	0.620	1.3	-10.0
(4)	13:57	8.14	13.27	0.958	0.803	0.620	1.3	-13.0

WEATHER CONDITIONS

Clear day, breezy 10-15 mph winds, Temp 70-75 deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 1301 hours. 3 WVs = 170 gals. Pumped approximately 150 gals. Collected water samples, labeled and placed on ice in cooler. Purge water placed in 55 gal drum and disposed of at the bundle pad upstream of the NAPIS.

WELL #OW-14

GAUGE DATE	6/20/2011
GAUGE TIME	10/18/1902
DTB (feet) Depth to Bottom	45.00
DEDICATED PUMP	Y
DTW (feet) Depth to Water	25.45
DTB - DTW	19.55
1 Well Volume	0.740
3 Well Volumes	43.40
PURGE DATE	6/20/2011
PURGE TIME	1025
SAMPLE DAY	6/20/2011
SAMPLE TIME	1050
PUMP DEPTH	30 ft

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	10:43	7.22	14.0	1.91	1.570	1.25	13.2	-110
(2)	10:45	7.21	13.9	1.912	1.576	1.26	4.9	-109
(3)	10:47	7.19	13.9	1.914	1.577	1.25	3.5	-109
(4)	10:49	7.20	13.9	1.917	1.578	1.27	2.8	-109

WEATHER CONDITIONS

Clear day, breezy 5-10 mph winds, temp 70-75 deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge 3 WVs = 43 gals. Pumped approximately 45 gals. Collected water samples, labeled and placed on ice in cooler. Purge water collected in 55 gal drums and disposed of at the bundle pad upstream of the NAPIS .

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
55 gallon drums to collect purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2nd QUARTER 2011 - Ground Water Sampling

WELL #OW-29

GAUGE DATE	6/20/2011
GAUGE TIME	1105
DTB (feet) Depth to Bottom	49.00
DEDICATED PUMP	Y
DTW (feet) Depth to Water	20.44
DTB - DTW	28.56
1 Well Volume	0.740
3 Well Volumes	63.40
PURGE DATE	6/20/2011
PURGE TIME	1110
SAMPLE DAY	6/20/2011
SAMPLE TIME	1145
PUMP DEPTH	40 ft

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	11:37	7.42	13.12	1.269	1.067	0.83	4.2	-37
(2)	11:39	7.42	13.11	1.272	1.067	0.83	3.3	-42
(3)	11:41	7.43	13.14	1.272	1.067	0.83	2.7	-45
(4)	11:43	7.43	13.20	1.273	1.067	0.83	2.5	-47

WEATHER CONDITIONS

Clear day, breezy 5-10 mph winds, temp 70-75 deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 1110 hours. Pumped approximately 60 gals. Collected water samples, labeled and placed on ice in cooler. Purge water placed in 55 gal drum and disposed of at the bundle pad upstream of the NAPIS.

WELL #OW-30

GAUGE DATE	6/20/2011
GAUGE TIME	0910
DTB (feet) Depth to Bottom	48.40
DEDICATED PUMP	Y
DTW (feet) Depth to Water	24.80
DTB - DTW	23.60
1 Well Volume	0.740
3 Well Volumes	52.39
PURGE DATE	6/20/2011
PURGE TIME	0915
SAMPLE DAY	6/20/2011
SAMPLE TIME	0950
PUMP DEPTH	35 ft

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	9:38	7.38	12.79	1.243	1.052	0.82	1.5	35
(2)	9:40	7.38	12.76	1.243	1.054	0.82	0.9	29
(3)	9:42	7.38	12.76	1.243	1.054	0.82	1.3	25
(4)	9:44	7.39	12.76	1.243	1.054	0.82	1.4	22

WEATHER CONDITIONS

Clear day, breezy 5-10 mph winds, temp 70-75 deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 0915 hours. Purged approximately 55 gals. Collected water samples, labeled and placed on ice in cooler. Purge water placed in 55 gal drum and disposed of at bundle pad upstream of the NAPIS. Instruments were calibrated before use.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
55 Gallon drum to collect purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2nd QUARTER 2011 - Ground Water Sampling

WELL #OW-50

GAUGE DATE	6/20/2011
GAUGE TIME	1304 hrs
DTB (feet) Depth to Bottom	63.00
DEDICATED PUMP	N
DTW (feet) Depth to Water	17.61
DTB - DTW	45.39
1 Well Volume	0.163
3 Well Volumes	22.20
PURGE DATE	6/20/2011
PURGE TIME	1313 hrs
SAMPLE DAY	6/20/2011
SAMPLE TIME	1620
PUMP DEPTH	50 feet

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (PPM)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	16:07	8.71	12.91	1.054	0.654	0.53	19	34.1
(2)	16:09	8.69	13.10	1.062	0.654	0.53	18	34.1
(3)	16:11	8.69	13.12	1.062	0.654	0.53	18	34.4
(4)	16:13	8.69	13.12	1.062	0.654	0.53	16	34.4

WEATHER CONDITIONS

Clear day, breezy 5-10 mph. Temp 75-80 deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Lowered pump to approximately 50 feet and began with purge. Purged approximately 20 gals and collected samples. Samples were labeled and placed on ice in cooler. Pump was decontaminated and rinsed before use. Instrument was calibrated per procedure before use. Purge water placed in 55 gal drum and disposed of at the bundle pad upstream of the NAPIS.

WELL #OW-52

GAUGE DATE	6/20/2011
GAUGE TIME	1625
DTB (feet) Depth to Bottom	79.00
DEDICATED PUMP	N
DTW (feet) Depth to Water	16.09
DTB - DTW	62.91
1 Well Volume	0.163
3 Well Volumes	30.76
PURGE DATE	6/20/2011
PURGE TIME	1630
SAMPLE DAY	6/20/2011
SAMPLE TIME	1650
PUMP DEPTH	60 feet

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (PPM)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	16:40	8.20	11.82	1.000	0.654	0.5	7.4	-40.5
(2)	16:42	8.25	12.55	0.989	0.644	0.49	8	-117
(3)	16:44	8.25	12.55	0.989	0.644	0.5	8.6	-151
(4)	16:46	8.25	12.55	0.990	0.644	0.5	10	-150.9

WEATHER CONDITIONS

Clear day, breezy 5-10 mph. Temp 75-80 deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Lowered pump to approximately 60 feet and began with purge. Purged approximately 25 gals and collected samples. Samples were labeled and placed on ice in cooler. Pump was decontaminated and rinsed before use. YSI instrument was calibrated before use. Purge water collected in 55 gal drum and disposed of at the bundle pad upstream of the NAPIS.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
55 gallon drum to catch purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2nd QUARTER 2011 - Ground Water Sampling

NAPIS 1

GAUGE DATE	6/15/2011
GAUGE TIME	0855
DTB (feet) Depth to Bottom	14.00
DEDICATED PUMP	N
DTW (feet) Depth to Water	7.96
DTB - DTW	6.04
1 Well Volume	0.163
3 Well Volumes	2.95
PURGE DATE	6/15/2011
PURGE TIME	0900
SAMPLE DAY	6/15/2011
SAMPLE TIME	0830
PUMP DEPTH	NA NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	0824	6.87	16.29	1.643	1.3	1.010	13.7	110.0
(2)	0826	6.86	16.30	1.643	1.3	1.010	13.6	109.8
(3)	0828	6.85	16.30	1.644	1.3	1.010	15.2	109.6
(4)								

WEATHER CONDITIONS

Clear day, 5-10 mph winds. Temp 40-45 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear with first two bails and turned slightly cloudy remainder of bailing. No odor detected at start and end of purging.

SAMPLE LOG

Began purge with new bailer. Bailed approximately 3 gals. Collected samples, labeled and placed in cooler on ice. Purge water collected in 5 gallon bucket and disposed of at the bundle pad upstream of the NAPIS.

NAPIS 2

GAUGE DATE	6/15/2011
GAUGE TIME	0940
DTB (feet) Depth to Bottom	14.50
DEDICATED PUMP	N
DTW (feet) Depth to Water	8.67
DTB - DTW	5.83
1 Well Volume	0.163
3 Well Volumes	2.85
PURGE DATE	6/15/2011
PURGE TIME	0945
SAMPLE DAY	6/15/2011
SAMPLE TIME	0958
PUMP DEPTH	

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	0951	7.20	23.9	1.934	1.285	1.01	15.4	-143.7
(2)	0953	7.10	23.9	1.931	1.281	1.00	11.8	-145.4
(3)	0955	7.05	24.0	1.932	1.281	1.00	10.8	-145.8
(4)								

WEATHER CONDITIONS

Clear day, 5-10 mph winds. Temp 40-45 Deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear with first two bails and turned slightly cloudy remainder of bailing. Has a slight yellow tint. No odor detected at start and end.

SAMPLE LOG

Began purge with new bailer. Bailed approximately 2 gals. Collected samples, labeled and placed in cooler on ice. Purge water placed in 5 gallon bucket and disposed of at the bundle pad upstream of the NAPIS. Instruments were calibrated before use.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 gallon bucket to catch purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2nd QUARTER 2011 - Ground Water Sampling

KA-3

GAUGE DATE	6/15/2011
GAUGE TIME	0910
DTB (feet) Depth to Bottom	25.00
DEDICATED PUMP	N
DTW (feet) Depth to Water	8.44
DTB - DTW	16.56
1 Well Volume	0.163
3 Well Volumes	8.10
PURGE DATE	6/15/2011
PURGE TIME	0915
SAMPLE DAY	6/15/2011
SAMPLE TIME	0930
PUMP DEPTH	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	0922	7.20	25.83	2.620	1.678	1.330	40	15.0
(2)	0924	7.14	25.75	2.619	1.677	1.330	40.7	14.1
(3)	0926	7.09	25.85	2.619	1.675	1.330	42.1	13.2
(4)								

WEATHER CONDITIONS

Clear day, slight breeze 0-5 mph winds. Temp 75-80 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

First couple of bails water is clear, thereafter water is slightly cloudy.
No odor detected at start and end of bailing, slightly warm.

SAMPLE LOG

KA-3 is located below ground level. This well had a water level of 5" inside the standpipe. Bailed out surrounding water before well plug was removed. Water covering the well had an oily sheen to it. Started purge with new bailer. Bailed approximately 6 gals of water. Samples collected and placed in cooler on ice. Purge water placed in 5 gallon bucket and disposed of at the bundle pad upstream of the NAPIS.

NAPIS 3

GAUGE DATE	6/15/2011
GAUGE TIME	0835
DTB (feet) Depth to Bottom	30.70
DEDICATED PUMP	N
DTW (feet) Depth to Water	7.89
DTB - DTW	22.81
1 Well Volume	0.163
3 Well Volumes	11.15
PURGE DATE	6/15/2011
PURGE TIME	0840
SAMPLE DAY	6/15/2011
SAMPLE TIME	0900
PUMP DEPTH	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	0851	7.25	20.51	4.110	2.923	2.410	34.2	64
(2)	0853	7.21	20.4	4.099	2.922	2.41	31.1	66
(3)	0855	7.26	20.4	4.099	2.922	2.41	30.7	66
(4)								

WEATHER CONDITIONS

Clear day, slight breeze 0-5 mph winds. Temp 75-80 Deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

First 4 bails, water is clear-slightly warm. Last few bails water is slightly cloudy. No odor detected at start or end of bailing.

SAMPLE LOG

New bailer used to purge approximately 9 gals of water. Samples collected and placed in cooler on ice. Purge water placed in 5 gallon bucket and disposed of at the bundle pad upstream of the NAPIS.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 Gallon bucket to catch purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2nd QUARTER 2011 - Ground Water Sampling

WELL #GWM-1	
GAUGE DATE	6/15/2011
GAUGE TIME	1030
DTB (feet) Depth to Bottom	23.70
DEDICATED PUMP	N
DTW (feet) Depth to Water	15.82
DTB - DTW	7.88
1 Well Volume	0.163
3 Well Volumes	3.85
PURGE DATE	6/15/2011
PURGE TIME	1035
SAMPLE DAY	6/15/2011
SAMPLE TIME	1046
PUMP DEPTH	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temp Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1040	7.07	12.44	4.581	3.922	3.300	23.2	-119.1
(2)	1042	7.02	12.35	4.582	3.928	3.300	18.8	-119.1
(3)	1044	6.93	12.43	4.591	3.925	3.300	15	-119.1
(4)								

WEATHER CONDITIONS

Clear day, slight breeze 5-10 mph, Temp 75 - 80 deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water has a slight yellowish tint, no odor detected at start and end of purging.

SAMPLE LOG

New bailer used to purge well of approximately 2 gallons before samples were collected. Samples labeled and placed in cooler. Water bailed was contained in a 5 gallon bucket and disposed of upsteam of the NAPIS in the waste water sewer system.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 Gallon bucket to catch purge water.

Weekly water levels were required to be checked on GWM-2 and GWM-3 due to continued presence of water. GWM-1 water level was

DATE/TIME	DTW (FT)
4/18/11: 1533	15.33
5/12/11: 1529	15.29
5/23/11: 1525	15.25
6/15/11: 1582	15.82

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING
GALLUP REFINERY
GROUNDWATER DISCHARGE PERMIT
GWM-2 WELL INSPECTION

Monitoring Requirement: Quarterly Start 2011

Date	Time	Quarter	DTB or DTW (ft)	Comments (Dry?)
6/15/2011	1045	2nd	15.02 ft (water)	Water present
Samples were collected for the following analysis: BTEX + MTBE, DRO/GRO extended, Major Cations and Anions. NMED was notified via e-mail of water found, actions taken.				
Water was clear in color, no odor detected. Water bailed was contained in a 5 gal bucket and disposed of upsteam of the NAPIS in the waste water collection system.				
Weather: Clear day, breezy 5-10 mph winds. Temp 70-75 Deg F.				

MEASUREMENTS: DTW = 15.02 ft; DTB 18.97; Water level of 3.95 ft; DTW at end of bailing = 18.78 ft with a remaining water level of 0.19 ft.

Weekly checks on water levels per NMED due to water levels until further notice.				
4/7/2011	1340 hrs	2nd	14.31	Water level
4/18/2011	1315 hrs	2nd	14.45	Water level
5/12/2011	1302 hrs	2nd	14.43	Water level
5/23/2011	1025 hrs	2nd	14.38	Water level
6/8/2011	1527 hrs	2nd	14.63	Water level
6/15/2011	1045 hrs	2nd	15.02	Water level

INSTRUMENTS USED:
YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 gallon buckets to catch purge water.

NOTES:
DTB = Depth to Bottom
DTW = Depth to Water

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING
GALLUP REFINERY
GROUNDWATER DISCHARGE PERMIT
GWM-3 WELL INSPECTION

Monitoring Requirement: Quarterly Start 2011

Date	Time	Quarter	DTB or DTW (ft)	Comments (Dry?)
6/15/2011	1133	2nd	14.2 (water)	Water present
Samples were collected for the following analysis: BTEX + MTBE, DRO/GRO extended, Major Cations and Anions. NMED was notified via e-mail of water found, actions taken.				
Water was clear in color, no odor detected. Water bailed was contained in a 5 gal bucket and disposed of upsteam of the NAPIS in the waste water collection system.				
Weather: Clear day, windy 10-15 mph winds. Temp 45-50 Deg F.				
MEASUREMENTS: DTW = 14.22 ft; DTB = 17.94; Water level of 3.72 ft; DTW at end of bailing = 17.64 ft with a remaining water level of 0.3 ft.				

Weekly checks on water levels per NMED due to water levels until further notice.				
4/7/2011	1345 hrs	2nd	11.99	Water level
4/18/2011	1320 hrs	2nd	12.23	Water level
5/12/2011	1308 hrs	2nd	12.41	Water level
5/23/2011	1023 hrs	2nd	13.11	Water level
6/8/2011	1532 hrs	2nd	13.57	Water level
6/15/2011	1133 hrs	2nd	14.2	Water level

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 gallon buckets to catch purge water.

NOTES:
DTB = Depth to Bottom
DTW = Depth to Water

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2nd QUARTER 2011 - Ground Water Sampling

WELL #OW-01

GAUGE DATE	6/20/2011
GAUGE TIME	15:25
DTB (feet) Depth to Bottom	94.04
DEDICATED PUMP	Y (inoperable)
DTW (feet) Depth to Water	1.90
DTB - DTW	92.14
1 Well Volume	0.740
3 Well Volumes	204.55
PURGE DATE	6/20/2011
PURGE TIME	15:30
SAMPLE DAY	6/20/2011
SAMPLE TIME	15:40
PUMP DEPTH	80

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	15:33	8.96	13.40	1.040	0.87	0.68	4.1	163.0
(2)	15:35	8.98	13.51	1.043	0.87	0.68	4.4	167.0
(3)	15:37	8.98	13.51	1.043	0.88	0.68	4.4	168.0
(4)	15:39	8.98	13.51	1.043	0.88	0.68	4.7	170.0

WEATHER CONDITIONS

Clear day, windy 10-15 mph. Temp 75-80 deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear - no odor detected.

SAMPLE LOG

This well use to have a dedicated pump inside well - connectors need to be replaced to place pump back in service as this well was only inspected for artesian flow. Lowered pump to approximately 80 feet and began with purge. Purged approximately 70 gals before pump lost suction. Allowed to recharge for 10 minutes before collecting samples. Samples labeled and placed in cooler on ice. Purged water was placed in 55 gal drums and disposed of at the bundle pad upstream of the NAPIS. Pump was decontaminated before each use with alconox water mixture and rinsed.

WELL #OW-10

GAUGE DATE	6/20/2011
GAUGE TIME	14:03
DTB (feet) Depth to Bottom	68.00
DEDICATED PUMP	N
DTW (feet) Depth to Water	1.40
DTB - DTW	66.60
1 Well Volume	0.740
3 Well Volumes	147.85
PURGE DATE	6/20/2011
PURGE TIME	14:05
SAMPLE DAY	6/20/2011
SAMPLE TIME	15:10
PUMP DEPTH	50 feet

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	15:00	7.70	13.5	1.984	1.650	1.3	2	241
(2)	15:02	7.69	13.5	1.919	1.651	1.32	1.8	233
(3)	5:04	7.69	13.5	1.919	1.651	1.32	1.8	237
(4)	15:06	7.69	13.5	1.919	1.651	1.32	1.8	237

WEATHER CONDITIONS

Clear day, windy 10-15 mph. Temp 75-80 deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

bundle pad upstream of the NAPIS. Samples collected and placed on ice in cooler. Portable pump flushed with alconox water mixture before use and rinsed.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
55 gallon drums to catch purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2nd Quarter Ground Water Sampling

RW-1 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	6/27/2011	Product Thickness (ft)	0.11	Clear day, breezy 5 - 10 mph winds, 70 - 75 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	8:00	Volume of Product Purged (Gallons)	0.1	
DTB (feet) Depth to Bottom	43.04	Volume of Water Purged (Gallons)	45	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	6/27/2011	Water is clear, with slight sheen and hydrocarbon odor detected when well cover was opened.
DTP (feet) Depth to Product	30.52	PURGE TIME	8:05	
DTW (feet) Depth to Water	30.63	SAMPLE DAY	N/A	
		SAMPLE TIME	N/A	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.
6/27/2011	8:05	6/27/2011	8:20	
6/27/2011	11:05	6/27/2011	11:35	

ADDITIONAL NOTES:

Lowered portable pump and began with purge at 0800 hours. Ran pump for approximately 15 minutes.
Started pump at 11:05 and shut off at 11:35 hours. Pumped a total of 45 gallons of water into 55 gallon drum.
Visible layer on top estimated to be 1/4 of inch. Estimated product recovery to be 0.11 gallons.

RW-2 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	6/27/2011	Product Thickness (ft)	0	Clear day, breezy 5 - 10 mph winds, 70 - 75 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	8:30	Volume of Product Purged (Gallons)	0	
DTB (feet) Depth to Bottom	39.80	Volume of Water Purged (Gallons)	0	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	N/A	Water is clear. No odor detected.
DTP (feet) Depth to Product	0.00	PURGE TIME	N/A	
DTW (feet) Depth to Water	26.71	SAMPLE DAY	N/A	
		SAMPLE TIME	N/A	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.

ADDITIONAL NOTES:

Gauged at 8:30 hours - no indication of SPH level in this well. No purging required.

INSTRUMENTS USED:
YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
55 gallon drum to catch purge water.

SIGNATURE: /s/ *Cheryl Johnson* / Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2nd Quarter Ground Water Sampling

RW-5 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	6/27/2011	Product Thickness (ft)	0	Clear day, breezy 5 - 10 mph winds, 75 - 80 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	8:40	Volume of Product Purged (Gallons)	0	
DTB (feet) Depth to Bottom	39.59	Volume of Water Purged (Gallons)	20	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	N/A	Water is clear and has a slight hydrocarbon odor. Small oily sheen observed floating on top of bailed water.
DTP (feet) Depth to Product	0.00	PURGE TIME	N/A	
DTW (feet) Depth to Water	28.96	SAMPLE DAY	N/A	
		SAMPLE TIME	N/A	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.
6/27/2011	8:45	6/27/2011	9:15	

ADDITIONAL NOTES:

Gauged well on 6/27/11 and checked for SPH levels. No indication of SPH level per meter used. Even though there is no indication of product level, went ahead and purged well of approximately 20 gallons. No visible layer was observed in any of the bailed water. There was a slight odor of hydrocarbons upon close inspection of the water but no measureable layer in each of the 5 gallon containers used to hold the bailed water.

RW-6 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	6/27/2011	Product Thickness (ft)	0.04	Clear day, breezy 5 - 10 mph winds, 75 - 80 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	9:25	Volume of Product Purged (Gallons)	0.04	
DTB (feet) Depth to Bottom	40.90	Volume of Water Purged (Gallons)	30	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	N/A	Water is clear with slight odor of hydrocarbons. Bailed water had slight sheen observed floating in water that was bailed.
DTP (feet) Depth to Product	30.11	PURGE TIME	N/A	
DTW (feet) Depth to Water	30.15	SAMPLE DAY	N/A	
		SAMPLE TIME	N/A	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.
3/9/2011	10:50	3/9/2011	10:55	
3/9/2011	11:55	3/9/2011	12:15	

ADDITIONAL NOTES:

Used disposable bailer to purge water from this well. Meter indicated there was a measureable SPH level. Bailed approximately 30 gallons of water. Each visible layer of SPH was estimated and volume to estimated at approximately 0.04 gallons total of product recovery.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 gallon buckets to catch purge water.

SIGNATURE: /s/ *Cheryl Johnson* / Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

ANNUAL/QUARTERLY 2011 - Ground Water Sampling

WELL #OW-01

GAUGE DATE	10/27/2011
GAUGE TIME (hrs)	10:15
DTB (feet) Depth to Bottom	94.55
Dedicated Pump	Y (inoperable)
DTW (feet) Depth to Water	0.17
DTB - DTW	94.38
1 Well Volume	0.740
3 Well Volumes	209.52
PURGE DATE	10/26/2011
PURGE TIME (hrs)	10:20
SAMPLE DAY	10/26/2011
SAMPLE TIME (hrs)	11:08
Pump Depth	80

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	10:58	8.20	13.86	1.052	0.868	0.670	4.7	90
(2)	11:00	8.26	13.94	1.054	0.868	0.670	3.6	87
(3)	11:02	8.28	13.96	1.054	0.869	0.670	3.2	84
(4)	11:04	8.30	14.01	1.056	0.869	0.670	3	82

WEATHER CONDITIONS

Partly cloudy, slight breeze 5 - 10 mph, 45 - 50 Deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

This well use to have a dedicated pump inside well - connectors need to be replaced to place pump back in service as this well was only inspected for artesian flow. Lowered pump to approximately 80 feet and began with purge. Purged approximately 130 gals after which samples were collected, labeled and placed in cooler on ice. Purged water was placed in 55 gal drums and disposed of at the bundle pad upstream of the NAPIS.

Pump was decontaminated before each use with alconox water mixture and rinsed.

WELL #OW-10

GAUGE DATE	10/26/2011
GAUGE TIME (hrs)	9:05
DTB (feet) Depth to Bottom	60.33
Dedicated Pump	N
DTW (feet) Depth to Water	0.42
DTB - DTW	59.91
1 Well Volume	0.740
3 Well Volumes	133.00
PURGE DATE	10/26/2011
PURGE TIME (hrs)	9:08
SAMPLE DAY	10/26/2011
SAMPLE TIME (hrs)	10:00
Pump Depth	50 feet

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	9:51	7.71	13.71	1.981	1.642	1.31	4	112
(2)	9:53	7.61	13.6	1.947	1.618	1.29	2.6	108
(3)	9:55	7.55	13.53	1.954	1.627	1.3	2.1	105
(4)								

WEATHER CONDITIONS

Partly cloudy, slight breeze 5 - 10 mph, 45 - 50 Deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Lowered pump to approximately 50 feet. Purged approx 80 gals. Purged water placed in 55 gal drum and disposed of at the bundle pad upstream of the NAPIS. Samples collected and placed on ice in cooler. Portable pump flushed with alconox water mixture before use and rinsed.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.

Water Level - Heron Instrument 100 feet DipperT electric water depth tape.

Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.

55 gallon drums to collect purged water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

ANNUAL/QUARTERLY 2011 - Ground Water Sampling

WELL #OW-13

GAUGE DATE	10/25/2011
GAUGE TIME	8:30
DTB (feet) Depth to Bottom	99.15
DEDICATED PUMP	Y
DTW (feet) Depth to Water	23.14
DTB - DTW	76.01
1 Well Volume	0.740
3 Well Volumes	168.74
PURGE DATE	10/25/2011
PURGE TIME	8:35
SAMPLE DAY	10/25/2011
SAMPLE TIME	9:50
PUMP DEPTH	80 ft

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	9:43	8.14	12.71	0.942	0.8	0.62	9.2	115.0
(2)	9:45	8.09	12.71	0.942	0.8	0.62	2.5	110.0
(3)	9:47	8.06	12.71	0.942	0.8	0.62	1.6	14.0
(4)	9:49	8.03	12.71	0.942	0.8	0.62	1.2	98.0

WEATHER CONDITIONS

Cloudy, slight breeze 0-5 mph, 55 - 60 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 0835 hours. Purged approximately 170 gallons before samples were collected. Samples were labeled and placed in cooler on ice. Purged water was collected in 55 gallon drums and disposed of upstream of the NAPIS.

WELL #OW-14

GAUGE DATE	10/24/2011
GAUGE TIME	13:35
DTB (feet) Depth to Bottom	46.52
DEDICATED PUMP	Y
DTW (feet) Depth to Water	25.38
DTB - DTW	21.14
1 Well Volume	0.740
3 Well Volumes	46.93
PURGE DATE	10/24/2011
PURGE TIME	13:40
SAMPLE DAY	10/24/2011
SAMPLE TIME	14:14
PUMP DEPTH	30 ft

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	14:08	7.45	13.64	1.993	1.654	1.32	2.0	-151
(2)	14:10	7.34	13.63	1.985	1.648	1.32	1.5	-171
(3)	14:12	7.26	13.62	1.987	1.650	1.32	1.2	-186
(4)	14:14	7.19	13.61	1.985	1.649	1.32	1.0	-197

WEATHER CONDITIONS

Partly cloudy, windy 10 - 15 mph winds, 70-75 Deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began purge at 1340 hours. Purged approximately 55 gallons and collected samples. Samples were labeled and placed in cooler on ice. Purge water was collected in 55 gallon drums and disposed of up stream of the NAPIS.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
55 gallon drum for collection of purged water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

ANNUAL/QUARTERLY 2011 - Ground Water Sampling

WELL #OW-29

GAUGE DATE	10/24/2011
GAUGE TIME	14:36
DTB (feet) Depth to Bottom	51.08
DEDICATED PUMP	Y
DTW (feet) Depth to Water	20.27
DTB - DTW	30.81
1 Well Volume	0.740
3 Well Volumes	68.40
PURGE DATE	10/24/2011
PURGE TIME	14:40
SAMPLE DAY	10/24/2011
SAMPLE TIME	15:30
PUMP DEPTH	40 ft

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	15:20	7.52	12.81	1.307	1.108	0.870	1.8	-93.0
(2)	15:22	7.45	12.82	1.308	1.108	0.870	1.5	-98.0
(3)	15:24	7.40	12.78	1.307	1.108	0.870	1.2	-102.0
(4)	15:26	7.37	12.80	1.308	1.108	0.870	1.1	-105.0

WEATHER CONDITIONS

Partly cloudy, windy 10-15 mph, 70-75 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge and purged approximatey 70 gallons before samples were collected. Samples were labeled and placed in cooler on ice. Purged water collected in 55 gallon drums and disposed of upstream of the NAPIS.

WELL #OW-30

GAUGE DATE	10/24/2011
GAUGE TIME	12:35
DTB (feet) Depth to Bottom	49.90
DEDICATED PUMP	Y
DTW (feet) Depth to Water	24.70
DTB - DTW	25.20
1 Well Volume	0.740
3 Well Volumes	55.94
PURGE DATE	10/24/2011
PURGE TIME	12:44
SAMPLE DAY	10/24/2011
SAMPLE TIME	13:10
PUMP DEPTH	35 ft

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	13:04	7.44	12.8	1.325	1.123	0.88	2.3	148
(2)	13:06	7.36	12.78	1.324	1.123	0.88	1.8	132
(3)	13:08	7.29	12.82	1.323	1.121	0.88	1.8	118
(4)	13:10	7.23	12.98	1.329	1.122	0.88	1.4	104

WEATHER CONDITIONS

Clear to partly cloudy, windy 10-15 mph, 70 - 75 Deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 1244 hours. Purged approximately 60 gallons before samples were collected. Samples were labeled and placed in cooler on ice. Purged water was collected in 55 gallon drums and disposed of upstream of the NAPIS.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
55 gallon drum for collection of purged water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

ANNUAL/QUARTERLY 2011 - Ground Water Sampling

WELL #OW-50

GAUGE DATE	10/25/2011
GAUGE TIME	13:20
DTB (feet) Depth to Bottom	64.00
DEDICATED PUMP	N
DTW (feet) Depth to Water	17.51
DTB - DTW	46.49
1 Well Volume	0.163
3 Well Volumes	22.73
PURGE DATE	10/25/2011
PURGE TIME	13:28
SAMPLE DAY	10/25/2011
SAMPLE TIME	14:11
PUMP DEPTH	50

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (PPM)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	14:03	7.94	14.48	0.844	0.687	0.53	1.9	30.0
(2)	14:05	7.93	14.42	0.843	0.686	0.53	1.5	17.0
(3)	14:07	7.91	14.36	0.839	0.685	0.53	1.4	4.0
(4)	14:09	7.90	14.32	0.841	0.687	0.53	1.3	-7.0

WEATHER CONDITIONS

Partly cloudy, slight breeze 0-5 mph, 50 - 55 Deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Lowered pump to approximately 50 feet inside well casing and began with purge at 1328 hours on 10-25-11. Purged approximately 25 gallons before collecting samples. Samples were labeled and placed in cooler on ice. Purge water was collected in 55 gallon drums and disposed of up stream of the NAPIS. Pump was decontaminated with alconox water mixture and rinsed before each use.

WELL #OW-52

GAUGE DATE	10/25/2011
GAUGE TIME	10:40
DTB (feet) Depth to Bottom	77.74
DEDICATED PUMP	N
DTW (feet) Depth to Water	16.14
DTB - DTW	61.60
1 Well Volume	0.163
3 Well Volumes	30.12
PURGE DATE	10/25/2011
PURGE TIME	10:46
SAMPLE DAY	10/25/2011
SAMPLE TIME	11:46
PUMP DEPTH	65

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (PPM)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	11:38	8.16	13.71	0.784	0.649	0.5	2.5	-137
(2)	11:40	8.13	13.72	0.784	0.649	0.5	2.1	-176
(3)	11:42	8.11	13.72	0.784	0.649	0.5	1.9	-197
(4)	11:44	8.10	13.74	0.784	0.649	0.5	1.7	-208

WEATHER CONDITIONS

Partly cloudy, slight breeze 0-5 mph, 50 - 55 Deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Lowered pump to approximately 50 feet inside well casing and began with purge at 1328 hours on 10-25-11. Purged approximately 30 gallons before collecting samples. Samples were labeled and placed in cooler on ice. Purge water was collected in 55 gallon drums and disposed of up stream of the NAPIS. Pump was decontaminated with alconox water mixture and rinsed before each use.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
55 gallon drum for collection of purged water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

ANNUAL/QUARTERLY 2011 - Ground Water Sampling

NAPIS 1

GAUGE DATE	9/27/2011
GAUGE TIME	10:50
DTB (feet) Depth to Bottom	13.53
DEDICATED PUMP	N
DTW (feet) Depth to Water	7.30
DTB - DTW	6.23
1 Well Volume	0.163
3 Well Volumes	3.05
PURGE DATE	9/27/2011
PURGE TIME	10:55
SAMPLE DAY	9/27/2011
SAMPLE TIME	11:11
PUMP DEPTH	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	11:01	7.01	20.02	1.816	1.304	1.03	21.3	147
(2)	11:03	6.92	20.04	1.819	1.306	1.03	20.9	145
(3)	11:05	6.87	20.07	1.821	1.306	1.03	20.2	144
(4)	11:07	6.84	20.08	1.822	1.307	1.03	20	143

WEATHER CONDITIONS

Clear day, slight breeze 5-10 mph winds, 75 - 80 deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water clear and no odor detected at start or end of purging.

SAMPLE LOG

Began purge with new bailer. Bailed approximately 3 gals. Collected samples, labeled and placed in cooler on ice. Purge water collected in 5 gallon bucket and disposed of at the bundle pad upstream of the NAPIS.

NAPIS 2

GAUGE DATE	9/27/2011
GAUGE TIME	11:18
DTB (feet) Depth to Bottom	13.61
DEDICATED PUMP	N
DTW (feet) Depth to Water	8.18
DTB - DTW	5.43
1 Well Volume	0.163
3 Well Volumes	2.66
PURGE DATE	9/27/2011
PURGE TIME	11:20
SAMPLE DAY	9/27/2011
SAMPLE TIME	11:33
PUMP DEPTH	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	11:25	6.97	25.45	1.909	1.23	0.96	58.4	-127
(2)	11:27	6.88	25.73	1.930	1.237	0.96	10.7	-139
(3)	11:29	6.83	25.59	1.928	1.239	0.97	10.6	-140
(4)								

WEATHER CONDITIONS

Clear day, slight breeze 5-10 mph winds, 75 - 80 deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water has small black particulate floating in the water. Water is slightly cloudy. No odor detected at start and end.

SAMPLE LOG

Began purge with new bailer. Bailed approximately 3 gals. Collected samples, labeled and placed in cooler on ice. Purge water collected in 5 gallon bucket and disposed of at the bundle pad upstream of the NAPIS.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 Gallon Buckets to catch purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY
ANNUAL/QUARTERLY 2011 - Ground Water Sampling

KA-3

GAUGE DATE	9/27/2011
GAUGE TIME	12:00
DTB (feet) Depth to Bottom	23.20
DEDICATED PUMP	N
DTW (feet) Depth to Water	8.11
DTB - DTW	15.09
1 Well Volume	0.163
3 Well Volumes	7.38
PURGE DATE	9/27/2011
PURGE TIME	12:05
SAMPLE DAY	9/27/2011
SAMPLE TIME	12:20
PUMP DEPTH	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	0922	7.20	25.83	2.620	1.678	1.330	40	15.0
(2)	0924	7.14	25.75	2.619	1.677	1.330	40.7	14.1
(3)	0926	7.09	25.85	2.619	1.675	1.330	42.1	13.2
(4)								

WEATHER CONDITIONS

Sunny to partly cloudy, breezy 5 - 10 mph winds, 75 - 80 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is slightly cloudy in color. No odor detected at start or end of purging.

SAMPLE LOG

Began purge with new bailer. Bailed approximately 8 gals. Collected samples, labeled and placed in cooler on ice. Purge water collected in 5 gallon bucket and disposed of at the bundle pad upstream of the NAPIS.

NAPIS 3

GAUGE DATE	9/27/2011
GAUGE TIME	12:25
DTB (feet) Depth to Bottom	30.42
DEDICATED PUMP	N
DTW (feet) Depth to Water	7.74
DTB - DTW	22.68
1 Well Volume	0.163
3 Well Volumes	11.09
PURGE DATE	9/27/2011
PURGE TIME	14:40
SAMPLE DAY	9/27/2011
SAMPLE TIME	15:16
PUMP DEPTH	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	15:07	7.18	23.96	2.800	1.857	1.48	136.8	18
(2)	15:09	7.27	20.87	2.818	1.989	1.6	123.9	10
(3)	15:11	7.30	20.89	2.832	1.997	1.61	118.0	12
(4)	15:13	7.31	20.91	2.828	1.994	1.6	113.9	13

WEATHER CONDITIONS

Overcast, breezy 5 - 10 mph winds, 75 - 80 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is slightly cloudy in color. No odor detected at start or end of purging.

SAMPLE LOG

Began purge with new bailer at 1225 hours on 9/27/11. Bailed approximately 2 gallons when facility experienced a power outage. Had to evacuate area at 1235 hours because of the flare. Resumed with purge at 1440 hours. Bailed total of 7 gals. Collected samples, labeled and placed in cooler on ice. Purge water collected in 5 gallon bucket and disposed of at the bundle pad upstream of the NAPIS.

INSTRUMENTS USED:
YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 Gallon buckets to catch purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

ANNUAL/QUARTERLY 2011 - Ground Water Sampling

RW-1 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	10/3/2011	Product Thickness (ft)	0.090	Sunny to partly cloudy, breezy 5 - 10 mph winds, 75 - 80 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	15:05	Volume of Product Purged (Gallons)	0.11	
DTB (feet) Depth to Bottom	43.04	Volume of Water Purged (Gallons)	42	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	10/3/2011	Water is clear in color and has hydrocarbon odor. Water bailed was observed to have an oily sheen as well as a visible hydrocarbon layer.
DTP (feet) Depth to Product	30.81	PURGE TIME	15:07	
DTW (feet) Depth to Water	30.90	SAMPLE DAY	10/3/2011	
DTB - DTW	12.14	SAMPLE TIME	15:40	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.
9/30/2011	12:48	9/30/2011	13:00	
10/3/2011	15:07	10/3/2011	15:38	

ADDITIONAL NOTES:

Started with purge on 9/30/11 - purged approximately 18 gallons. On 10/3/11 resumed purge bailed approxiately 24 gallons of water after which samples were collected. Samples were labeled and placed in cooler on ice.

Since this well had a visible SPH level, floating level thickness was estimated after bailing was completed.

Purge water was collected in 55 gal drum and disposed of up stream of the NAPIS.

RW-2 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	10/3/2011	Product Thickness (ft)	0.000	Sunny to partly cloudy, breezy 5 - 10 mph winds, 75 - 80 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	12:38	Volume of Product Purged (Gallons)	0	
DTB (feet) Depth to Bottom	39.80	Volume of Water Purged (Gallons)	15	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	10/3/2011	Water is clear and has small black particles floating in the water. Pea size rainbow sheen observed in the purged water.
DTP (feet) Depth to Product	0.00	PURGE TIME	12:39	
DTW (feet) Depth to Water	25.36	SAMPLE DAY	10/3/2011	
DTB - DTW	14.44	SAMPLE TIME	15:00	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.
10/3/2011	12:39	10/3/2011	12:50	

ADDITIONAL NOTES:

10/3/11 bailed approxiately 15 gallons of water after which samples were collected for the annual sampling event. Samples were labeled and placed in cooler on ice. No SPH level was observed or detected in this well.

Purge water was collected in 55 gal drum and disposed of up stream of the NAPIS.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.

Water Level - Heron Instrument 100 feet DipperT electric water depth tape.

Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.

Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.

5 gallon buckets to catch purge water.

SIGNATURE: /s/ *Cheryl Johnson* / Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

ANNUAL/QUARTERLY 2011 - Ground Water Sampling

RW-5 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	10/4/2011	Product Thickness (ft)	0.000	Cloudy, rain showers, 0-5 mph winds, 60 - 65 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	8:15	Volume of Product Purged (Gallons)	0	
DTB (feet) Depth to Bottom	39.59	Volume of Water Purged (Gallons)	14	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	10/4/2011	Water clear in color; has small particulates floating in water. Oily sheen observed floating on top of bailed water.
DTP (feet) Depth to Product	0.00	PURGE TIME	8:20	
DTW (feet) Depth to Water	29.89	SAMPLE DAY	10/4/2011	
DTB - DTW	9.70	SAMPLE TIME	8:50	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.
10/4/2011	8:20	10/4/2011	8:40	

ADDITIONAL NOTES:

10/4/11 bailed approxiately 14 gallons of water after which samples were collected for the annual sampling event. Samples were labeled and placed in cooler on ice. No visible SPH level was detected during this inspection.

Purge water was collected in 55 gal drum and disposed of up stream of the NAPIS.

RW-6 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	10/4/2011	Product Thickness (ft)	0.03	Sunny to partly cloudy, breezy 5 - 10 mph winds, 75 - 80 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	9:05	Volume of Product Purged (Gallons)	0.09	
DTB (feet) Depth to Bottom	40.90	Volume of Water Purged (Gallons)	30	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	10/4/2011	Water is slightly cloudy in color. No odor detected at start or end of purging.
DTP (feet) Depth to Product	29.91	PURGE TIME	9:07	
DTW (feet) Depth to Water	29.94	SAMPLE DAY	10/4/2011	
DTB - DTW	10.96	SAMPLE TIME	10:02	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.
10/4/2011	9:07	10/4/2011	10:00	

ADDITIONAL NOTES:

10/4/11 bailed approxiately 30 gallons of water after which samples were collected for the annual sampling event. Samples were labeled and placed in cooler on ice. Since this well had a product level, floating level thickness was estimated after bailing was completed.

Purge water was collected in 55 gal drum and disposed of up stream of the NAPIS.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
5 gallon buckets to catch purge water.

SIGNATURE: /s/ *Cheryl Johnson* / Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2011 Annual/Quarterly Sampling Well Log

WELL #GWM-1	
GAUGE DATE	9/26/2011
GAUGE TIME	12:45
DTB (feet) Depth to Bottom	26.20
DEDICATED PUMP	N
DTW (feet) Depth to Water	16.42
DTB - DTW	9.78
Capacity per foot	0.163
3 Well Volumes	4.78
PURGE DATE	9/26/2011
PURGE TIME	12:50
SAMPLE DAY	9/26/2011
SAMPLE TIME	13:15
PUMP DEPTH	NA

TEST PARAMATERS

	Time (hrs)	pH	Temp Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1307	6.71	14.73	5.055	4.087	3.450	15.6	-113.0
(2)	1309	6.60	15.17	5.113	4.092	3.450	14.3	-113.0
(3)	1311	6.53	15.65	5.180	4.099	3.460	11.8	-113.0
(4)	1315	6.48	16.17	5.249	4.105	3.460	10.6	-113.0

WEATHER CONDITIONS

Overcast, breezy 5-10 mph, temperature 70-75 deg.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water has a slight yellowish tint, no odor detected at start and end of purging.

SAMPLE LOG

New bailer used to purge well of approximately 3 gallons before samples were collected. Samples labeled and placed in cooler. Water bailed was contained in a 5 gallon bucket and disposed of upsteam of the NAPIS in the waste water sewer system. Instruments were calibrated before use.

INSTRUMENTS USED & CALIBRATED WHERE APPLICABLE:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5-gallon buckets to catch purge water

Weekly water levels were required to be checked on GWM-2 and GWM-3 due to continued presence of water. GWM-1 water level was also measured at same time.

DATE/TIME	DTW (FT)	
7/6/2011	16.39	Weekly water level checks discontinued

Signature: /s/ Cheryl Johnson, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2011 Annual/Quarterly Sampling Well Log

WELL #GWM-2		**TEST PARAMATERS**								
			Time (hrs)	pH	Temp Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
GAUGE DATE	9/26/2011	(1)								
GAUGE TIME	1325	(2)	Water Quality Parameters not required.							
DTB (feet) Depth to Bottom	18.97	(3)								
DEDICATED PUMP	N	(4)								
DTW (feet) Depth to Water	15.89									
DTB - DTW	3.08									
Capacity per foot	0.163									
3 Well Volumes	1.51									
PURGE DATE	9/26/2011									
PURGE TIME	1330									
SAMPLE DAY	6/15/2011									
SAMPLE TIME	1342									
PUMP DEPTH	NA									

WEATHER CONDITIONS

Overcast, breezy 5-10 mph, temperature 70-75 deg.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water has a slight yellowish tint, no odor detected at start and end of purging.

SAMPLE LOG

New bailer used to purge well of approximately 2.5 gallons before samples were collected. Samples labeled and placed in cooler. Water bailed was contained in a 5 gallon bucket and disposed of upsteam of the NAPIS in the waste water sewer system. After samples were taken, bailed remaining water in the well. Water level at end was 18.85 with a remaining water level of 0.12 feet.

INSTRUMENTS USED & CALIBRATED WHERE APPLICABLE:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 Gallon buckets to catch purge water.

Weekly water levels were required to be checked on GWM-2 and GWM-3 due to continued presence of water.

DATE/TIME	**DTW (FT)**	
7/6/2011:0918	15.79	Weekly water level checks discontinued

Signature: /s/ Cheryl Johnson, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2011 Annual/Quarterly Sampling Well Log

WELL #GWM-3		TEST PARAMATERS								
			Time (hrs)	pH	Temp Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
GAUGE DATE	9/26/2011	(1)								
GAUGE TIME	13:55	(2)	Water Quality Parameters not required.							
DTB (feet) Depth to Bottom	23.70	(3)								
DEDICATED PUMP	N	(4)								
DTW (feet) Depth to Water	15.64									
DTB - DTW	8.06									
Capacity per foot	0.163									
3 Well Volumes	3.94									
PURGE DATE	9/26/2011									
PURGE TIME	13:52									
SAMPLE DAY	6/15/2011									
SAMPLE TIME	14:02									
PUMP DEPTH DTW (feet) at end of Purging	NA									

WEATHER CONDITIONS

Overcast, slight breeze 5-10 mph winds, 70-75 Deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water has a slight yellowish tint, no odor detected at start and end of purging.

SAMPLE LOG

New bailer used to purge well of approximately 3 gallons before samples were collected. Samples labeled and placed in cooler. Water bailed was contained in a 5 gallon bucket and disposed of upsteam of the NAPIS in the waste water sewer system.

INSTRUMENTS USED & CALIBRATED WHERE APPLICABLE:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 gallon buckets to catch purge water.

Weekly water levels were required to be checked on GWM-2 and GWM-3 due to continued presence of water.

DATE/TIME	DTW (FT)	
7/6/2011:0929	16.39	Weekly water level checks discontinued

Signature: /s/ Cheryl Johnson, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2011 Annual/Quarterly Sampling Well Log

WELL #BW-1A

GAUGE DATE	10/28/2011
GAUGE TIME	9:37
DTB (feet) Depth to Bottom	37.62
DEDICATED PUMP	N
DTW (feet) Depth to Water	DRY
DTB - DTW	37.62
Capacity per foot	0.163
3 Well Volumes	N/A
PURGE DATE	
PURGE TIME	
SAMPLE DAY	
SAMPLE TIME	
PUMP DEPTH	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	N/A							
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Clear day, 0-5 mph winds, 40-45 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

N/A - well is dry.

SAMPLE LOG

Gauged well - no water level detected. Well is dry.

WELL #BW-1B

GAUGE DATE	10/28/2011
GAUGE TIME	9:38
DTB (feet) Depth to Bottom	67.45
DEDICATED PUMP	N
DTW (feet) Depth to Water	DRY
DTB - DTW	0.00
Capacity per foot	0.163
3 Well Volumes	N/A
PURGE DATE	
PURGE TIME	
SAMPLE DAY	
SAMPLE TIME	
PUMP DEPTH	N/A

TEST PARAMATERS

	Time	pH	Temperature Deg F	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	N/A							
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Clear day, 0-5 mph winds, 40-45 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

N/A - well is dry.

SAMPLE LOG

Gauged well - no water level detected. Well is dry.

INSTRUMENTS USED & CALIBRATED WHERE APPLICABLE:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2011 Annual/Quarterly Sampling Well Log

WELL #BW-1C

GAUGE DATE	10/28/2011
GAUGE TIME	9:35
DTB (feet) Depth to Bottom	136.29
DEDICATED PUMP	Y
DTW (feet) Depth to Water	6.11
DTB - DTW	130.18
Capacity per foot	0.163
3 Well Volumes	63.66
PURGE DATE	10/28/2011
PURGE TIME	9:40
SAMPLE DAY	10/28/2011
SAMPLE TIME	10:08
PUMP DEPTH DTW (feet) at end of Purging	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	10:00	8.45	13.3	1.067	0.892	0.690	17.30	101.0
(2)	10:02	8.45	13.2	1.064	0.893	0.690	19.40	102.0
(3)	10:04	8.45	13.1	1.061	0.893	0.690	17.10	103.0
(4)	10:06	8.45	12.9	1.057	0.894	0.690	20.60	104.0

WEATHER CONDITIONS

Clear day, 0-5 mph, 40-45 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water clear, no odor detected at start and end of purging.

SAMPLE LOG

Water meter instrument calibrated before use. Started with purge at 0940 hours. Purged approximately 4.5 gallons before pump lost suction. Allowed well to recharge before grabing samples. Samples labeled and placed in cooler on ice.

WELL #BW-2A

GAUGE DATE	10/28/2011
GAUGE TIME	10:15
DTB (feet) Depth to Bottom	67.57
DEDICATED PUMP	Y
DTW (feet) Depth to Water	32.16
DTB - DTW	35.41
Capacity per foot	0.163
3 Well Volumes	17.32
PURGE DATE	10/28/2011
PURGE TIME	10:20
SAMPLE DAY	10/28/2011
SAMPLE TIME	11:20
PUMP DEPTH DTW (feet) at end of Purging	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	11:10	8.05	12.5	1.031	0.881	0.680	2.70	11.0
(2)	11:12	7.96	13.1	1.048	0.881	0.680	2.50	-101.0
(3)	11:14	7.91	13.2	1.050	0.881	0.680	2.30	-148.0
(4)	11:16	7.85	13.3	1.052	0.881	0.680	2.10	-165.0

WEATHER CONDITIONS

Clear day, 0-5 mph slight breeze, 40-45 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water clear, no apparent odor detected at start of purge.

SAMPLE LOG

Started purge at 1020 hrs on 10/28/11. Purged approximately 18 gallons befor pump lost suction. Allowed well to recharge before collecting samples. Samples were labeled and placed in cooler on ice. Purge water collected in 55 gal. drum and disposed of upstream of the NAPIS.

INSTRUMENTS USED & CALIBRATED WHERE APPLICABLE:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
55-gallon drums to catch purge water

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2011 Annual/Quarterly Sampling Well Log

WELL #BW-2B

GAUGE DATE	10/28/2011
GAUGE TIME	10:15
DTB (feet) Depth to Bottom	92.26
DEDICATED PUMP	Y
DTW (feet) Depth to Water	27.56
DTB - DTW	64.70
Capacity per foot	0.163
3 Well Volumes	31.64
PURGE DATE	10/28/2011
PURGE TIME	10:20
SAMPLE DAY	10/28/2011
SAMPLE TIME	11:48
PUMP DEPTH DTW (feet) at end of Purging	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	11:37	7.57	13.16	1.743	1.464	1.160	2.00	-161.0
(2)	11:39	7.55	13.24	1.747	1.465	1.160	1.90	-164.0
(3)	11:41	7.53	13.30	1.750	1.465	1.160	1.80	-167.0
(4)	11:43	7.52	13.47	1.758	1.465	1.160	1.60	-169.0

WEATHER CONDITIONS

Clear Day, slight breeze 0-5 mph winds, 40-45 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water clear, no apparent odor detected at start of purging.

SAMPLE LOG

Started purge at 1020 hours. Purged approximately 30 gallons. Collected samples at 1148 hours.
Samples were labeled and placed in cooler on ice.
Purge water collected in 55 gallon drum and disposed of upstream of the NAPIS.

WELL #BW-2C

GAUGE DATE	10/28/2011
GAUGE TIME	11:55
DTB (feet) Depth to Bottom	152.84
DEDICATED PUMP	N
DTW (feet) Depth to Water	20.18
DTB - DTW	132.66
Capacity per foot	0.163
3 Well Volumes	64.87
PURGE DATE	10/28/2011
PURGE TIME	12:00
SAMPLE DAY	10/28/2011
SAMPLE TIME	12:35
PUMP DEPTH	135 Ft.
DTW (feet) at end of Purging	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	12:24	8.35	12.85	1.114	0.943	0.730	38.60	-16.0
(2)	12:26	8.42	13.18	1.027	0.862	0.670	9.60	-22.0
(3)	12:28	8.44	13.52	1.036	0.863	0.670	8.20	-26.0
(4)	12:30	8.47	13.76	1.042	0.863	0.670	8.00	-30.0

WEATHER CONDITIONS

Clear day, slight breeze 0-5 mph winds, 40-45 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water slightly cloudy, no odor detected at start and end of purge.

SAMPLE LOG

Started with purge at 1200 hours. Purged approximately 7 gallons before pump lost suction. Allowed to recharge and collected samples at 1235 hours. Samples were labeled and placed in cooler on ice.
Purge water collected in 55 gallon drum and disposed of upstream of the NAPIS.

INSTRUMENTS USED & CALIBRATED WHERE APPLICABLE:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
55-gallon drums to catch purge water

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2011 Annual/Quarterly Sampling Well Log

WELL #BW-3A

GAUGE DATE	10/28/2011
GAUGE TIME	12:45
DTB (feet) Depth to Bottom	52.35
DEDICATED PUMP	N
DTW (feet) Depth to Water	52.35
DTB - DTW	0.00
Capacity per foot	0.163
3 Well Volumes	0.00
PURGE DATE	
PURGE TIME	
SAMPLE DAY	
SAMPLE TIME	
PUMP DEPTH DTW (feet) at end of Purging	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)								
(2)	N/A							
(3)								
(4)								

WEATHER CONDITIONS

Clear day, 0-5 mph, 40-45 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

N/A - well is dry.

SAMPLE LOG

On 10/28/11 gauged well - no indication of a water level. Well is dry.

WELL #BW-3B

GAUGE DATE	10/28/2011
GAUGE TIME	12:46
DTB (feet) Depth to Bottom	69.40
DEDICATED PUMP	Y
DTW (feet) Depth to Water	32.10
DTB - DTW	37.30
Capacity per foot	0.163
3 Well Volumes	18.24
PURGE DATE	10/28/2011
PURGE TIME	12:48
SAMPLE DAY	10/28/2011
SAMPLE TIME	13:25
PUMP DEPTH DTW (feet) at end of Purging	56 / N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	13:17	7.98	12.69	1.176	1.001	0.780	4.30	-189.0
(2)	13:19	7.92	12.91	1.187	1.003	0.780	4.00	-195.0
(3)	13:21	7.88	13.13	1.194	1.003	0.780	3.40	-201.0
(4)	13:23	7.85	13.39	1.200	1.002	0.780	2.90	-208.0

WEATHER CONDITIONS

Clear day, 0-5 mph, 40-45 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water cloudy, brownish tint, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 1336 hours on 10/28/11. Purged approximately 9 gallons before pump lost suction. Allowed well to recharge and collected samples. Samples were labeled and placed in cooler on ice.

INSTRUMENTS USED & CALIBRATED WHERE APPLICABLE:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
55-gallon drums to catch purge water

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2011 Annual/Quarterly Sampling Well Log

WELL #BW-3C	
GAUGE DATE	10/28/2011
GAUGE TIME	13:35
DTB (feet) Depth to Bottom	154.45
DEDICATED PUMP	N
DTW (feet) Depth to Water	7.62
DTB - DTW	146.83
Capacity per foot	0.163
3 Well Volumes	71.80
PURGE DATE	10/28/2011
PURGE TIME	13:36
SAMPLE DAY	10/28/2011
SAMPLE TIME	14:30
PUMP DEPTH DTW (feet) at end of Purging	145

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	14:21	8.30	21.58	0.756	0.526	0.40	92.60	-95.0
(2)	14:23	8.18	14.50	1.236	1.005	0.78	15.80	-53.0
(3)	14:25	8.17	14.05	1.220	1.003	0.78	5.50	-58.0
(4)	14:27	8.17	14.22	1.223	1.001	0.78	3.80	-75.0

WEATHER CONDITIONS

Clear day, 0-5 mph, 40-45 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water clear and at end of purging water had slight brownish tint.

SAMPLE LOG

Lowered portable pump to approximately 145 feet. Began with purge at 1336 hours and pump lost suction after purging approximately 4 gallons. Allowed well to recharge and collected samples. Samples were labeled and placed in cooler on ice.

INSTRUMENTS USED & CALIBRATED WHERE APPLICABLE:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
55-gallon drums to catch purge water

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2011 Annual/Quarterly Sampling Well Log

WELL #MW-4

GAUGE DATE	10/12/2011
GAUGE TIME	8:28
DTB (feet) Depth to Bottom	121.72
DEDICATED PUMP	Y
DTW (feet) Depth to Water	7.72
DTB - DTW	114.00
Capacity per foot	1.020
3 Well Volumes	348.84
PURGE DATE	10/12/2011
PURGE TIME	8:33
SAMPLE DAY	10/12/2011
SAMPLE TIME	10:52
PUMP DEPTH DTW (feet) at end of Purging	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	10:45	8.33	13.61	0.916	0.761	0.59	3	118.0
(2)	10:47	8.34	13.35	0.910	0.761	0.59	2.1	112.0
(3)	10:49	8.34	13.26	0.908	0.761	0.59	1.6	105.0
(4)	10:52	8.34	13.20	0.907	0.761	0.59	1.4	99.0

WEATHER CONDITIONS

Clear day, 0-5 mph winds, 45 - 50 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 0833 hours on 10/12/11. Purged approximately 250 gallons. Samples were collected and placed in cooler on ice. Purge water collected in 55 gallon drums and disposed of upstream of the NAPIS.

WELL #MW-5

GAUGE DATE	10/10/2011
GAUGE TIME	13:15
DTB (feet) Depth to Bottom	130.83
DEDICATED PUMP	Y
DTW (feet) Depth to Water	14.52
DTB - DTW	116.31
Capacity per foot	0.740
3 Well Volumes	258.21
PURGE DATE	10/10/2011
PURGE TIME	13:20
SAMPLE DAY	10/10/2011
SAMPLE TIME	14:36
PUMP DEPTH DTW (feet) at end of Purging	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	14:25	8.60	13.57	0.894	0.744	0.57	1.4	68.0
(2)	14:27	8.61	13.47	0.892	0.744	0.57	1	64.0
(3)	14:29	8.61	13.42	0.891	0.744	0.57	0.9	62.0
(4)	14:31	8.61	13.40	0.891	0.744	0.57	0.8	60.0

WEATHER CONDITIONS

Clear day, 0-5 mph winds, 55 - 60 Deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 0833 hours on 10/10/11. Purged approximately 250 gallons. Samples were collected and placed in cooler on ice. Purge water collected in 55 gallon drums and disposed of upstream of the NAPIS.

INSTRUMENTS USED & CALIBRATED WHERE APPLICABLE:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
55-gallon drums to catch purge water

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2011 Annual/Quarterly Sampling Well Log

WELL #MW-1

GAUGE DATE	10/6/2011
GAUGE TIME	10:00
DTB (feet) Depth to Bottom	130.83
DEDICATED PUMP	Y
DTW (feet) Depth to Water	6.79
DTB - DTW	124.04
Capacity per foot	1.020
3 Well Volumes	379.56
PURGE DATE	10/6/2011
PURGE TIME	10:05
SAMPLE DAY	10/6/2011
SAMPLE TIME	11:20
PUMP DEPTH DTW (feet) at end of Purging	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	11:09	8.08	13.81	0.875	0.723	0.56	18.7	177.0
(2)	11:11	8.19	13.69	0.873	0.723	0.56	17.4	174.0
(3)	11:13	8.26	13.88	0.877	0.723	0.56	17.5	168.0
(4)	11:15	8.32	14.03	0.880	0.723	0.56	19.2	161.0

WEATHER CONDITIONS

Cloudy - drizzle, 5 - 10 mph winds, 50 - 55 deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 1005 hours on 10/6/11. Purged approximately 300 gallons. Samples were collected and placed in cooler on ice. Purge water collected in 55 gallon drums and disposed of upstream of the NAPIS.

WELL #MW-2

GAUGE DATE	10/10/2011
GAUGE TIME	9:35
DTB (feet) Depth to Bottom	137.48
DEDICATED PUMP	Y
DTW (feet) Depth to Water	8.80
DTB - DTW	128.68
Capacity per foot	1.020
3 Well Volumes	393.76
PURGE DATE	10/10/2011
PURGE TIME	9:45
SAMPLE DAY	10/10/2011
SAMPLE TIME	12:14
PUMP DEPTH	N/A
DTW (feet) at end of Purging	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	12:05	8.50	14.02	0.889	0.731	0.56	1.1	109.0
(2)	12:07	8.52	3.83	0.885	0.731	0.56	0.8	95.0
(3)	12:09	8.53	13.73	0.883	0.731	0.56	0.7	83.0
(4)	12:11	8.53	13.68	0.882	0.732	0.56	0.7	70.0

WEATHER CONDITIONS

Clear day , 0-5 mph winds, 50 - 55 deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 1214 hours on 10/10/11. Purged approximately 280 gallons. Samples were collected and placed in cooler on ice. Purge water collected in 55 gallon drums and disposed of upstream of the NAPIS.

INSTRUMENTS USED & CALIBRATED WHERE APPLICABLE:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
55-gallon drums to catch purge water

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2011 Annual/Quarterly Sampling Well Log

WELL #OW-11

GAUGE DATE	10/26/2011
GAUGE TIME	13:20
DTB (feet) Depth to Bottom	65.79
DEDICATED PUMP	N
DTW (feet) Depth to Water	20.83
DTB - DTW	44.96
Capacity per foot	0.740
3 Well Volumes	99.81
PURGE DATE	10/26/2011
PURGE TIME	13:25
SAMPLE DAY	10/26/2011
SAMPLE TIME	14:41
PUMP DEPTH	40

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	14:33	8.09	14.34	2.213	1.806	1.45	5.4	61
(2)	14:35	8.10	14.28	2.205	1.802	1.45	4.1	59
(3)	14:37	8.10	14.35	2.202	1.797	1.44	3.6	54
(4)	14:39	8.09	14.41	2.202	1.794	1.44	3.4	48

WEATHER CONDITIONS

Partly cloudy, windy 10-15 mph. Temp 50-55 deg F.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Lowered pump to approximately 40 feet and began with purge. Purged approximately 100 gallons.
Samples collected, labeled & placed in cooler on ice. Pump was decontaminated and rinsed before use.
Purge water collected in 55 gal drums and disposed of upstream of the NAPIS.

WELL #OW-12

GAUGE DATE	10/26/2011
GAUGE TIME	11:25
DTB (feet) Depth to Bottom	128.85
DEDICATED PUMP	N
DTW (feet) Depth to Water	48.00
DTB - DTW	80.85
Capacity per foot	0.740
3 Well Volumes	179.49
PURGE DATE	10/26/2011
PURGE TIME	11:30
SAMPLE DAY	10/26/2011
SAMPLE TIME	12:18
PUMP DEPTH	100

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	12:07	8.73	15.21	0.886	0.709	0.54	34.1	83
(2)	12:09	8.81	15.20	0.886	0.708	0.54	33.4	82
(3)	12:11	8.85	15.21	0.886	0.708	0.54	33.1	80
(4)	12:13	8.87	15.29	0.887	0.708	0.54	32.9	78

WEATHER CONDITIONS

Partly cloudy. Slight breeze 0-5 mph winds. 80-85 deg F.

Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Lowered pump to approximately 100 feet and began purge at 1130 hours on 10/26/11.
Purged approximately 38 gallons. Collected samples, samples were labeled & placed in cooler on ice.
Pump was decontaminated with Alconox and rinsed before use. Purge water collected in 55 gallon drums and disposed of upstream of the NAPIS.

INSTRUMENTS USED & CALIBRATED WHERE APPLICABLE:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
55-gallon drums to catch purge water.

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

2011 Annual/Quarterly Sampling Well Log

WELL #SMW-2

GAUGE DATE	10/12/2011
GAUGE TIME	11:44
DTB (feet) Depth to Bottom	52.80
DEDICATED PUMP	N
DTW (feet) Depth to Water	25.58
DTB - DTW	27.22
Capacity per foot	0.163
3 Well Volumes	13.31
PURGE DATE	10/12/2011
PURGE TIME	11:50
SAMPLE DAY	10/12/2011
SAMPLE TIME	12:16
PUMP DEPTH DTW (feet) at end of Purging	40 feet

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	12:05	7.00	15.38	8.057	6.416	5.59	5.8	51
(2)	12:07	6.98	15.42	8.081	6.429	5.60	5.8	51
(3)	12:09	6.97	15.48	8.098	6.434	5.60	6.2	51
(4)	12:11	6.95	15.53	8.107	6.434	5.60	8.6	50

WEATHER CONDITIONS

Clear day, little to no winds 0-5 mph, 60 - 65 deg f.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 1150 hours on 10/12/11. Purged approximately 12 gallons. Samples were collected and placed in cooler on ice. Purge water collected in 55 gallon drums and disposed of upstream of the NAPIS.

WELL #SMW-4

GAUGE DATE	10/10/2011
GAUGE TIME	8:50
DTB (feet) Depth to Bottom	69.68
DEDICATED PUMP	Y
DTW (feet) Depth to Water	29.33
DTB - DTW	40.35
Capacity per foot	0.163
3 Well Volumes	19.73
PURGE DATE	10/10/2011
PURGE TIME	8:58
SAMPLE DAY	10/10/2011
SAMPLE TIME	9:24
PUMP DEPTH DTW (feet) at end of Purging	N/A

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	9:16	7.96	13.42	0.996	0.831	0.64	3.4	182
(2)	9:18	7.97	13.59	1.006	0.836	0.65	3.0	174
(3)	9:20	7.99	13.71	1.011	0.838	0.65	3.1	166
(4)	9:22	7.99	13.74	1.015	0.840	0.65	3.1	159

WEATHER CONDITIONS

Clear day, little to no winds 0-5 mph, 60 - 65 deg f.
Attendee: Cheryl Johnson

WATER APPEARANCE

Water is clear, no odor detected at start and end of purging.

SAMPLE LOG

Began with purge at 0858 hours on 10/10/11. Purged approximately 20 gallons. Samples were collected and placed in cooler on ice. Purge water collected in 55 gallon drums and disposed of upstream of the NAPIS.

INSTRUMENTS USED & CALIBRATED WHERE APPLICABLE:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
55-gallon drums to catch purge water

Signature: /s/ *Cheryl Johnson*, Environmental Specialist

WESTERN REFINING - GALLUP REFINERY
4th QUARTER 2011 - Ground Water Sampling

OW-1

GAUGE DATE	12/15/2011
GAUGE TIME	1120
DTB (feet) Depth to Bottom	94.55
DEDICATED PUMP	Y(inop)
DTW (feet) Depth to Water	3.48
DTB - DTW	91.07
Capacity per foot	0.650
3 Well Volumes	178.00
PURGE DATE	12/15/2011
PURGE TIME	1125
SAMPLE DAY	12/15/2011
SAMPLE TIME	1235
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1125	8.73	6.16	1.222	0.794	0.61	75.8	81.7
(2)	1142	8.76	11.18	1.302	0.848	0.66	10.6	45.0
(3)	1215	8.97	12.52	1.313	0.847	0.66	12	5.2
(4)	1226	8.87	12.33	1.331	0.865	0.67	9.8	-0.8

WEATHER CONDITIONS

Clear, temp ~ 40°F.

WATER APPEARANCE

Clear, no odor.

SAMPLE LOG

Began with purge. Pumped approximately 55 gals. Well not rechraging, sampled after 55 gal purge. Collected water samples, labeled and placed on ice in cooler. Purge water collected in labeled 55 gal drum to be disposed of at the bundle pad upstream of the NAPIS .

OW-10

GAUGE DATE	12/15/2011
GAUGE TIME	1500
DTB (feet) Depth to Bottom	60.33
DEDICATED PUMP	N
DTW (feet) Depth to Water	0.78
DTB - DTW	59.55
Capacity per foot	0.650
3 Well Volumes	116.00
PURGE DATE	12/15/2011
PURGE TIME	1506
SAMPLE DAY	12/15/2011
SAMPLE TIME	1630
PUMP DEPTH	50 ft
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1508	8.71	11.04	0.005	1.781	1.30	10.8	105.5
(2)	1533	8.23	11.30	1.734	1.767	1.36	34.7	118.0
(3)	1555	8.17	11.25	2.319	1.512	1.20	31.8	129.6
(4)	1625	8.18	10.80	2.298	1.515	1.20	15.8	143.2

WEATHER CONDITIONS

Clear, temp 40°F.

WATER APPEARANCE

Clear, no odor.

SAMPLE LOG

Began with purge. Pumped approximately 120 gals. Collected water samples, labeled and placed on ice in cooler. Purge water collected in labeled 55 gal drums to be disposed of at the bundle pad upstream of the NAPIS .

INSTRUMENTS USED:
YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.

Signature: Tom Fleener / Trihydro Corporation

WESTERN REFINING - GALLUP REFINERY

4th QUARTER 2011 - Ground Water Sampling

OW-13

GAUGE DATE	12/13/2011
GAUGE TIME	1225
DTB (feet) Depth to Bottom	100.00
DEDICATED PUMP	Y
DTW (feet) Depth to Water	23.00
DTB - DTW	77.00
Capacity per foot	0.650
3 Well Volumes	150.00
PURGE DATE	12/13/2011
PURGE TIME	1230
SAMPLE DAY	12/13/2011
SAMPLE TIME	1350
PUMP DEPTH	80 ft
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1233	7.98	11.55	1.239	0.806	0.620	9.8	-2.7
(2)	1300	8.06	12.18	1.216	0.791	0.610	13.6	-18.5
(3)	1321	8.20	12.21	1.221	0.795	0.610	17.5	-46.0
(4)	1340	8.17	12.21	1.222	0.795	0.610	13.1	-48.2

WEATHER CONDITIONS

Cloudy, temp ~ 45°F.

WATER APPEARANCE

Clear, no odor.

SAMPLE LOG

Began with purge. Pumped approximately 150 gals. Collected water samples, labeled and placed on ice in cooler. Purge water collected in labeled 55 gal drums to be disposed of at the bundle pad upstream of the NAPIS .

OW-14

GAUGE DATE	12/13/2011
GAUGE TIME	1400
DTB (feet) Depth to Bottom	46.52
DEDICATED PUMP	Y
DTW (feet) Depth to Water	25.19
DTB - DTW	21.33
Capacity per foot	0.650
3 Well Volumes	42.00
PURGE DATE	12/13/2011
PURGE TIME	1407
SAMPLE DAY	12/13/2011
SAMPLE TIME	1430
PUMP DEPTH	30 ft
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1408	7.57	12.38	2.48	1.614	1.29	19.2	-124.2
(2)	1415	7.36	12.85	2.516	1.637	1.31	14.2	-159.6
(3)	1421	7.29	12.82	2.524	1.642	1.31	18.5	-161.6
(4)	1428	7.27	12.85	2.522	1.641	1.31	14.1	-162.5

WEATHER CONDITIONS

Cloudy, snow flurries.

WATER APPEARANCE

Clear, no odor.

SAMPLE LOG

Began with purge. Pumped approximately 45 gals. Collected water samples, labeled and placed on ice in cooler. Purge water collected in labeled 55 gal drum to be disposed of at the bundle pad upstream of the NAPIS .

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Dedicated pumps

Signature: Tom Fleener / Trihydro Corporation

WESTERN REFINING - GALLUP REFINERY

4th QUARTER 2011 - Ground Water Sampling

OW-29

GAUGE DATE	12/13/2011
GAUGE TIME	1040
DTB (feet) Depth to Bottom	51.08
DEDICATED PUMP	Y
DTW (feet) Depth to Water	20.00
DTB - DTW	31.08
Capacity per foot	0.653
3 Well Volumes	61.00
PURGE DATE	12/13/2011
PURGE TIME	1100
SAMPLE DAY	12/13/2011
SAMPLE TIME	1140
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1057	7.48	11.10	1.706	1.111	0.870	14.2	-31.8
(2)	1112	7.71	11.41	1.686	1.095	0.860	8.7	-87.5
(3)	1125	7.37	12.17	1.691	1.099	0.860	7.6	-101.6
(4)	1140	7.54	12.03	1.689	1.098	0.860	8.6	-111.6

WEATHER CONDITIONS

Cloudy, S wind ~10 mph, temp ~35°F.

WATER APPEARANCE

Clear, no odor at beginning or end of purging.

SAMPLE LOG

Began with purge. Pumped approximately 61 gals. Collected water samples, labeled and placed on ice in cooler. Purge water collected in labeled 55 gal drum to be disposed of at the bundle pad upstream of the NAPIS .

OW-30

GAUGE DATE	12/15/2011
GAUGE TIME	0754
DTB (feet) Depth to Bottom	49.90
DEDICATED PUMP	Y
DTW (feet) Depth to Water	24.64
DTB - DTW	25.26
Capacity per foot	0.650
3 Well Volumes	50.00
PURGE DATE	12/15/2011
PURGE TIME	0756
SAMPLE DAY	12/15/2011
SAMPLE TIME	0820
PUMP DEPTH	38 ft
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	0800	8.61	10.06	1.704	1.120	0.88	44.0	69.7
(2)	0807	8.30	11.63	1.726	1.124	0.88	16.8.	54.6
(3)	0811	8.11	11.55	1.725	1.118	0.88	30.7	44.1
(4)	0814	7.99	11.76	1.729	1.124	0.88	21.8	38.5

WEATHER CONDITIONS

Clear, temp ~35°F.

WATER APPEARANCE

Cear, no odor.

SAMPLE LOG

Began with purge. Pumped approximately 50 gals. Collected water samples, labeled and placed on ice in cooler. Purge water collected labeled 55 gal drum to be disposed of at the bundle pad upstream of the NAPIS .

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Dedicated pumps

Signature: Tom Fleener / Trihydro Corporation

WESTERN REFINING - GALLUP REFINERY

4th QUARTER 2011 - Ground Water Sampling

OW-50

GAUGE DATE	12/15/2011
GAUGE TIME	1315
DTB (feet) Depth to Bottom	64.00
DEDICATED PUMP	N
DTW (feet) Depth to Water	17.30
DTB - DTW	46.70
Capacity per foot	0.160
3 Well Volumes	23.00
PURGE DATE	12/15/2011
PURGE TIME	1330
SAMPLE DAY	12/15/2011
SAMPLE TIME	1425
PUMP DEPTH	55
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1330	8.99	9.71	1.256	0.816	0.630	76.3	34.4
(2)	1336	8.82	12.81	1.054	2.685	0.530	19	34.1
(3)	1343	8.60	13.14	1.062	0.090	0.530	18	34.4
(4)	1418	8.62	12.06	1.038	0.679	0.520	31	62.4

WEATHER CONDITIONS

Clear, temp ~ 35°F.

WATER APPEARANCE

Cloudy

SAMPLE LOG

Began with purge. Pumped ~ 23 gals using portable pump. Collected water samples, labeled and placed on ice in cooler. Purge water collected in labeled 55 gal drums to be disposed of at the bundle pad upstream of the NAPIS .

OW-52

GAUGE DATE	12/13/2011
GAUGE TIME	1615
DTB (feet) Depth to Bottom	77.47
DEDICATED PUMP	N
DTW (feet) Depth to Water	15.90
DTB - DTW	61.57
Capacity per foot	0.160
3 Well Volumes	30.00
PURGE DATE	12/13/2011
PURGE TIME	1627
SAMPLE DAY	12/13/2011
SAMPLE TIME	1700
PUMP DEPTH	40
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1627	8.39	7.02	1.121	0.728	0.56	67.1	-8.0
(2)	1638	7.98	11.82	1.005	0.654	0.50	7.4	-40.5
(3)	1646	8.20	12.55	0.989	0.644	0.49	8.0	-117.9
(4)	1656	8.25	12.75	1	0.649	0.50	12.3	-151.8

WEATHER CONDITIONS

Cloudy, calm winds, temp ~45°F.

WATER APPEARANCE

Cloudy during purging, cleared up by 3rd parameter reading.

SAMPLE LOG

Began with purge. Pumped approximately 30 gals. Collected water samples, labeled and placed on ice in cooler. Purge water collected in labeled 55 gal drum to be disposed of at the bundle pad upstream of the NAPIS .

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.

Signature: Tom Fleener / Trihydro Corporation

WESTERN REFINING - GALLUP REFINERY

4th QUARTER 2011 - Ground Water Sampling

NAPIS-1

GAUGE DATE	1/30/2012
GAUGE TIME	1435 hrs
DTB (feet) Depth to Bottom	13.53
DEDICATED PUMP	N
DTW (feet) Depth to Water	7.18
DTB - DTW	6.35
Capacity per foot	0.160
3 Well Volumes	3.00
PURGE DATE	1/30/2012
PURGE TIME	1435 hrs
SAMPLE DAY	1/30/2012
SAMPLE TIME	1440 hrs
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	not taken							
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Clear day, windy 5 to 10 mph, temp 50-55 deg F.

WATER APPEARANCE

Water clear - no odor detected.

SAMPLE LOG

Using new bailer bailed approximately 2 gals. Collected water samples, labeled and placed on ice in cooler. Purge water disposed of at the bundle pad upstream of the NAPIS. Sampled for 8270C analysis only as this was missed during the 4th quarter sampling completed in December 2011. Glass amber bottle broke in transit. Procedure approved by NMED, Kristen Van Horn.

NAPIS-2

GAUGE DATE	1/30/2012
GAUGE TIME	1415 hrs
DTB (feet) Depth to Bottom	13.61
DEDICATED PUMP	N
DTW (feet) Depth to Water	8.02
DTB - DTW	5.59
Capacity per foot	0.160
3 Well Volumes	2.60
PURGE DATE	1/30/2012
PURGE TIME	1420 hrs
SAMPLE DAY	1/30/2012
SAMPLE TIME	1420 hrs
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	not taken							
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Clear day, windy 5 to 10 mph, temp 50-55 deg F.

WATER APPEARANCE

Water has slight yellow color - warm.

SAMPLE LOG

Upon opening cover to well - there was water inside well cover. Removed water inside well cover before removing casing plug. Using new bailer bailed approximately 2 gals. Collected water samples, labeled and placed on ice in cooler. Purge water disposed of at the bundle pad upstream of the NAPIS. Sampled for gen chem analysis only as this was missed during the 4th quarter sampling which was completed in December 2011. Procedure approved by NMED, Kristen Van Horn.

INSTRUMENTS USED:

Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Disposable bailer - Polyethylene bailer (1.5" x 36" OAL). Individually sealed.
5 Gallon buckets to catch purge water.

Signature: Cheryl Johnson / Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

4th QUARTER 2011 - Ground Water Sampling

NAPIS-1

GAUGE DATE	12/14/2011
GAUGE TIME	1425
DTB (feet) Depth to Bottom	13.53
DEDICATED PUMP	N
DTW (feet) Depth to Water	7.45
DTB - DTW	6.08
Capacity per foot	0.160
3 Well Volumes	3.00
PURGE DATE	12/14/2011
PURGE TIME	1430
SAMPLE DAY	12/14/2011
SAMPLE TIME	1450
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1435	8.17	12.91	1.994	1.299	1.03	34.4	-56.6
(2)	1440	7.89	13.30	1.940	1.262	1.00	19.6	-50.7
(3)	1441	7.86	14.84	1.930	1.256	0.99	20.3	-49.8
(4)	1443	7.84	15.12	1.978	1.287	1.02	20.2	-49.2

WEATHER CONDITIONS

Cloudy, S wind ~15mph, temp. ~30°F.

WATER APPEARANCE

Clear

SAMPLE LOG

Began with purge. Bailed approximately 4 gals. Collected water samples, labeled and placed on ice in cooler. Purge water collected in labeled 55 gal drum to be disposed of at the bundle pad upstream of the NAPIS .

NAPIS-2

GAUGE DATE	12/14/2011
GAUGE TIME	0918
DTB (feet) Depth to Bottom	13.61
DEDICATED PUMP	N
DTW (feet) Depth to Water	8.20
DTB - DTW	5.41
Capacity per foot	0.160
3 Well Volumes	2.60
PURGE DATE	12/14/2011
PURGE TIME	0915
SAMPLE DAY	12/14/2011
SAMPLE TIME	0930
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	0920	8.20	18.28	2.152	1.408	1.12	2.7	-61.9
(2)	0924	7.68	18.35	2.38	1.548	1.23	13.4	-113.0
(3)	0926	7.78	22.38	2.126	1.384	1.04	9.3	-135.0
(4)	0928	7.75	21.36	2.129	1.386	1.09	9.2	-135.4

WEATHER CONDITIONS

Cloudy, S wind ~ 20 mph, temp ~ 35°F.

WATER APPEARANCE

Cloudy.

SAMPLE LOG

Began with purge. Bailed approximately 3 gals. Collected water samples, labeled and placed on ice in cooler. Purge water collected in labeled 55 gal drums to be disposed of at the bundle pad upstream of the NAPIS .

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Bailer

Signature: Tom Fleener / Trihydro Corporation

WESTERN REFINING - GALLUP REFINERY

4th QUARTER 2011 - Ground Water Sampling

NAPIS-3

GAUGE DATE	12/14/2011
GAUGE TIME	1100
DTB (feet) Depth to Bottom	30.42
DEDICATED PUMP	N
DTW (feet) Depth to Water	8.30
DTB - DTW	22.12
Capacity per foot	0.160
3 Well Volumes	11.00
PURGE DATE	12/14/2011
PURGE TIME	1100
SAMPLE DAY	12/14/2011
SAMPLE TIME	1120
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1100	8.81	20.47	4.514	2.934	2.42	61.5	7.3
(2)	1107	8.40	19.14	4.491	2.920	2.41	44.5	-10.0
(3)								
(4)								

WEATHER CONDITIONS

Cloudy, S wind ~15mph, temp. ~30°F.

WATER APPEARANCE

SAMPLE LOG

Bailed approximately 6 gals. Well not rechraging, sampled after 6 gal purge. Collected water samples, labeled and placed on ice in cooler. Purge water collected in labeled 55 gal drum to be disposed of at the bundle pad upstream of the NAPIS .

KA-3

GAUGE DATE	12/14/2011
GAUGE TIME	1000
DTB (feet) Depth to Bottom	23.20
DEDICATED PUMP	N
DTW (feet) Depth to Water	8.08
DTB - DTW	15.12
Capacity per foot	0.160
3 Well Volumes	7.25
PURGE DATE	12/14/2011
PURGE TIME	1004
SAMPLE DAY	12/14/2011
SAMPLE TIME	1040
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1004	8.08	19.00	2.525	1.614	1.31	40.2	-64.8
(2)	1011	8.34	19.40	2.780	1.812	1.45	21.4	-72.2
(3)	1020	8.07	19.10	2.300	1.480	1.17	18.6	-67.3
(4)	1030	7.91	19.21	2.239	1.459	1.15	30.3	-65.2

WEATHER CONDITIONS

Cloudy, S wind ~15mph, temp. ~30°F.

WATER APPEARANCE

SAMPLE LOG

Began with purge. Bailed approximately 8 gals. Collected water samples, labeled and placed on ice in cooler. Purge water collected in labeled 55 gal drum to be disposed of at the bundle pad upstream of the NAPIS .

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Bailer

Signature: Tom Fleener / Trihydro Corporation

WESTERN REFINING - GALLUP REFINERY

4th QUARTER 2011 - Ground Water Sampling

GWM-2

GAUGE DATE	12/14/2011
GAUGE TIME	1305
DTB (feet) Depth to Bottom	18.81
DEDICATED PUMP	N
DTW (feet) Depth to Water	15.40
DTB - DTW	3.41
Capacity per foot	0.160
3 Well Volumes	1.60
PURGE DATE	12/14/2011
PURGE TIME	1310
SAMPLE DAY	12/14/2011
SAMPLE TIME	1320
PUMP DEPTH	NA
DTW (feet) at end of Purging	dry

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)								
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Cloudy, S wind ~ 15mph, temp. ~ 35°F.

WATER APPEARANCE

Mostly clear with yellow tint.

SAMPLE LOG

Began with purge. Bailed ~ 1 gallon. Collected water samples, labeled and placed on ice in cooler. Continued bailing well until dry (~1 additional gallon). Purge water placed in labeled 55 gal drum to be disposed of at the bundle pad upstream of the NAPIS.

GWM-3

GAUGE DATE	12/14/2011
GAUGE TIME	1400
DTB (feet) Depth to Bottom	17.80
DEDICATED PUMP	N
DTW (feet) Depth to Water	14.35
DTB - DTW	3.45
Capacity per foot	0.160
3 Well Volumes	1.70
PURGE DATE	12/14/2011
PURGE TIME	1402
SAMPLE DAY	12/14/2011
SAMPLE TIME	1420
PUMP DEPTH	NA
DTW (feet) at end of Purging	dry

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)								
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Cloudy, S wind ~15mph, temp. ~ 35°F.

WATER APPEARANCE

SAMPLE LOG

Began with purge. Bailed ~ 1 gallon. Collected water samples, labeled and placed on ice in cooler. Continued bailing well until dry (~1 additional gallon). Purge water placed in labeled 55 gal drum to be disposed of at the bundle pad upstream of the NAPIS.

INSTRUMENTS USED:

Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Bailer

Signature: Tom Fleener / Trihydro Corporation

WESTERN REFINING - GALLUP REFINERY

4th QUARTER 2011 - Ground Water Sampling

Oil Sump LDU

GAUGE DATE	NA
GAUGE TIME	NA
DTB (feet) Depth to Bottom	NA
DEDICATED PUMP	N
DTW (feet) Depth to Water	NA
DTB - DTW	NA
Capacity per foot	NA
3 Well Volumes	NA
PURGE DATE	NA
PURGE TIME	NA
SAMPLE DAY	12/14/2011
SAMPLE TIME	1525
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)								
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Cloudy, S wind ~ 15mph, temp. ~ 35°F.

WATER APPEARANCE

Yellow tint.

SAMPLE LOG

Grab sample collected with bailer, labeled and placed on ice in cooler.

GWM-1

GAUGE DATE	12/14/2011
GAUGE TIME	1322
DTB (feet) Depth to Bottom	26.20
DEDICATED PUMP	N
DTW (feet) Depth to Water	16.08
DTB - DTW	10.12
Capacity per foot	0.160
3 Well Volumes	4.90
PURGE DATE	12/14/2011
PURGE TIME	1340
SAMPLE DAY	12/14/2011
SAMPLE TIME	1345
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)	1330	7.95	12.74	5.901	3.849	3.24	25.3	-100.4
(2)	1334	7.37	12.96	6.174	4.019	3.39	12.0	-116.4
(3)	1339	7.25	12.92	6.131	3.989	3.36	15.6	-119.4
(4)	1341	7.20	12.48	6.222	4.037	3.40	-22.4	-120.6

WEATHER CONDITIONS

Cloudy, S wind ~15 mph, temp. ~ 35°F.

WATER APPEARANCE

Clear to brown and cloudy

SAMPLE LOG

Began with purge. Bailed ~ 5 gallons. Collected water samples, labeled and placed on ice in cooler. Purge water placed in labeled 55 gal drum to be disposed of at the bundle pad upstream of the NAPIS.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Bailer

Signature: Tom Fleener / Trihydro Corporation

WESTERN REFINING - GALLUP REFINERY

4th QUARTER 2011 - Ground Water Sampling

East LDU

GAUGE DATE	NA
GAUGE TIME	NA
DTB (feet) Depth to Bottom	NA
DEDICATED PUMP	N
DTW (feet) Depth to Water	NA
DTB - DTW	NA
Capacity per foot	NA
3 Well Volumes	NA
PURGE DATE	NA
PURGE TIME	NA
SAMPLE DAY	12/14/2011
SAMPLE TIME	1500
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)								
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Cloudy, S wind ~15mph, temp. ~35°F.

WATER APPEARANCE

Clear with yellow tint

SAMPLE LOG

Collected grab samples with bailer, labeled and placed on ice in cooler.

West LDU

GAUGE DATE	NA
GAUGE TIME	NA
DTB (feet) Depth to Bottom	NA
DEDICATED PUMP	N
DTW (feet) Depth to Water	NA
DTB - DTW	NA
Capacity per foot	NA
3 Well Volumes	NA
PURGE DATE	NA
PURGE TIME	NA
SAMPLE DAY	12/14/2011
SAMPLE TIME	1510
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)								
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Cloudy, S wind ~15mph, temp. ~35°F.

WATER APPEARANCE

Clear with yellow tint.

SAMPLE LOG

Collected grab samples with bailer, labeled and placed on ice in cooler.

INSTRUMENTS USED:

Bailer

Signature: Tom Fleener / Trihydro Corporation

WESTERN REFINING - GALLUP REFINERY

4th QUARTER 2011 - Ground Water Sampling

Infl to AL-2

GAUGE DATE	NA
GAUGE TIME	NA
DTB (feet) Depth to Bottom	NA
DEDICATED PUMP	N
DTW (feet) Depth to Water	NA
DTB - DTW	NA
Capacity per foot	NA
3 Well Volumes	NA
PURGE DATE	NA
PURGE TIME	NA
SAMPLE DAY	12/14/2011
SAMPLE TIME	0815
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)								
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Cloudy, S wind ~15 mph, temp ~35°F

WATER APPEARANCE

Greenish black with sheen.

SAMPLE LOG

Collected grab samples from north discharge pipe using plastic dipper, labeled and placed on ice in cooler.

Infl to EP-1

GAUGE DATE	NA
GAUGE TIME	NA
DTB (feet) Depth to Bottom	NA
DEDICATED PUMP	N
DTW (feet) Depth to Water	NA
DTB - DTW	NA
Capacity per foot	NA
3 Well Volumes	NA
PURGE DATE	NA
PURGE TIME	NA
SAMPLE DAY	12/14/2011
SAMPLE TIME	0830
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)								
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Cloudy, S wind ~15 mph, temp ~35°F

WATER APPEARANCE

Clear with green tint

SAMPLE LOG

Collected grab samples from eastern discharge pipe using plastic dipper, labeled and placed on ice in cooler.

INSTRUMENTS USED:

Plastic dipper

Signature: Tom Fleener / Trihydro Corporation

WESTERN REFINING - GALLUP REFINERY

4th QUARTER 2011 - Ground Water Sampling

AL-2 to EP-1

GAUGE DATE	NA
GAUGE TIME	NA
DTB (feet) Depth to Bottom	NA
DEDICATED PUMP	N
DTW (feet) Depth to Water	NA
DTB - DTW	NA
Capacity per foot	NA
3 Well Volumes	NA
PURGE DATE	NA
PURGE TIME	NA
SAMPLE DAY	12/14/2011
SAMPLE TIME	1245
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)								
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Cloudy, S wind ~15 mph, Temp. ~35°F

WATER APPEARANCE

Greenish black.

SAMPLE LOG

Collected grab samples with plastic dipper, labeled and placed on ice in cooler.

Infl to AL-1

GAUGE DATE	NA
GAUGE TIME	NA
DTB (feet) Depth to Bottom	NA
DEDICATED PUMP	N
DTW (feet) Depth to Water	NA
DTB - DTW	NA
Capacity per foot	NA
3 Well Volumes	NA
PURGE DATE	NA
PURGE TIME	NA
SAMPLE DAY	12/14/2011
SAMPLE TIME	0740
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)								
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Cloudy, S wind approximately ~15 mph, temp ~30°F

WATER APPEARANCE

Black with green tint

SAMPLE LOG

Collected grab samples with plastic dipper, labeled and placed on ice in cooler.

INSTRUMENTS USED:

Plastic dipper.

Signature: Tom Fleener / Trihydro Corporation

WESTERN REFINING - GALLUP REFINERY

4th QUARTER 2011 - Ground Water Sampling

Pilot Eff.

GAUGE DATE	NA
GAUGE TIME	NA
DTB (feet) Depth to Bottom	NA
DEDICATED PUMP	N
DTW (feet) Depth to Water	NA
DTB - DTW	NA
Capacity per foot	NA
3 Well Volumes	NA
PURGE DATE	NA
PURGE TIME	NA
SAMPLE DAY	12/14/2011
SAMPLE TIME	755
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)								
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Cloudy, S wind ~15 mph, Temp. ~ 30°F

WATER APPEARANCE

Clear with yellow tint, visible solids present.

SAMPLE LOG

Collected grab sample with plastic dipper as effluent was flowing, labeled and placed samples on ice in cooler. Dissolved metals sample collected 0900 12/15.

NAPIS Eff.

GAUGE DATE	NA
GAUGE TIME	NA
DTB (feet) Depth to Bottom	NA
DEDICATED PUMP	N
DTW (feet) Depth to Water	NA
DTB - DTW	NA
Capacity per foot	NA
3 Well Volumes	NA
PURGE DATE	NA
PURGE TIME	NA
SAMPLE DAY	12/14/2011
SAMPLE TIME	1130
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)								
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Cloudy, S wind ~15 mph, Temp. ~35°F

WATER APPEARANCE

Blackish green in color.

SAMPLE LOG

Collected grab samples with plastic dipper, labeled and placed on ice in cooler.

INSTRUMENTS USED:

Plastic dipper.

Signature: Tom Fleener / Trihydro Corporation

WESTERN REFINING - GALLUP REFINERY

FOURTH QUARTER 2011 - Ground Water Sampling

RW-1 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	11/8/2011	Product Thickness (ft)	0.080	Partly cloudy, slight breeze 0 - 5 mph winds, 25 - 30 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	8:30	Volume of Product Purged (Gallons)	0.09	
DTB (feet) Depth to Bottom	43.04	Volume of Water Purged (Gallons)	38	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	11/8/2011	Water is clear in color and has hydrocarbon odor. Water bailed was observed to have an oily sheen as well as a visible hydrocarbon layer.
DTP (feet) Depth to Product	30.77	PURGE TIME	8:30	
DTW (feet) Depth to Water	30.85	SAMPLE DAY	N/A	
DTB - DTW	12.19	SAMPLE TIME	N/A	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.
11/8/2011	8:30	11/8/2011	9:00	

ADDITIONAL NOTES:

Lowered portable pump and started with purge on 11/8/11 - purged approximately 38 gallons.
Visible SPH layer on top of bailed water is estimated to be 1/8 of inch.
Purge water was collected in 55 gal drum and disposed of up stream of the NAPIS.

RW-2 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	11/8/2011	Product Thickness (ft)	0.000	Partly cloudy, slight breeze 0 - 5 mph winds, 25 - 30 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	9:15	Volume of Product Purged (Gallons)	0	
DTB (feet) Depth to Bottom	39.80	Volume of Water Purged (Gallons)	N/A	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	N/A	Water is clear. No odor detected at start or end of purging.
DTP (feet) Depth to Product	0.00	PURGE TIME	N/A	
DTW (feet) Depth to Water	31.65	SAMPLE DAY	N/A	
DTB - DTW	8.15	SAMPLE TIME	N/A	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.

ADDITIONAL NOTES:

Gauged well on 11/8/11. Meter indicated no SPH level in well.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.
Water Level - Heron Instrument 100 feet DipperT electric water depth tape.
Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.
55 gallon drum to catch purge water.

SIGNATURE: /s/ *Cheryl Johnson* / Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

FOURTH QUARTER 2011 - Ground Water Sampling

RW-5 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	11/8/2011	Product Thickness (ft)	0.000	Partly cloudy, slight breeze 0 - 5 mph winds, 30 - 35 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	9:20	Volume of Product Purged (Gallons)	0	
DTB (feet) Depth to Bottom	39.59	Volume of Water Purged (Gallons)	17	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	11/8/2011	Water clear in color; has small particulates floating in water. Oily sheen observed floating on top of bailed water.
DTP (feet) Depth to Product	0.00	PURGE TIME	9:21	
DTW (feet) Depth to Water	29.85	SAMPLE DAY	N/A	
DTB - DTW	9.74	SAMPLE TIME	N/A	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.
11/8/2011	9:21	11/8/2011	9:35	

ADDITIONAL NOTES:

11/8/11 bailed approxiately 17 gallons of water even though this well has no SPH level.

Purge water was collected in 55 gal drum and disposed of up stream of the NAPIS.

RW-6 (Recovery Well)				WEATHER CONDITIONS
GAUGE DATE	11/8/2011	Product Thickness (ft)	0.03	Partly cloudy, slight breeze 0 - 5 mph winds, 30 - 35 Deg F. Attendee: Cheryl Johnson
GAUGE TIME	9:45	Volume of Product Purged (Gallons)	0.05	
DTB (feet) Depth to Bottom	40.90	Volume of Water Purged (Gallons)	25	**WATER APPEARANCE**
DEDICATED PUMP	N	PURGE DATE	11/8/2011	Water is clear; has hydrocarbon odor upon opening well cover.
DTP (feet) Depth to Product	29.90	PURGE TIME	9:46	
DTW (feet) Depth to Water	29.93	SAMPLE DAY	N/A	
DTB - DTW	10.97	SAMPLE TIME	N/A	
WELL PURGING				**Notes**
START DATE	START TIME	END DATE	END TIME	Recovery wells (1, 2, 5, 6) were included as part of the annual ground water sampling for the first time in 2011. These wells were only monitored for product level thickness and product recovery on a quarterly basis. Sampling of wells was not a requirement.
11/8/2011	9:46	11/8/2011	10:05	

ADDITIONAL NOTES:

11/8/11 bailed approxiately 25 gallons of water. There was a visible layer of SPH on top of bailed water.

Purge water was collected in 55 gal drum and disposed of up stream of the NAPIS.

INSTRUMENTS USED:

YSI 556 MPS Insrument with flow cell. Used to collect water quality parameters.

Water Level - Heron Instrument 100 feet DipperT electric water depth tape.

Submersible bladder pump, Grundfos Redi-flo 2, 2" and an adjustable rate controller.

5 gallon buckets to catch purge water.

SIGNATURE: /s/ *Cheryl Johnson* / Environmental Specialist

WESTERN REFINING - GALLUP REFINERY

4th QUARTER 2011 - Ground Water Sampling

PW-2	
GAUGE DATE	NA
GAUGE TIME	NA
DTB (feet) Depth to Bottom	NA
DEDICATED PUMP	NA
DTW (feet) Depth to Water	NA
DTB - DTW	NA
Capacity per foot	NA
3 Well Volumes	NA
PURGE DATE	12/15/2011
PURGE TIME	1035
SAMPLE DAY	12/15/2011
SAMPLE TIME	1040
PUMP DEPTH	NA
DTW (feet) at end of Purging	NA

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)								
(2)								
(3)								
(4)								

WEATHER CONDITIONS

Clear, temp ~35°F.

WATER APPEARANCE

Clear, no odor.

SAMPLE LOG

Ran pump for ~five mintues. Collected water samples, labeled and placed on ice in cooler.

GAUGE DATE	
GAUGE TIME	
DTB (feet) Depth to Bottom	
DEDICATED PUMP	
DTW (feet) Depth to Water	
DTB - DTW	
Capacity per foot	
3 Well Volumes	
PURGE DATE	
PURGE TIME	
SAMPLE DAY	
SAMPLE TIME	
PUMP DEPTH	
DTW (feet) at end of Purging	

TEST PARAMATERS

	Time (hrs)	pH	Temperature Deg C	Conductivity (uS), (mS)	TDS (g/L)	Salinity (ppt)	Dissolved Oxygen (%)	ORP (mV)
(1)								
(2)								
(3)								
(4)								

WEATHER CONDITIONS

WATER APPEARANCE

SAMPLE LOG

INSTRUMENTS USED:
Dedicated pump

Signature: Tom Fleener / Trihydro Corporation

Western Refining Gallup

Air Quality Permit 0633M7-R3 Condition 3s, 4p and 3r

Compliance Determination Method For VOC Emission Limits
MONTHLY SAMPLING BTEX

Month	IN ppb benzene	OUT ppb benzene	ppb benzene	IN ppb toluene	OUT ppb toluene	ppb toluene	IN ppb ethylbenzene	OUT ppb ethylbenzene	ppb ethylbenzene	IN ppb xylene	OUT ppb xylene	ppb xylene	ppb total BTEX	A mass fraction	Gallons (G) TOTAL FLOW/month	B TONS/month)	BTEX Mass A X B (tonnes)	BTEX Mass all strippers (tonnes)	BTEX Mass 12 months rolling (TPY)
Jan-11	Z84-V7 inlet 19000	Z84-V7 outlet 5000	Z84-V7 emitted 14000	Z84-V7 inlet 29000	Z84-V7 outlet 7900	Z84-V7 emitted 21100	Z84-V7 inlet 3200	Z84-V7 outlet 1000	Z84-V7 emitted 2200	Z84-V7 inlet 19000	Z84-V7 outlet 6900	Z84-V7 emitted 12100	Z84-V7 emitted 49400	0.0000494	566,928	2364.1	0.1		
	Z84-V1-2 inlet 5100	Z84-V1-2 outlet 690	Z84-V1-2 emitted 4410	Z84-V1-2 inlet 8400	Z84-V1-2 outlet 1300	Z84-V1-2 emitted 7100	Z84-V1-2 inlet 790	Z84-V1-2 outlet 140	Z84-V1-2 emitted 650	Z84-V1-2 inlet 4400	Z84-V1-2 outlet 830	Z84-V1-2 emitted 3570	Z84-V1-2 emitted 15730	0.00001573	7,046,424	29383.6	0.5	0.6	15.17
Feb-11	Z84-V7 inlet 33000	Z84-V7 outlet 110	Z84-V7 emitted 32890	Z84-V7 inlet 36000	Z84-V7 outlet 140	Z84-V7 emitted 35860	Z84-V7 inlet 1700	Z84-V7 outlet 20	Z84-V7 emitted 1680	Z84-V7 inlet 9500	Z84-V7 outlet 150	Z84-V7 emitted 9350	Z84-V7 emitted 79780	0.00007978	479,808	2000.8	0.2		
	Z84-V1-2 inlet 13000	Z84-V1-2 outlet 330	Z84-V1-2 emitted 12670	Z84-V1-2 inlet 16000	Z84-V1-2 outlet 410	Z84-V1-2 emitted 15590	Z84-V1-2 inlet 850	Z84-V1-2 outlet 21	Z84-V1-2 emitted 829	Z84-V1-2 inlet 4600	Z84-V1-2 outlet 160	Z84-V1-2 emitted 4440	Z84-V1-2 emitted 33529	0.000033529	6,147,590	25635.5	0.9	1.0	15.05
Mar-11	Z84-V7 inlet 33000	Z84-V7 outlet 2500	Z84-V7 emitted 30500	Z84-V7 inlet 22000	Z84-V7 outlet 2600	Z84-V7 emitted	Z84-V7 inlet 810	Z84-V7 outlet 0	Z84-V7 emitted 810	Z84-V7 inlet 4400	Z84-V7 outlet 930	Z84-V7 emitted 3470	Z84-V7 emitted 34780	0.00003478	584,784	2438.5	0.1		
	Z84-V1-2 inlet 5100	Z84-V1-2 outlet 73	Z84-V1-2 emitted 5027	Z84-V1-2 inlet 9400	Z84-V1-2 outlet 140	Z84-V1-2 emitted 9260	Z84-V1-2 inlet 760	Z84-V1-2 outlet 12	Z84-V1-2 emitted 748	Z84-V1-2 inlet 4300	Z84-V1-2 outlet 81	Z84-V1-2 emitted 4219	Z84-V1-2 emitted 19254	0.000019254	7,135,704	29755.9	0.6	0.7	14.86
Apr-11	Z84-V7 inlet 34000	Z84-V7 outlet 75	Z84-V7 emitted 33925	Z84-V7 inlet 23000	Z84-V7 outlet 140	Z84-V7 emitted 22860	Z84-V7 inlet 1200	Z84-V7 outlet 23	Z84-V7 emitted 1177	Z84-V7 inlet 7100	Z84-V7 outlet 150	Z84-V7 emitted 6950	Z84-V7 emitted 64912	0.000064912	557,280	2323.9	0.2		
	Z84-V1-2 inlet 7400	Z84-V1-2 outlet 130	Z84-V1-2 emitted 7270	Z84-V1-2 inlet 10000	Z84-V1-2 outlet 230	Z84-V1-2 emitted 9770	Z84-V1-2 inlet 760	Z84-V1-2 outlet 29	Z84-V1-2 emitted 731	Z84-V1-2 inlet 4000	Z84-V1-2 outlet 180	Z84-V1-2 emitted 3820	Z84-V1-2 emitted 21591	0.000021591	7,607,952	31725.2	0.7	0.8	14.73
May-11	Z84-V7 inlet 30000	Z84-V7 outlet 1500	Z84-V7 emitted 28500	Z84-V7 inlet 34000	Z84-V7 outlet 1300	Z84-V7 emitted 32700	Z84-V7 inlet 1500	Z84-V7 outlet 65	Z84-V7 emitted 1435	Z84-V7 inlet 9000	Z84-V7 outlet 400	Z84-V7 emitted 8600	Z84-V7 emitted 71235	0.000071235	513,360	2140.7	0.2		
	Z84-V1-2 inlet 4400	Z84-V1-2 outlet 140	Z84-V1-2 emitted 4260	Z84-V1-2 inlet 7200	Z84-V1-2 outlet 310	Z84-V1-2 emitted 6890	Z84-V1-2 inlet 440	Z84-V1-2 outlet 35	Z84-V1-2 emitted 405	Z84-V1-2 inlet 2600	Z84-V1-2 outlet 220	Z84-V1-2 emitted 2380	Z84-V1-2 emitted 13935	0.000013935	8,830,685	36824.0	0.5	0.7	14.73
Jun-11	Z84-V7 inlet 20000	Z84-V7 outlet 280	Z84-V7 emitted 19720	Z84-V7 inlet 25000	Z84-V7 outlet 300	Z84-V7 emitted 24700	Z84-V7 inlet 2300	Z84-V7 outlet 17	Z84-V7 emitted 2283	Z84-V7 inlet 14000	Z84-V7 outlet 110	Z84-V7 emitted 13890	Z84-V7 emitted 60593	0.000060593	591,840	2468.0	0.1		
	Z84-V1-2 inlet 21000	Z84-V1-2 outlet 2400	Z84-V1-2 emitted 18600	Z84-V1-2 inlet 18000	Z84-V1-2 outlet 2500	Z84-V1-2 emitted 15500	Z84-V1-2 inlet 960	Z84-V1-2 outlet 150	Z84-V1-2 emitted 810	Z84-V1-2 inlet 5300	Z84-V1-2 outlet 900	Z84-V1-2 emitted 4400	Z84-V1-2 emitted 39310	0.00003931	6,112,800	25490.4	1.0	1.2	14.60
Jul-11	Z84-V7 inlet 29000	Z84-V7 outlet 86	Z84-V7 emitted 28914	Z84-V7 inlet 26000	Z84-V7 outlet 110	Z84-V7 emitted 25890	Z84-V7 inlet 1100	Z84-V7 outlet 5.3	Z84-V7 emitted 1095	Z84-V7 inlet 6000	Z84-V7 outlet 37	Z84-V7 emitted 5963	Z84-V7 emitted 61862	6.18617E-05	401,760	1675.3	0.1		
	Z84-V1-2 inlet 7500	Z84-V1-2 outlet 19	Z84-V1-2 emitted 7481	Z84-V1-2 inlet 14000	Z84-V1-2 outlet 40	Z84-V1-2 emitted 13960	Z84-V1-2 inlet 780	Z84-V1-2 outlet 0	Z84-V1-2 emitted 780	Z84-V1-2 inlet 4500	Z84-V1-2 outlet 0	Z84-V1-2 emitted 4500	Z84-V1-2 emitted 26721	0.000026721	9,218,606	38441.6	1.0	1.1	14.58
Aug-11	Z84-V7 inlet 18000	Z84-V7 outlet 2100	Z84-V7 emitted 15900	Z84-V7 inlet 27000	Z84-V7 outlet 4000	Z84-V7 emitted 23000	Z84-V7 inlet 3500	Z84-V7 outlet 640	Z84-V7 emitted 2860	Z84-V7 inlet 24000	Z84-V7 outlet 4200	Z84-V7 emitted 19800	Z84-V7 emitted 61560	0.00006156	397,296	1656.7	0.1		
	Z84-V1-2 inlet 16000	Z84-V1-2 outlet 260	Z84-V1-2 emitted 15740	Z84-V1-2 inlet 25000	Z84-V1-2 outlet 590	Z84-V1-2 emitted 24410	Z84-V1-2 inlet 2000	Z84-V1-2 outlet 85	Z84-V1-2 emitted 1915	Z84-V1-2 inlet 13000	Z84-V1-2 outlet 590	Z84-V1-2 emitted 12410	Z84-V1-2 emitted 54475	0.000054475	9,138,701	38108.4	2.1	2.2	15.95
Sep-11	Z84-V7 inlet 24500	Z84-V7 outlet 1310	Z84-V7 emitted 23190	Z84-V7 inlet 31000	Z84-V7 outlet 2550	Z84-V7 emitted 28450	Z84-V7 inlet 3300	Z84-V7 outlet 425	Z84-V7 emitted 2875	Z84-V7 inlet 22000	Z84-V7 outlet 2800	Z84-V7 emitted 19200	Z84-V7 emitted 73715	0.000073715	401,760	1675.3	0.1		
	Z84-V1-2 inlet 10650	Z84-V1-2 outlet 250	Z84-V1-2 emitted 10400	Z84-V1-2 inlet 19000	Z84-V1-2 outlet 600	Z84-V1-2 emitted 18400	Z84-V1-2 inlet 1700	Z84-V1-2 outlet 87	Z84-V1-2 emitted 1613	Z84-V1-2 inlet 10650	Z84-V1-2 outlet 600	Z84-V1-2 emitted 10050	Z84-V1-2 emitted 40463	0.000040463	8,160,480	34029.2	1.4	1.5	15.90
Oct-11	Z84-V7 inlet 31000	Z84-V7 outlet 520	Z84-V7 emitted 30480	Z84-V7 inlet 35000	Z84-V7 outlet 1100	Z84-V7 emitted 33900	Z84-V7 inlet 3100	Z84-V7 outlet 210	Z84-V7 emitted 2890	Z84-V7 inlet 20000	Z84-V7 outlet 1400	Z84-V7 emitted 18600	Z84-V7 emitted 85870	0.00008587	522,288	2177.9	0.2		
	Z84-V1-2 inlet 5300	Z84-V1-2 outlet 240	Z84-V1-2 emitted 5060	Z84-V1-2 inlet 13000	Z84-V1-2 outlet 610	Z84-V1-2 emitted 12390	Z84-V1-2 inlet 1400	Z84-V1-2 outlet 88	Z84-V1-2 emitted 1312	Z84-V1-2 inlet 8300	Z84-V1-2 outlet 610	Z84-V1-2 emitted 7690	Z84-V1-2 emitted 26452	0.000026452	8,154,835	34005.7	0.9	1.1	15.81
Nov-11	Z84-V7 inlet 19000	Z84-V7 outlet 9200	Z84-V7 emitted 9800	Z84-V7 inlet 21000	Z84-V7 outlet 18000	Z84-V7 emitted 3000	Z84-V7 inlet 2600	Z84-V7 outlet 2700	Z84-V7 emitted -100	Z84-V7 inlet 17000	Z84-V7 outlet 18000	Z84-V7 emitted -1000	Z84-V7 emitted 11700	0.0000117	453,600	1891.5	0.0		
	Z84-V1-2 inlet 10000	Z84-V1-2 outlet 140	Z84-V1-2 emitted 9860	Z84-V1-2 inlet 13000	Z84-V1-2 outlet 230	Z84-V1-2 emitted 12770	Z84-V1-2 inlet 1100	Z84-V1-2 outlet 21	Z84-V1-2 emitted 1079	Z84-V1-2 inlet 6600	Z84-V1-2 outlet 160	Z84-V1-2 emitted 6440	Z84-V1-2 emitted 30149	0.000030149	8,035,200	33506.8	1.0	1.0	15.81
Dec-11	Z84-V7 inlet 18000	Z84-V7 outlet 1200	Z84-V7 emitted 16800	Z84-V7 inlet	Z84-V7 outlet	Z84-V7 emitted 0	Z84-V7 inlet	Z84-V7 outlet	Z84-V7 emitted 0	Z84-V7 inlet	Z84-V7 outlet	Z84-V7 emitted 0	Z84-V7 emitted 16800	0.0000168	453,600	1891.5	0.0		
	Z84-V1-2 inlet 2900	Z84-V1-2 outlet 370	Z84-V1-2 emitted 2530	Z84-V1-2 inlet	Z84-V1-2 outlet	Z84-V1-2 emitted 0	Z84-V1-2 inlet	Z84-V1-2 outlet	Z84-V1-2 emitted 0	Z84-V1-2 inlet	Z84-V1-2 outlet	Z84-V1-2 emitted 0	Z84-V1-2 emitted 2530	0.00000253	8,035,200	33506.8	0.1	0.1	14.43

QUARTERLY SAMPLING TOTAL VOC

					Stripper VOC (tons)	API VOC (tons)	Total VOC (tons)
1st QTR 11	Z84-V7 inlet 60210	Z84-V7 outlet 6030	Z84-V7 emitted 54180	1st QTR 11	1.84	0.16	2.00
	Z84-V1-2 inlet 20610	Z84-V1-2 outlet 3235	Z84-V1-2 emitted 17375				
2nd QTR 11	Z84-V7 inlet 130200	Z84-V7 outlet 1415	Z84-V7 emitted 128785	2nd QTR 11	3.13	0.16	3.29
	Z84-V1-2 inlet 31170	Z84-V1-2 outlet 7410	Z84-V1-2 emitted 23760				
3rd QTR 11	Z84-V7 inlet 62100	Z84-V7 outlet 2128	Z84-V7 emitted 59972	3rd QTR 11	3.37	0.16	3.53
	Z84-V1-2 inlet 27240	Z84-V1-2 outlet 169	Z84-V1-2 emitted 27071				
4th QTR 11	Z84-V7 inlet 95310	Z84-V7 outlet 5123	Z84-V7 emitted 90187	4th QTR 11	3.13	0.16	3.29
	Z84-V1-2 inlet 30170	Z84-V1-2 outlet 4325	Z84-V1-2 emitted 25845				

	Total VOC ppb			TONS/QTR	VOC Mass (tons)	VOC YTD (ton)
Z84-V7 emitted	54180	0.00005418	1,631,520	6803.4	0.37	0.37
Z84-V1-2 emitted	17375	0.000017375	20,329,718	84774.9	1.47	1.84
Z84-V7 emitted	128785	0.000128785	1,662,480	6932.5	0.89	2.73
Z84-V1-2 emitted	23760	0.00002376	22,551,437	94039.5	2.23	4.97
Z84-V7 emitted	59972	0.000059972	1,506,960	6284.0	0.38	5.35
Z84-V1-2 emitted	27071	0.000027071	26,517,787	110579.2	2.99	8.34
Z84-V7 emitted	90187	0.000090187	1,390,896	5800.0	0.52	8.86
Z84-V1-2 emitted	25845	0.000025845	24,225,235	101019.2	2.61	11.47

A. WATER SEPARATOR Z84-T5 Condition 3.t.

	Z84-T5 Flow (gal)		Z84-T5 VOC Mass= days X 3.534 lbs/day
1st QTR 11	20,329,718	1st QTR 10	0.1590 tons
2nd QTR 11	22,551,437	2nd QTR 10	0.1608 tons
3rd QTR 11	26,517,787	3rd QTR 10	0.1600 tons
4th QTR 11	24,225,235	4th QTR 10	0.1600 tons
	93,624,177		

Ciniza Refinery Sewer Test Form

Test Data for Main Line Upstream of Listed Manhole

Unit & Line #: TANK FARM
Test Fluid: Water: water
Test Water Column (ft.): 8'
Test Duration (min.): 45 min.
Manhole Number: 15, 16, 17, 18, 20.
Date: 12-15-11

Were all process sewer cup branches from the above manholes filled with water to verify that branch lines held level? yes

Did all branch lines hold level? yes

List any branch lines and location of branch lines that did not hold level (if any):

All branch lines from 235 231 108 227 342 232, 106, 228, 343 451, 452, 453, Held water for 45 min. Test OK

Test Witness Signatures: [signature]

Environmental: [signature]

Western Representative: Ray Martin [signature]

Ciniza Refinery Sewer Test Form

Test Data for Main Line Upstream of Listed Manhole

Unit & Line #: Tank Farm
Test Fluid: Water: Fire Water
Test Water Column (ft.): 8'
Test Duration (min.): 45 min.
Manhole Number: #1, #2, #3, #4, #5.
Date: 12-21-11

Were all process sewer cup branches from the above manholes filled with water to verify that branch lines held level? yes

Did all branch lines hold level? yes

List any branch lines and location of branch lines that did not hold level (if any):

All branch Lines from TK's 338, 339, 225, 112, 111, 115, 116, 112, 571, 572, 569, 570, were tested with water all Tested ok., Hellel test for 45 min (can not find sewer Box #5, 2, sewer Box 6. is not authorized to open. H2S present.

Test Witness Signatures: Ray Martinez

Environmental:

Western Representative: James Herrera Jr

Ciniza Refinery Sewer Test Form

Test Data for Main Line Upstream of Listed Manhole

Unit & Line #: Tank Farm.
Test Fluid: Water: water
Test Water Column (ft.): 6' water Column.
Test Duration (min.): 30 min
Manhole Number: #7, 8, 9, 31, 32
Date: 12-22-11

Were all process sewer cup branches from the above manholes filled with water to verify that branch lines held level? yes

Did all branch lines hold level? yes

List any branch lines and location of branch lines that did not hold level (if any):
North of 382
6" dike drain to CB-27 has a split and needs to be repaired. All other branch lines from TKS 581, 582, 575, 577, 574, 576, tested ok.

Test Witness Signatures: James Herrera Jr

Environmental:

Western Representative: Ray Martinez.

Ciniza Refinery Sewer Test Form

Test Data for Main Line Upstream of Listed Manhole

Unit & Line #: Tank Farm
Test Fluid: Water: Water
Test Water Column (ft.): 5 ft
Test Duration (min.): 45 min
Manhole Number: 9. 10 11
Date: 12-28-11

Were all process sewer cup branches from the above manholes filled with water to verify that branch lines held level? yes

Did all branch lines hold level? yes

List any branch lines and location of branch lines that did not hold level (if any):

N/A

Test Witness Signatures: Frank [illegible] 143/P 12-28-11

Environmental: [illegible]

Western Representative: [illegible]

Ciniza Refinery Sewer Test Form

Test Data for Main Line Upstream of Listed Manhole

Unit & Line #: Tank Farm
Test Fluid: Water: Water
Test Water Column (ft.): 19 ft
Test Duration (min.): 45 min
Manhole Number: 10, 11, 12, 13
Date: 12-29-11

Were all process sewer cup branches from the above manholes filled with water to verify that branch lines held level? yes

Did all branch lines hold level? yes

List any branch lines and location of branch lines that did not hold level (if any):

N/A

Test Witness Signatures: Frank O. [illegible] 11 29/A 12-29-11

Environmental: [illegible]

Western Representative: [illegible]

Ciniza Refinery Sewer Test Form

Test Data for Main Line Upstream of Listed Manhole

Unit & Line #: All Branch line from B-1 TO B-6
Test Fluid: Water: Water
Test Water Column (ft.): 6' water Column
Test Duration (min.): 30 Min
Manhole Number: B-1, B2, B3, B4, B6.
Date:

Were all process sewer cup branches from the above manholes filled with water to verify that branch lines held level?

Did all branch lines hold level?

List any branch lines and location of branch lines that did not hold level (if any):

Branch line From B-6 Box to main is plugged and needs to be Vacumned out. (Line unplugged)

Test Witness Signatures:

Environmental:

Western Representative: Ray Martinez

2011 EPA/NMED/RCRA Activity

01/17/2011	Provided the agencies the completion of Milestone #4 Certification "Commence operation of the Storm Water Management System" by January 15, 2011.
01/26/2011	Received Approval with Modifications for Remedy Completion Report Railroad Rack Lagoon (SWMU No. 8) Revised Report from the HWB.
02/14/2011	Provided agencies the Completion of Milestone # 5 Certification "Complete Measures to prevent the old API Separator from receiving any flows, including removal of segments from, and insertion of cement plugs in, all inlet piping to the old API Separator" by March 01, 2011.
03/30/2011	Submitted the 2011 Financial Assurance Cost Estimate to the HWB.
04/04/2011	Submitted the Closure Certification for the Land Treatment Unit and received approval from the HWB on April 26, 2011.
06/15/2011	Received Approval with Modifications for the Investigation Work Plan SWMU No. 14 Old API Separator.
07/18/2011	Provided agencies the Completion of Milestone #6 Certification "Complete site preparation and foundation for DGF and MPPE units" by July 31, 2011.
07/22/2011	Received Approval with Modifications on the Annual Groundwater Monitoring Report: Gallup Refinery 2009, by the HWB.
09/16/2011	Received notification of issuance of Draft Hazardous Waste Permit for the Gallup Refinery from the HWB.
10/03/2011	NMED conducted a hazardous waste Compliance Evaluation Inspection at the Gallup Refinery.
10/07/2011	Received Approval with Modifications for the Excavated Soil For Use at Evaporation Pond Berms from the HWB.
11/04/2011	Received approval from OCD on the Closure of the Temporary NE Land Farm and Beneficial Reuse of Remediated Soils.
12/02/2011	Received Approval With Modifications Request For Approval of Process Design Changes from the HWB.

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2011 Major Refinery Activities and Events

January	Commenced operation of the new storm water management system.
May	There was a Mini-turnaround of general maintenance of the Platformer, NHT, DHT and SATs Units.
June	Resurvey of active ground water monitoring wells and recovery wells was completed by DePauli Engineering & Surveying LLC.
July	Completed site preparation and foundations for DGF and MPPE wastewater treatment units.
Summer	Dike repairs were completed by Envirotech.
September/October	Conducted annual groundwater sampling.
December	Underground sewer test at Tank Farm and Boiler House was completed.

2011 Year	Three tanks were fitted with operational radar gauges.
	An additional fire engine was purchased and a new fire station was built.

SPILL EVENT INFORMATION (2011)

Date of Event	Incident Report #	Time of Event	Product/Stream Name	Unit & Location of Event	Equipment Involved	Result of Event	Ground (g)/ Slab (s)	Route Cause of Event	Initial Estimated Quantity (bbls)
1/1	**11-001**	**1940**	Oily water	Crude Unit	CD-3 South Desalter	Release of Oily water	s	Weather Freeze	unk
1/1	11-004	1430	Slop Oil	TankFarm Pipeway	T-105 to T-107 Piping	split Line	g	Pipe Corrosion	unk
1/2	11-005	1700	Diesel	Truck Rack		Spill from Overflow Drains	s	Cracked Overflow Tubes	200 gal
1/4	11-010	0800	Caustic	Caustic Tank	Caustic Tank Suction Piping	Caustic spill from Baker Tank	g	Frozen line	2300 gal
1/5	11-012	1245	Sour Naphtha	North Main Pipeway	Sour Naphtha Line (DHT DV-25)	Leak Line	g	Pipe Corrosion	to Slab
1/8	11-015	1205	Diesel	Crude/FCC Pipeway	Sour Naphtha Line	Leaky Flange-due to Hydrotest	s	Leaky Flange	10 gal
1/23	11-038	2020	Process Wastewater	API Area	Benzene Stripper #4	Foam and Wastewater out of stack	s	Foam	10-20
1/25	11-035	1500	Process Wastewater	API Area	Benzene Stripper #4	Foam and Wastewater out of stack	s	Foam	5-8
2/3	11-040	0700	Sour Water	SWS Stripper	SWS Tk-1	Overflow Tank	g	Frozen/plugged line	unk
2/11	11-048	2200	API Wastewater	API Area	API Pit	Overflow of West Bay of API	g	Backup of East Bay	~5 bbls
2/15		1450	Antifreeze	Warehouse Yard	N/A	55 gal drum leak-Spill of Antifreeze	s	Leaky Drum	1 gal
2/18	11-051	0500	Naphtha	NHT	HCBD/Circ Piping	Leak on NHT Stripper Bottom to HCBD Line	s	Pipe Corrosion	<1 gal
3/23	11-071	1000	Process Wastewater	Old API	N/A	Flow into Old API	s	Mis-valve allignment	5 bbls
3/29	11-070	1830	Process Wastewater	API Area	South Benzene Stripper	Stripper Overflow	s/g	South Fan Tripped	20-25 bbl/1/2 bbl
4/29	11-100	1300	ULSD	Mkt Tank Area	OC Diesel Tank	Broken Nipple on Waterdraw Drain valve	s	Corrsoions/brittle fittings	1400 gal
5/2	11-103	1800	ULSD	Tank Farm	T-577	Tank Overflow	g	Stuck Autogauge	<3 bbls
5/2	11-105	1630	Sour Naphtha	Tank Farm	T-235	Spill to ground	g	Bad Gasket	<1 bbl
5/13	11-129	2030	Process Wastewater	API Area	Benzene Stripper #4	Benezene Stripper #4 Containment Pad Overflow	s	Foam	~10 bbls
5/28	11-145	0700	Water/Oil Mixture	API Area	Benzene Strippers	Overflow Containment Pad	s/g	Foam	1600 gal
7/12	11-190	0920	Slop Oil	Tankfarm- South of T-228	Slop Line to T-107 from Unit	Slop Oil drain to pad and ground	s/g	Thin wall piping	<1 gal
7/26	11-199	1208	Diesel	Boiler Area	Sulair Compressor	Overfilling Tank	s	Operator Error	1 bbl
8/18	11-219	0915	Gasoline Additive	Truck Rack	Additive Tubing	Underground Leak	g	Old piping	7 gal
8/27	11-229	1330	Fuel Oil	Hot Oil Tank Farm Loading Rack	Demo- Fuel Oil Lines	Leakage from demoed lines	g	Oil residue in lines	1/2 bbl
9/21	11-244	0430	Diesel	Fire Bird Fuel Island	FJ Crikos Trucking Inc	Overfilled diesel while filling up	s	Operator Error	3 gal
10/2	11-249	1540	Oily water	Offsite (T-35)	T-35	Overflow Tank	g	Weather-Storm	13 bbls
10/12	11-259	1615	Waste Oil	Bundle Pad	PSC Vacuum Truck	Spill to Asphalt	s	Stuck Flapper Valve	15-20 gal
10/14	11-262	0200	Gasoline	Wholesale Transportation Parking Lot	Tanker Transport	Spill to Asphalt	s	Operator Error	30 gal
10/21	11-267	0630	Process Wastewater	API Area	Old API Pit	Overflow from T-105 to Old API	na	Valve misalignment	3200 gal
10/29	11-278	1950	Crude Oil	Truck/Transmix/Crude Unloading Rack	N/A	Crude Oil on Ground	g	Incorrect sampling/offloading product	25 gal
11/14	11-289	1100	FCC Feed	FCCU	N/A	Leak in FCCU Charge Line	g	Leak in FCCU Charge Line	60 bbls
11/17	11-295	2230	Water/Oil Mixture	API Area	Knockout Drum/Flare	Overflow Flare Knockout Drum/fire on Flare Stack	g	Pressure up of Flare Knockout Drum	42-50 gal
11/20	11-299	2045	Caustic	API Area	Knockout Drum-Sandpiper pump	Caustic spill from leaky Hose	g	Ruptured Caustic Hose from Sandpiper Pump	5 bbls
12/9	11-324	0100	Process Wastewater	API Area	Benzene Stripper #4	Overflow Containment Pad	g	Stripper Tripped Out/collapsed discharge piping	10-15 bbls
12/13		0800	Crude Oil	Railroad Rack	Crude Railcar	PRV on railcar released crude oil	g	Connected Steam pressured up rail car	1/4 bbls
12/23	11-350	1400	Diesel	Boiler House	Diesel Air Compressor	Leaking Diesel to Containment Area	s	Fill Line partiall blocked in	50 gal
12/29	11-354	0820	Ethanol	Transmix/Ethanol Unloading Area	N/A	Leaky material on ground	g	Possible leaky line/or past spillage	5 gal

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 01/10/2011

NOTE ANY FINDINGS: No Issues found at time of inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
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DATE OF INSPECTION: 01/20/2011

NOTE ANY FINDINGS: No Issues found.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 02/08/2011

NOTE ANY FINDINGS: No Issues found at time of inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 02/24/2011

NOTE ANY FINDINGS: No Issues found.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 03/09/2011

NOTE ANY FINDINGS: No Issues found.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 04/12/2011

NOTE ANY FINDINGS: No Issues Found at time of Inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 04/20/2011

NOTE ANY FINDINGS: No Issues found at time of inspection.

Print Name / Title:: Beck ~~Larsen~~ / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 05/10/2011

NOTE ANY FINDINGS: No Issues found at time of inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 05/26/2011

NOTE ANY FINDINGS: No Issues Found at time of Inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 06/09/2011

NOTE ANY FINDINGS: No Issues Found at time of Inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 06/14/2011

NOTE ANY FINDINGS: No Issues found at time of inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 07/07/2011

NOTE ANY FINDINGS: No Issues found at time of inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 07/18/2011

NOTE ANY FINDINGS: No Issues Found at time of Inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 08/09/2011

NOTE ANY FINDINGS: No Issues Found at time of Inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 08/16/2011

NOTE ANY FINDINGS: No Issues Found at time of Inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 09/13/2011

NOTE ANY FINDINGS: No Issues Found at time of Inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 09/26/2011

NOTE ANY FINDINGS: No Issues Found at time of Inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 10/10/2011

NOTE ANY FINDINGS: No Issues Found at time of Inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 10/20/2011

NOTE ANY FINDINGS: No Issues Found at time of Inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 11/10/2011

NOTE ANY FINDINGS: No Issues Found at time of Inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 11/22/2011

NOTE ANY FINDINGS: No Issues Found at time of Inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 12/06/2011

NOTE ANY FINDINGS: No Issues Found at time of Inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

WESTERN REFINING
OCD DISCHARGE PERMIT (GW-032)
BI-MONTHLY PERIMETER INSPECTION

Instructions: Inspection shall be conducted on a bimonthly basis or as needed in accordance with OCD Discharge Permit (GW-032)(Section #20)(Revision of: March 12,2008).The inspection is to focus on hydrocarbon staining or any release that could potentially result in contamination leaving the property boundaries.

DATE OF INSPECTION: 12/16/2011

NOTE ANY FINDINGS: No Issues Found at time of Inspection.

Print Name / Title:: Beck Larsen / Environmental Engineer

Signature of Inspector:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Wednesday, May 04, 2011

Ed Riege
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: Gallup OCD Landfarms

Order No.: 1104008

Dear Ed Riege:

Hall Environmental Analysis Laboratory, Inc. received 18 sample(s) on 3/31/2011 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms
Lab Order: 1104008

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Batch ID	Test Name	Collection Date
1104008-01A	BG-NE-033011	26291	EPA Method 300.0: Anions	3/30/2011 12:10:00 PM
1104008-01A	BG-NE-033011	26348	EPA Method 8310: PAHs	3/30/2011 12:10:00 PM
1104008-01A	BG-NE-033011	26347	EPA Method 504.1 Modified: EDB	3/30/2011 12:10:00 PM
1104008-01A	BG-NE-033011	26253	EPA Method 7471: Mercury	3/30/2011 12:10:00 PM
1104008-01A	BG-NE-033011	26291	EPA Method 300.0: Anions	3/30/2011 12:10:00 PM
1104008-01A	BG-NE-033011	26239	EPA Method 8260B: VOLATILES	3/30/2011 12:10:00 PM
1104008-01A	BG-NE-033011	26243	EPA Method 8270C: Semivolatiles	3/30/2011 12:10:00 PM
1104008-01A	BG-NE-033011	26241	EPA Method 8082: PCB's	3/30/2011 12:10:00 PM
1104008-01A	BG-NE-033011	26237	EPA Method 6010B: Soil Metals	3/30/2011 12:10:00 PM
1104008-01A	BG-NE-033011	26237	EPA Method 6010B: Soil Metals	3/30/2011 12:10:00 PM
1104008-01A	BG-NE-033011	26237	EPA Method 6010B: Soil Metals	3/30/2011 12:10:00 PM
1104008-01A	BG-NE-033011	26237	EPA Method 6010B: Soil Metals	3/30/2011 12:10:00 PM
1104008-01A	BG-NE-033011	R44664	SM4500-H+B: pH	3/30/2011 12:10:00 PM
1104008-01B	BG-NE-033011	R44992	CYANIDE-TOTAL	3/30/2011 12:10:00 PM
1104008-01C	BG-NE-033011	R45118	EPA 903.1: Ra 226 and EPA 904.0: Ra 2	3/30/2011 12:10:00 PM
1104008-02A	BG-W-033011	26237	EPA Method 6010B: Soil Metals	3/30/2011 1:15:00 PM
1104008-02A	BG-W-033011	26291	EPA Method 300.0: Anions	3/30/2011 1:15:00 PM
1104008-02A	BG-W-033011	26291	EPA Method 300.0: Anions	3/30/2011 1:15:00 PM
1104008-02A	BG-W-033011	26291	EPA Method 300.0: Anions	3/30/2011 1:15:00 PM
1104008-02A	BG-W-033011	26237	EPA Method 6010B: Soil Metals	3/30/2011 1:15:00 PM
1104008-02A	BG-W-033011	26253	EPA Method 7471: Mercury	3/30/2011 1:15:00 PM
1104008-02A	BG-W-033011	26237	EPA Method 6010B: Soil Metals	3/30/2011 1:15:00 PM
1104008-02A	BG-W-033011	26237	EPA Method 6010B: Soil Metals	3/30/2011 1:15:00 PM
1104008-03A	BG-S-033011	26237	EPA Method 6010B: Soil Metals	3/30/2011 2:10:00 PM
1104008-03A	BG-S-033011	26291	EPA Method 300.0: Anions	3/30/2011 2:10:00 PM
1104008-03A	BG-S-033011	26291	EPA Method 300.0: Anions	3/30/2011 2:10:00 PM
1104008-03A	BG-S-033011	26237	EPA Method 6010B: Soil Metals	3/30/2011 2:10:00 PM
1104008-03A	BG-S-033011	26237	EPA Method 6010B: Soil Metals	3/30/2011 2:10:00 PM
1104008-03A	BG-S-033011	26237	EPA Method 6010B: Soil Metals	3/30/2011 2:10:00 PM
1104008-03A	BG-S-033011	26253	EPA Method 7471: Mercury	3/30/2011 2:10:00 PM
1104008-03A	BG-S-033011	26291	EPA Method 300.0: Anions	3/30/2011 2:10:00 PM
1104008-04A	CentralOCD-Close-0	26315	Volatiles by 8260B/1311	3/30/2011 4:30:00 PM
1104008-04B	CentralOCD-Close-0	R44744	EPA Method 8260B: VOLATILES	4/8/2011
1104008-04C	CentralOCD-Close-0	26414	EPA Method 8011/504.1: EDB	4/8/2011
1104008-04D	CentralOCD-Close-0	26425	EPA Method 8082: PCB's	4/8/2011
1104008-04D	CentralOCD-Close-0	26424	EPA Method 8310: PAHs	4/8/2011
1104008-04E	CentralOCD-Close-0	26405	Total Phenolics	4/8/2011
1104008-04F	CentralOCD-Close-0	26407	EPA Method 200.7: Metals	4/8/2011

CLIENT: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms
Lab Order: 1104008

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Batch ID	Test Name	Collection Date
1104008-04F	CentralOCD-Close-0	26407	EPA Method 200.7: Metals	4/8/2011
1104008-04F	CentralOCD-Close-0	26593	EPA Method 245.1: Mercury	4/8/2011
1104008-04G	CentralOCD-Close-0	26401	SM2540C MOD: Total Dissolved Solids	4/8/2011
1104008-04G	CentralOCD-Close-0	R44785	EPA Method 300.0: Anions	4/8/2011
1104008-04G	CentralOCD-Close-0	R44769	SM4500-H+B: pH	4/8/2011
1104008-04G	CentralOCD-Close-0	R44750	EPA Method 300.0: Anions	4/8/2011
1104008-04G	CentralOCD-Close-0	R44750	EPA Method 300.0: Anions	4/8/2011
1104008-04G	CentralOCD-Close-0	R44785	EPA Method 300.0: Anions	4/8/2011
1104008-04H	CentralOCD-Close-0	R44992	EPA 335.4: Total Cyanide Subbed	4/8/2011
1104008-05B	NEOCD-Close-0330	R44669	EPA Method 300.0: Anions	4/8/2011
1104008-05B	NEOCD-Close-0330	R44669	EPA Method 300.0: Anions	4/8/2011
1104008-05B	NEOCD-Close-0330	R44698	EPA Method 300.0: Anions	4/8/2011
1104008-05C	NEOCD-Close-0330	26389	EPA Method 200.7: Metals	4/8/2011
1104008-05C	NEOCD-Close-0330	26389	EPA Method 200.7: Metals	4/8/2011
1104008-05C	NEOCD-Close-0330	26389	EPA Method 200.7: Metals	4/8/2011
1104008-06A	EB-033011	R44594	EPA Method 8260B: VOLATILES	3/30/2011 6:00:00 PM
1104008-07A	FB-033-11	R44594	EPA Method 8260B: VOLATILES	3/30/2011 6:05:00 PM
1104008-08A	Central OCD-01-033	26239	EPA Method 8021B: Volatiles	3/31/2011 10:30:00 AM
1104008-08A	Central OCD-01-033	26291	EPA Method 300.0: Anions	3/31/2011 10:30:00 AM
1104008-08A	Central OCD-01-033	26291	EPA Method 300.0: Anions	3/31/2011 10:30:00 AM
1104008-08A	Central OCD-01-033	26239	EPA Method 8015B: Gasoline Range	3/31/2011 10:30:00 AM
1104008-08A	Central OCD-01-033	26269	EPA Method 418.1: TPH	3/31/2011 10:30:00 AM
1104008-08A	Central OCD-01-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 10:30:00 AM
1104008-08A	Central OCD-01-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 10:30:00 AM
1104008-08A	Central OCD-01-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 10:30:00 AM
1104008-08A	Central OCD-01-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 10:30:00 AM
1104008-08A	Central OCD-01-033	26252	EPA Method 8015B: Diesel Range Orga	3/31/2011 10:30:00 AM
1104008-08B	Central OCD-01-033	R45118	EPA 903.1: Ra 226 and EPA 904.0: Ra 2	3/31/2011 10:30:00 AM
1104008-09A	Central OCD-02-033	26239	EPA Method 8015B: Gasoline Range	3/31/2011 11:00:00 AM
1104008-09A	Central OCD-02-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 11:00:00 AM
1104008-09A	Central OCD-02-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 11:00:00 AM
1104008-09A	Central OCD-02-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 11:00:00 AM
1104008-09A	Central OCD-02-033	26239	EPA Method 8021B: Volatiles	3/31/2011 11:00:00 AM
1104008-09A	Central OCD-02-033	26252	EPA Method 8015B: Diesel Range Orga	3/31/2011 11:00:00 AM
1104008-09A	Central OCD-02-033	26291	EPA Method 300.0: Anions	3/31/2011 11:00:00 AM
1104008-09A	Central OCD-02-033	26291	EPA Method 300.0: Anions	3/31/2011 11:00:00 AM
1104008-09A	Central OCD-02-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 11:00:00 AM
1104008-09B	Central OCD-02-033	R45118	EPA 903.1: Ra 226 and EPA 904.0: Ra 2	3/31/2011 11:00:00 AM
1104008-10A	Central OCD-03-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 11:35:00 AM
1104008-10A	Central OCD-03-033	26291	EPA Method 300.0: Anions	3/31/2011 11:35:00 AM

CLIENT: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms
Lab Order: 1104008

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Batch ID	Test Name	Collection Date
1104008-10A	Central OCD-03-033	26291	EPA Method 300.0: Anions	3/31/2011 11:35:00 AM
1104008-10A	Central OCD-03-033	26252	EPA Method 8015B: Diesel Range Orga	3/31/2011 11:35:00 AM
1104008-10A	Central OCD-03-033	26239	EPA Method 8021B: Volatiles	3/31/2011 11:35:00 AM
1104008-10A	Central OCD-03-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 11:35:00 AM
1104008-10A	Central OCD-03-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 11:35:00 AM
1104008-10A	Central OCD-03-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 11:35:00 AM
1104008-10A	Central OCD-03-033	26239	EPA Method 8015B: Gasoline Range	3/31/2011 11:35:00 AM
1104008-10B	Central OCD-03-033	R45118	EPA 903.1: Ra 226 and EPA 904.0: Ra 2	3/31/2011 11:35:00 AM
1104008-11A	Central OCD-04-033	26239	EPA Method 8021B: Volatiles	3/31/2011 11:20:00 AM
1104008-11A	Central OCD-04-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 11:20:00 AM
1104008-11A	Central OCD-04-033	26291	EPA Method 300.0: Anions	3/31/2011 11:20:00 AM
1104008-11A	Central OCD-04-033	26291	EPA Method 300.0: Anions	3/31/2011 11:20:00 AM
1104008-11A	Central OCD-04-033	26239	EPA Method 8015B: Gasoline Range	3/31/2011 11:20:00 AM
1104008-11A	Central OCD-04-033	26252	EPA Method 8015B: Diesel Range Orga	3/31/2011 11:20:00 AM
1104008-11A	Central OCD-04-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 11:20:00 AM
1104008-11A	Central OCD-04-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 11:20:00 AM
1104008-11A	Central OCD-04-033	26237	EPA Method 6010B: Soil Metals	3/31/2011 11:20:00 AM
1104008-11B	Central OCD-04-033	R45118	EPA 903.1: Ra 226 and EPA 904.0: Ra 2	3/31/2011 11:20:00 AM
1104008-12A	NE OCD-01-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 8:45:00 AM
1104008-12A	NE OCD-01-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 8:45:00 AM
1104008-12A	NE OCD-01-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 8:45:00 AM
1104008-12A	NE OCD-01-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 8:45:00 AM
1104008-12A	NE OCD-01-033111	26291	EPA Method 300.0: Anions	3/31/2011 8:45:00 AM
1104008-12A	NE OCD-01-033111	26291	EPA Method 300.0: Anions	3/31/2011 8:45:00 AM
1104008-12B	NE OCD-01-033111	R45118	EPA 903.1: Ra 226 and EPA 904.0: Ra 2	3/31/2011 8:45:00 AM
1104008-13A	NE OCD-02-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 9:00:00 AM
1104008-13A	NE OCD-02-033111	26291	EPA Method 300.0: Anions	3/31/2011 9:00:00 AM
1104008-13A	NE OCD-02-033111	26291	EPA Method 300.0: Anions	3/31/2011 9:00:00 AM
1104008-13A	NE OCD-02-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 9:00:00 AM
1104008-13A	NE OCD-02-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 9:00:00 AM
1104008-13A	NE OCD-02-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 9:00:00 AM
1104008-13B	NE OCD-02-033111	R45118	EPA 903.1: Ra 226 and EPA 904.0: Ra 2	3/31/2011 9:00:00 AM
1104008-14A	NE OCD-03-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 9:25:00 AM
1104008-14A	NE OCD-03-033111	26291	EPA Method 300.0: Anions	3/31/2011 9:25:00 AM
1104008-14A	NE OCD-03-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 9:25:00 AM
1104008-14A	NE OCD-03-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 9:25:00 AM
1104008-14A	NE OCD-03-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 9:25:00 AM
1104008-14A	NE OCD-03-033111	26291	EPA Method 300.0: Anions	3/31/2011 9:25:00 AM
1104008-14B	NE OCD-03-033111	R45118	EPA 903.1: Ra 226 and EPA 904.0: Ra 2	3/31/2011 9:25:00 AM
1104008-15A	NE OCD-04-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 9:40:00 AM

CLIENT:	Western Refining Southwest, Gallup
Project:	Gallup OCD Landfarms
Lab Order:	1104008

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Batch ID	Test Name	Collection Date
1104008-15A	NE OCD-04-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 9:40:00 AM
1104008-15A	NE OCD-04-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 9:40:00 AM
1104008-15A	NE OCD-04-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011 9:40:00 AM
1104008-15A	NE OCD-04-033111	26291	EPA Method 300.0: Anions	3/31/2011 9:40:00 AM
1104008-15B	NE OCD-04-033111	R45118	EPA 903.1: Ra 226 and EPA 904.0: Ra 2	3/31/2011 9:40:00 AM
1104008-16A	Trip Blank	R44594	EPA Method 8260B: VOLATILES	
1104008-17A	BD-02-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011
1104008-17A	BD-02-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011
1104008-17A	BD-02-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011
1104008-17A	BD-02-033111	26291	EPA Method 300.0: Anions	3/31/2011
1104008-17A	BD-02-033111	26291	EPA Method 300.0: Anions	3/31/2011
1104008-17A	BD-02-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011
1104008-17B	BD-02-033111	R45118	EPA 903.1: Ra 226 and EPA 904.0: Ra 2	3/31/2011
1104008-18A	BD-01-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011
1104008-18A	BD-01-033111	26291	EPA Method 300.0: Anions	3/31/2011
1104008-18A	BD-01-033111	26291	EPA Method 300.0: Anions	3/31/2011
1104008-18A	BD-01-033111	26239	EPA Method 8015B: Gasoline Range	3/31/2011
1104008-18A	BD-01-033111	26239	EPA Method 8021B: Volatiles	3/31/2011
1104008-18A	BD-01-033111	26252	EPA Method 8015B: Diesel Range Orga	3/31/2011
1104008-18A	BD-01-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011
1104008-18A	BD-01-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011
1104008-18A	BD-01-033111	26237	EPA Method 6010B: Soil Metals	3/31/2011
1104008-18B	BD-01-033111	R45118	EPA 903.1: Ra 226 and EPA 904.0: Ra 2	3/31/2011

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BG-NE-033011
Lab Order:	1104008	**Collection Date:**	3/30/2011 12:10:00 PM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1 MODIFIED: EDB						Analyst: **LRW**
1,2-Dibromoethane	ND	0.10		µg/Kg	1	4/11/2011 8:04:28 PM
Surr: 1,2,3-Trichloropropane	102	48.2-131		%REC	1	4/11/2011 8:04:28 PM
EPA METHOD 8082: PCB'S						Analyst: **SCC**
Aroclor 1016	ND	0.020		mg/Kg	1	4/5/2011 5:47:47 PM
Aroclor 1221	ND	0.020		mg/Kg	1	4/5/2011 5:47:47 PM
Aroclor 1232	ND	0.020		mg/Kg	1	4/5/2011 5:47:47 PM
Aroclor 1242	ND	0.020		mg/Kg	1	4/5/2011 5:47:47 PM
Aroclor 1248	ND	0.020		mg/Kg	1	4/5/2011 5:47:47 PM
Aroclor 1254	ND	0.020		mg/Kg	1	4/5/2011 5:47:47 PM
Aroclor 1260	ND	0.020		mg/Kg	1	4/5/2011 5:47:47 PM
Surr: Decachlorobiphenyl	79.2	20.8-136		%REC	1	4/5/2011 5:47:47 PM
EPA METHOD 8310: PAHS						Analyst: **SCC**
Naphthalene	ND	0.25		mg/Kg	1	4/13/2011 1:50:59 PM
1-Methylnaphthalene	ND	0.25		mg/Kg	1	4/13/2011 1:50:59 PM
2-Methylnaphthalene	ND	0.25		mg/Kg	1	4/13/2011 1:50:59 PM
Acenaphthylene	ND	0.25		mg/Kg	1	4/13/2011 1:50:59 PM
Acenaphthene	ND	0.25		mg/Kg	1	4/13/2011 1:50:59 PM
Fluorene	ND	0.030		mg/Kg	1	4/13/2011 1:50:59 PM
Phenanthrene	ND	0.015		mg/Kg	1	4/13/2011 1:50:59 PM
Anthracene	ND	0.015		mg/Kg	1	4/13/2011 1:50:59 PM
Fluoranthene	ND	0.020		mg/Kg	1	4/13/2011 1:50:59 PM
Pyrene	ND	0.025		mg/Kg	1	4/13/2011 1:50:59 PM
Benz(a)anthracene	ND	0.010		mg/Kg	1	4/13/2011 1:50:59 PM
Chrysene	ND	0.011		mg/Kg	1	4/13/2011 1:50:59 PM
Benzo(b)fluoranthene	ND	0.010		mg/Kg	1	4/13/2011 1:50:59 PM
Benzo(k)fluoranthene	ND	0.010		mg/Kg	1	4/13/2011 1:50:59 PM
Benzo(a)pyrene	ND	0.010		mg/Kg	1	4/13/2011 1:50:59 PM
Dibenz(a,h)anthracene	ND	0.010		mg/Kg	1	4/13/2011 1:50:59 PM
Benzo(g,h,i)perylene	ND	0.010		mg/Kg	1	4/13/2011 1:50:59 PM
Indeno(1,2,3-cd)pyrene	ND	0.10		mg/Kg	1	4/13/2011 1:50:59 PM
Surr: Benzo(e)pyrene	82.7	37.6-115		%REC	1	4/13/2011 1:50:59 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Fluoride	4.3	1.5		mg/Kg	5	4/8/2011 4:23:25 PM
Chloride	7.6	7.5		mg/Kg	5	4/8/2011 4:23:25 PM
Nitrogen, Nitrate (As N)	ND	1.5		mg/Kg	5	4/8/2011 4:23:25 PM
Sulfate	42	7.5		mg/Kg	5	4/8/2011 4:23:25 PM
EPA METHOD 7471: MERCURY						Analyst: **ELS**

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BG-NE-033011
Lab Order:	1104008	**Collection Date:**	3/30/2011 12:10:00 PM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: **ELS**
Mercury	ND	0.033		mg/Kg	1	4/5/2011 12:42:41 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	ND	13		mg/Kg	5	4/5/2011 11:29:42 AM
Barium	380	1.0		mg/Kg	10	4/5/2011 1:08:39 PM
Cadmium	ND	0.50		mg/Kg	5	4/5/2011 11:29:42 AM
Chromium	17	1.5		mg/Kg	5	4/5/2011 11:29:42 AM
Copper	4.2	1.5		mg/Kg	5	4/5/2011 11:29:42 AM
Iron	20000	500		mg/Kg	500	4/5/2011 1:12:54 PM
Lead	6.0	1.3		mg/Kg	5	4/5/2011 11:29:42 AM
Manganese	370	1.0		mg/Kg	10	4/5/2011 1:08:39 PM
Selenium	ND	13		mg/Kg	5	4/5/2011 11:29:42 AM
Silver	ND	1.3		mg/Kg	5	4/5/2011 11:29:42 AM
Uranium	ND	50		mg/Kg	10	4/5/2011 1:08:39 PM
Zinc	23	13		mg/Kg	5	4/5/2011 11:29:42 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	4/7/2011 6:29:37 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	4/7/2011 6:29:37 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	4/7/2011 6:29:37 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	4/7/2011 6:29:37 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	4/7/2011 6:29:37 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	4/7/2011 6:29:37 PM
2-Methylphenol	ND	0.50		mg/Kg	1	4/7/2011 6:29:37 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	4/7/2011 6:29:37 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	4/7/2011 6:29:37 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	4/7/2011 6:29:37 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	4/7/2011 6:29:37 PM
Phenol	ND	0.20		mg/Kg	1	4/7/2011 6:29:37 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	4/7/2011 6:29:37 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	4/7/2011 6:29:37 PM
Surr: 2,4,6-Tribromophenol	70.3	29.4-125		%REC	1	4/7/2011 6:29:37 PM
Surr: 2-Fluorobiphenyl	62.1	21-131		%REC	1	4/7/2011 6:29:37 PM
Surr: 2-Fluorophenol	64.5	25.7-110		%REC	1	4/7/2011 6:29:37 PM
Surr: 4-Terphenyl-d14	43.9	36.2-172		%REC	1	4/7/2011 6:29:37 PM
Surr: Nitrobenzene-d5	62.4	23.2-122		%REC	1	4/7/2011 6:29:37 PM
Surr: Phenol-d5	71.4	25.2-114		%REC	1	4/7/2011 6:29:37 PM
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
Benzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Toluene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BG-NE-033011
Lab Order:	1104008	**Collection Date:**	3/30/2011 12:10:00 PM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
Ethylbenzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Naphthalene	ND	0.10		mg/Kg	1	4/7/2011 6:08:04 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	4/7/2011 6:08:04 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	4/7/2011 6:08:04 PM
Acetone	ND	0.75		mg/Kg	1	4/7/2011 6:08:04 PM
Bromobenzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Bromoform	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Bromomethane	ND	0.15		mg/Kg	1	4/7/2011 6:08:04 PM
2-Butanone	ND	0.50		mg/Kg	1	4/7/2011 6:08:04 PM
Carbon disulfide	ND	0.50		mg/Kg	1	4/7/2011 6:08:04 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	4/7/2011 6:08:04 PM
Chlorobenzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Chloroethane	ND	0.10		mg/Kg	1	4/7/2011 6:08:04 PM
Chloroform	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Chloromethane	ND	0.15		mg/Kg	1	4/7/2011 6:08:04 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	4/7/2011 6:08:04 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Dibromomethane	ND	0.10		mg/Kg	1	4/7/2011 6:08:04 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	4/7/2011 6:08:04 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	4/7/2011 6:08:04 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	4/7/2011 6:08:04 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	4/7/2011 6:08:04 PM
2-Hexanone	ND	0.50		mg/Kg	1	4/7/2011 6:08:04 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BG-NE-033011
Lab Order:	1104008	**Collection Date:**	3/30/2011 12:10:00 PM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
4-Isopropyltoluene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	4/7/2011 6:08:04 PM
Methylene chloride	ND	0.15		mg/Kg	1	4/7/2011 6:08:04 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Styrene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	4/7/2011 6:08:04 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	4/7/2011 6:08:04 PM
Vinyl chloride	ND	0.050		mg/Kg	1	4/7/2011 6:08:04 PM
Xylenes, Total	ND	0.10		mg/Kg	1	4/7/2011 6:08:04 PM
Surr: 1,2-Dichloroethane-d4	76.4	49.2-130		%REC	1	4/7/2011 6:08:04 PM
Surr: 4-Bromofluorobenzene	99.9	68.3-124		%REC	1	4/7/2011 6:08:04 PM
Surr: Dibromofluoromethane	78.2	65.5-126		%REC	1	4/7/2011 6:08:04 PM
Surr: Toluene-d8	93.0	87.6-115		%REC	1	4/7/2011 6:08:04 PM
SM4500-H+B: PH						Analyst: **KS**
pH	9.03	0.100		pH Units	1	4/11/2011 3:39:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BG-W-033011
Lab Order:	1104008	**Collection Date:**	3/30/2011 1:15:00 PM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Fluoride	2.4	1.5		mg/Kg	5	4/13/2011 5:17:11 AM
Chloride	ND	7.5		mg/Kg	5	4/13/2011 5:17:11 AM
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	4/13/2011 5:17:11 AM
Nitrogen, Nitrate (As N)	3.0	1.5		mg/Kg	5	4/13/2011 5:17:11 AM
Sulfate	15	7.5		mg/Kg	5	4/13/2011 5:17:11 AM
EPA METHOD 7471: MERCURY						Analyst: **ELS**
Mercury	ND	0.033		mg/Kg	1	4/5/2011 12:51:48 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	ND	13		mg/Kg	5	4/5/2011 11:36:29 AM
Barium	380	1.0		mg/Kg	10	4/5/2011 1:23:44 PM
Cadmium	ND	0.50		mg/Kg	5	4/5/2011 11:36:29 AM
Chromium	16	1.5		mg/Kg	5	4/5/2011 11:36:29 AM
Copper	1.7	1.5		mg/Kg	5	4/5/2011 11:36:29 AM
Iron	19000	500		mg/Kg	500	4/5/2011 1:26:19 PM
Lead	8.2	1.3		mg/Kg	5	4/5/2011 11:36:29 AM
Manganese	370	1.0		mg/Kg	10	4/5/2011 1:23:44 PM
Selenium	ND	13		mg/Kg	5	4/5/2011 11:36:29 AM
Silver	ND	1.3		mg/Kg	5	4/5/2011 11:36:29 AM
Uranium	ND	50		mg/Kg	10	4/5/2011 1:23:44 PM
Zinc	20	13		mg/Kg	5	4/5/2011 11:36:29 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BG-S-033011
Lab Order:	1104008	**Collection Date:**	3/30/2011 2:10:00 PM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Fluoride	1.8	1.5		mg/Kg	5	4/13/2011 5:34:36 AM
Chloride	ND	7.5		mg/Kg	5	4/13/2011 5:34:36 AM
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	4/13/2011 5:34:36 AM
Nitrogen, Nitrate (As N)	2.1	1.5		mg/Kg	5	4/13/2011 5:34:36 AM
Sulfate	11	7.5		mg/Kg	5	4/13/2011 5:34:36 AM
EPA METHOD 7471: MERCURY						Analyst: **ELS**
Mercury	ND	0.033		mg/Kg	1	4/5/2011 12:53:38 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	ND	13		mg/Kg	5	4/5/2011 11:51:22 AM
Barium	390	1.0		mg/Kg	10	4/5/2011 1:28:55 PM
Cadmium	ND	0.50		mg/Kg	5	4/5/2011 11:51:22 AM
Chromium	9.8	1.5		mg/Kg	5	4/5/2011 11:51:22 AM
Copper	1.9	1.5		mg/Kg	5	4/5/2011 11:51:22 AM
Iron	13000	500		mg/Kg	500	4/5/2011 1:31:30 PM
Lead	2.4	1.3		mg/Kg	5	4/5/2011 11:51:22 AM
Manganese	820	50		mg/Kg	500	4/5/2011 1:31:30 PM
Selenium	ND	13		mg/Kg	5	4/5/2011 11:51:22 AM
Silver	ND	1.3		mg/Kg	5	4/5/2011 11:51:22 AM
Uranium	ND	50		mg/Kg	10	4/5/2011 1:28:55 PM
Zinc	21	13		mg/Kg	5	4/5/2011 11:51:22 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	CentralOCD-Close-033011
Lab Order:	1104008	**Collection Date:**	4/8/2011
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-04	**Matrix:**	LEACHATE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8011/504.1: EDB						Analyst: **JDC**
1,2-Dibromoethane	ND	0.010		µg/L	1	4/14/2011 4:42:21 PM
EPA METHOD 8082: PCB'S						Analyst: **SCC**
Aroclor 1016	ND	1.0		µg/L	1	4/19/2011 9:22:46 PM
Aroclor 1221	ND	1.0		µg/L	1	4/19/2011 9:22:46 PM
Aroclor 1232	ND	1.0		µg/L	1	4/19/2011 9:22:46 PM
Aroclor 1242	ND	1.0		µg/L	1	4/19/2011 9:22:46 PM
Aroclor 1248	ND	1.0		µg/L	1	4/19/2011 9:22:46 PM
Aroclor 1254	ND	1.0		µg/L	1	4/19/2011 9:22:46 PM
Aroclor 1260	ND	1.0		µg/L	1	4/19/2011 9:22:46 PM
Surr: Decachlorobiphenyl	45.2	23.9-124		%REC	1	4/19/2011 9:22:46 PM
Surr: Tetrachloro-m-xylene	42.8	28.1-139		%REC	1	4/19/2011 9:22:46 PM
EPA METHOD 8310: PAHS						Analyst: **SCC**
Naphthalene	2.5	2.0		µg/L	1	4/21/2011 8:05:03 PM
1-Methylnaphthalene	ND	2.0		µg/L	1	4/21/2011 8:05:03 PM
2-Methylnaphthalene	ND	2.0		µg/L	1	4/21/2011 8:05:03 PM
Acenaphthylene	ND	2.5		µg/L	1	4/21/2011 8:05:03 PM
Acenaphthene	ND	5.0		µg/L	1	4/21/2011 8:05:03 PM
Fluorene	ND	0.80		µg/L	1	4/21/2011 8:05:03 PM
Phenanthrene	ND	0.60		µg/L	1	4/21/2011 8:05:03 PM
Anthracene	ND	0.60		µg/L	1	4/21/2011 8:05:03 PM
Fluoranthene	ND	0.30		µg/L	1	4/21/2011 8:05:03 PM
Pyrene	ND	0.30		µg/L	1	4/21/2011 8:05:03 PM
Benz(a)anthracene	0.070	0.070		µg/L	1	4/21/2011 8:05:03 PM
Chrysene	ND	0.20		µg/L	1	4/21/2011 8:05:03 PM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	4/21/2011 8:05:03 PM
Benzo(k)fluoranthene	ND	0.070		µg/L	1	4/21/2011 8:05:03 PM
Benzo(a)pyrene	ND	0.070		µg/L	1	4/21/2011 8:05:03 PM
Dibenz(a,h)anthracene	ND	0.070		µg/L	1	4/21/2011 8:05:03 PM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	4/21/2011 8:05:03 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	4/21/2011 8:05:03 PM
Surr: Benzo(e)pyrene	79.8	26.9-103		%REC	1	4/21/2011 8:05:03 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Fluoride	1.8	0.50		mg/L	5	4/16/2011 9:25:23 AM
Chloride	19	10		mg/L	20	4/14/2011 8:12:23 AM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	4/16/2011 8:50:34 AM
Sulfate	220	2.5		mg/L	5	4/14/2011 7:54:58 AM
EPA METHOD 200.7: METALS						Analyst: **RAGS**

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	CentralOCD-Close-033011
Lab Order:	1104008	**Collection Date:**	4/8/2011
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-04	**Matrix:**	LEACHATE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 200.7: METALS						Analyst: **RAGS**
Barium	0.39	0.0020		mg/L	1	4/15/2011 4:09:13 PM
Cadmium	ND	0.0020		mg/L	1	4/15/2011 4:09:13 PM
Chromium	ND	0.0060		mg/L	1	4/15/2011 4:09:13 PM
Copper	0.016	0.0060		mg/L	1	4/15/2011 4:09:13 PM
Iron	0.020	0.020		mg/L	1	4/15/2011 4:09:13 PM
Lead	ND	0.0050		mg/L	1	4/15/2011 4:09:13 PM
Manganese	4.5	0.010	*	mg/L	5	4/19/2011 10:38:31 AM
Silver	ND	0.0050		mg/L	1	4/15/2011 4:09:13 PM
Zinc	0.14	0.010		mg/L	1	4/15/2011 4:09:13 PM
EPA METHOD 245.1: MERCURY						Analyst: **MBR**
Mercury	ND	0.00020		mg/L	1	4/28/2011 12:34:16 PM
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
Benzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Toluene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Ethylbenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Methyl tert-butyl ether (MTBE)	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,2,4-Trimethylbenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,3,5-Trimethylbenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Naphthalene	ND	40		µg/L	20	4/14/2011 5:54:11 AM
1-Methylnaphthalene	ND	80		µg/L	20	4/14/2011 5:54:11 AM
2-Methylnaphthalene	ND	80		µg/L	20	4/14/2011 5:54:11 AM
Acetone	ND	200		µg/L	20	4/14/2011 5:54:11 AM
Bromobenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Bromodichloromethane	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Bromoform	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Bromomethane	ND	60		µg/L	20	4/14/2011 5:54:11 AM
2-Butanone	ND	200		µg/L	20	4/14/2011 5:54:11 AM
Carbon disulfide	ND	200		µg/L	20	4/14/2011 5:54:11 AM
Carbon Tetrachloride	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Chlorobenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Chloroethane	ND	40		µg/L	20	4/14/2011 5:54:11 AM
Chloroform	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Chloromethane	ND	60		µg/L	20	4/14/2011 5:54:11 AM
2-Chlorotoluene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
4-Chlorotoluene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
cis-1,2-DCE	ND	20		µg/L	20	4/14/2011 5:54:11 AM
cis-1,3-Dichloropropene	ND	20		µg/L	20	4/14/2011 5:54:11 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	CentralOCD-Close-033011
Lab Order:	1104008	**Collection Date:**	4/8/2011
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-04	**Matrix:**	LEACHATE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	4/14/2011 5:54:11 AM
Dibromochloromethane	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Dibromomethane	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,2-Dichlorobenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,3-Dichlorobenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,4-Dichlorobenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Dichlorodifluoromethane	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,1-Dichloroethane	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,1-Dichloroethene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,2-Dichloropropane	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,3-Dichloropropane	ND	20		µg/L	20	4/14/2011 5:54:11 AM
2,2-Dichloropropane	ND	40		µg/L	20	4/14/2011 5:54:11 AM
1,1-Dichloropropene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Hexachlorobutadiene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
2-Hexanone	ND	200		µg/L	20	4/14/2011 5:54:11 AM
Isopropylbenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
4-Isopropyltoluene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
4-Methyl-2-pentanone	ND	200		µg/L	20	4/14/2011 5:54:11 AM
Methylene Chloride	ND	60		µg/L	20	4/14/2011 5:54:11 AM
n-Butylbenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
n-Propylbenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
sec-Butylbenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Styrene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
tert-Butylbenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	4/14/2011 5:54:11 AM
Tetrachloroethene (PCE)	ND	20		µg/L	20	4/14/2011 5:54:11 AM
trans-1,2-DCE	ND	20		µg/L	20	4/14/2011 5:54:11 AM
trans-1,3-Dichloropropene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,2,3-Trichlorobenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,2,4-Trichlorobenzene	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,1,1-Trichloroethane	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,1,2-Trichloroethane	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Trichloroethene (TCE)	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Trichlorofluoromethane	ND	20		µg/L	20	4/14/2011 5:54:11 AM
1,2,3-Trichloropropane	ND	40		µg/L	20	4/14/2011 5:54:11 AM
Vinyl chloride	ND	20		µg/L	20	4/14/2011 5:54:11 AM
Xylenes, Total	ND	30		µg/L	20	4/14/2011 5:54:11 AM
Surr: 1,2-Dichloroethane-d4	97.3	65.8-138		%REC	20	4/14/2011 5:54:11 AM
Surr: 4-Bromofluorobenzene	111	72.7-128		%REC	20	4/14/2011 5:54:11 AM
Surr: Dibromofluoromethane	103	69-135		%REC	20	4/14/2011 5:54:11 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	CentralOCD-Close-033011
Lab Order:	1104008	**Collection Date:**	4/8/2011
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-04	**Matrix:**	LEACHATE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
Surr: Toluene-d8	105	86.1-134		%REC	20	4/14/2011 5:54:11 AM
TOTAL PHENOLICS						Analyst: **SCC**
Phenolics, Total Recoverable	6.9	2.5		µg/L	1	4/14/2011
SM4500-H+B: PH						Analyst: **LJB**
pH	6.52	0.100	H	pH units	1	4/14/2011 6:45:00 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	8650	100		mg/L	1	4/14/2011 8:54:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	NEOCD-Close-033011
Lab Order:	1104008	**Collection Date:**	4/8/2011
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-05	**Matrix:**	LEACHATE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SRM
Chloride	6.3	5.0		mg/L	10	4/12/2011 3:21:20 PM
Sulfate	44	0.50		mg/L	1	4/11/2011 3:03:31 PM
EPA METHOD 200.7: METALS						Analyst: ELS
Barium	0.81	0.010		mg/L	5	4/19/2011 10:47:26 AM
Chromium	ND	0.0060		mg/L	1	4/15/2011 5:00:24 PM
Iron	ND	0.020		mg/L	1	4/15/2011 5:00:24 PM
Lead	ND	0.0050		mg/L	1	4/15/2011 5:00:24 PM
Manganese	6.0	0.020	*	mg/L	10	4/19/2011 10:43:30 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EB-033011
Lab Order:	1104008	**Collection Date:**	3/30/2011 6:00:00 PM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
Benzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Toluene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Ethylbenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Naphthalene	ND	2.0		µg/L	1	4/6/2011 4:57:36 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	4/6/2011 4:57:36 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	4/6/2011 4:57:36 PM
Acetone	ND	10		µg/L	1	4/6/2011 4:57:36 PM
Bromobenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Bromodichloromethane	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Bromoform	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Bromomethane	ND	3.0		µg/L	1	4/6/2011 4:57:36 PM
2-Butanone	ND	10		µg/L	1	4/6/2011 4:57:36 PM
Carbon disulfide	ND	10		µg/L	1	4/6/2011 4:57:36 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Chlorobenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Chloroethane	ND	2.0		µg/L	1	4/6/2011 4:57:36 PM
Chloroform	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Chloromethane	ND	3.0		µg/L	1	4/6/2011 4:57:36 PM
2-Chlorotoluene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
4-Chlorotoluene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
cis-1,2-DCE	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/6/2011 4:57:36 PM
Dibromochloromethane	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Dibromomethane	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	4/6/2011 4:57:36 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EB-033011
Lab Order:	1104008	**Collection Date:**	3/30/2011 6:00:00 PM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
2-Hexanone	ND	10		µg/L	1	4/6/2011 4:57:36 PM
Isopropylbenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	4/6/2011 4:57:36 PM
Methylene Chloride	ND	3.0		µg/L	1	4/6/2011 4:57:36 PM
n-Butylbenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
n-Propylbenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
sec-Butylbenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Styrene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
tert-Butylbenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/6/2011 4:57:36 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
trans-1,2-DCE	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/6/2011 4:57:36 PM
Vinyl chloride	ND	1.0		µg/L	1	4/6/2011 4:57:36 PM
Xylenes, Total	ND	1.5		µg/L	1	4/6/2011 4:57:36 PM
Surr: 1,2-Dichloroethane-d4	94.2	65.8-138		%REC	1	4/6/2011 4:57:36 PM
Surr: 4-Bromofluorobenzene	112	72.7-128		%REC	1	4/6/2011 4:57:36 PM
Surr: Dibromofluoromethane	99.7	69-135		%REC	1	4/6/2011 4:57:36 PM
Surr: Toluene-d8	101	86.1-134		%REC	1	4/6/2011 4:57:36 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	FB-033-11
Lab Order:	1104008	**Collection Date:**	3/30/2011 6:05:00 PM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: MMS
Benzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Toluene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Ethylbenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Naphthalene	ND	2.0		µg/L	1	4/6/2011 6:22:15 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	4/6/2011 6:22:15 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	4/6/2011 6:22:15 PM
Acetone	ND	10		µg/L	1	4/6/2011 6:22:15 PM
Bromobenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Bromodichloromethane	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Bromoform	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Bromomethane	ND	3.0		µg/L	1	4/6/2011 6:22:15 PM
2-Butanone	ND	10		µg/L	1	4/6/2011 6:22:15 PM
Carbon disulfide	ND	10		µg/L	1	4/6/2011 6:22:15 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Chlorobenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Chloroethane	ND	2.0		µg/L	1	4/6/2011 6:22:15 PM
Chloroform	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Chloromethane	ND	3.0		µg/L	1	4/6/2011 6:22:15 PM
2-Chlorotoluene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
4-Chlorotoluene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
cis-1,2-DCE	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/6/2011 6:22:15 PM
Dibromochloromethane	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Dibromomethane	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	4/6/2011 6:22:15 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	FB-033-11
Lab Order:	1104008	**Collection Date:**	3/30/2011 6:05:00 PM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: MMS
2-Hexanone	ND	10		µg/L	1	4/6/2011 6:22:15 PM
Isopropylbenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	4/6/2011 6:22:15 PM
Methylene Chloride	ND	3.0		µg/L	1	4/6/2011 6:22:15 PM
n-Butylbenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
n-Propylbenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
sec-Butylbenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Styrene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
tert-Butylbenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/6/2011 6:22:15 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
trans-1,2-DCE	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/6/2011 6:22:15 PM
Vinyl chloride	ND	1.0		µg/L	1	4/6/2011 6:22:15 PM
Xylenes, Total	ND	1.5		µg/L	1	4/6/2011 6:22:15 PM
Surr: 1,2-Dichloroethane-d4	101	65.8-138		%REC	1	4/6/2011 6:22:15 PM
Surr: 4-Bromofluorobenzene	107	72.7-128		%REC	1	4/6/2011 6:22:15 PM
Surr: Dibromofluoromethane	106	69-135		%REC	1	4/6/2011 6:22:15 PM
Surr: Toluene-d8	105	86.1-134		%REC	1	4/6/2011 6:22:15 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	Central OCD-01-033111
Lab Order:	1104008	**Collection Date:**	3/31/2011 10:30:00 AM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-08	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/7/2011 8:45:22 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/7/2011 8:45:22 AM
Surr: DNOP	99.2	81.8-129		%REC	1	4/7/2011 8:45:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/6/2011 12:46:03 PM
Surr: BFB	103	89.7-125		%REC	1	4/6/2011 12:46:03 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	4/6/2011 12:46:03 PM
Toluene	ND	0.050		mg/Kg	1	4/6/2011 12:46:03 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/6/2011 12:46:03 PM
Xylenes, Total	ND	0.10		mg/Kg	1	4/6/2011 12:46:03 PM
Surr: 4-Bromofluorobenzene	117	85.3-139		%REC	1	4/6/2011 12:46:03 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	810	30		mg/Kg	20	4/8/2011 7:00:09 PM
Sulfate	420	30		mg/Kg	20	4/8/2011 7:00:09 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Barium	240	1.0		mg/Kg	10	4/5/2011 1:36:47 PM
Chromium	17	1.5		mg/Kg	5	4/5/2011 1:34:04 PM
Copper	5.4	1.5		mg/Kg	5	4/5/2011 1:34:04 PM
Iron	16000	500		mg/Kg	500	4/5/2011 1:39:24 PM
Lead	6.4	1.3		mg/Kg	5	4/5/2011 1:34:04 PM
Manganese	420	1.0		mg/Kg	10	4/5/2011 1:36:47 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	Central OCD-02-033111
Lab Order:	1104008	**Collection Date:**	3/31/2011 11:00:00 AM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-09	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/7/2011 9:19:43 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/7/2011 9:19:43 AM
Surr: DNOP	106	81.8-129		%REC	1	4/7/2011 9:19:43 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/6/2011 1:15:01 PM
Surr: BFB	103	89.7-125		%REC	1	4/6/2011 1:15:01 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	4/6/2011 1:15:01 PM
Toluene	ND	0.050		mg/Kg	1	4/6/2011 1:15:01 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/6/2011 1:15:01 PM
Xylenes, Total	ND	0.10		mg/Kg	1	4/6/2011 1:15:01 PM
Surr: 4-Bromofluorobenzene	121	85.3-139		%REC	1	4/6/2011 1:15:01 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	300	30		mg/Kg	20	4/8/2011 7:34:59 PM
Sulfate	290	30		mg/Kg	20	4/8/2011 7:34:59 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Barium	210	0.50		mg/Kg	5	4/5/2011 1:42:04 PM
Chromium	16	1.5		mg/Kg	5	4/5/2011 1:42:04 PM
Copper	4.4	1.5		mg/Kg	5	4/5/2011 1:42:04 PM
Iron	20000	500		mg/Kg	500	4/5/2011 1:49:07 PM
Lead	6.0	1.3		mg/Kg	5	4/5/2011 1:42:04 PM
Manganese	450	1.0		mg/Kg	10	4/5/2011 1:46:28 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	Central OCD-03-033111
Lab Order:	1104008	**Collection Date:**	3/31/2011 11:35:00 AM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-10	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/7/2011 9:53:54 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/7/2011 9:53:54 AM
Surr: DNOP	96.3	81.8-129		%REC	1	4/7/2011 9:53:54 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/6/2011 1:43:57 PM
Surr: BFB	102	89.7-125		%REC	1	4/6/2011 1:43:57 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	4/6/2011 1:43:57 PM
Toluene	ND	0.050		mg/Kg	1	4/6/2011 1:43:57 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/6/2011 1:43:57 PM
Xylenes, Total	ND	0.10		mg/Kg	1	4/6/2011 1:43:57 PM
Surr: 4-Bromofluorobenzene	122	85.3-139		%REC	1	4/6/2011 1:43:57 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	200	30		mg/Kg	20	4/8/2011 8:09:49 PM
Sulfate	510	30		mg/Kg	20	4/8/2011 8:09:49 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Barium	410	1.0		mg/Kg	10	4/5/2011 2:02:38 PM
Chromium	15	1.5		mg/Kg	5	4/5/2011 1:59:53 PM
Copper	5.5	1.5		mg/Kg	5	4/5/2011 1:59:53 PM
Iron	17000	500		mg/Kg	500	4/5/2011 2:05:15 PM
Lead	7.1	1.3		mg/Kg	5	4/5/2011 1:59:53 PM
Manganese	430	1.0		mg/Kg	10	4/5/2011 2:02:38 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
POL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	Central OCD-04-033111
Lab Order:	1104008	**Collection Date:**	3/31/2011 11:20:00 AM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-11	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/6/2011 4:50:32 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/6/2011 4:50:32 PM
Surr: DNOP	84.9	81.8-129		%REC	1	4/6/2011 4:50:32 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/6/2011 2:12:53 PM
Surr: BFB	104	89.7-125		%REC	1	4/6/2011 2:12:53 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	4/6/2011 2:12:53 PM
Toluene	ND	0.050		mg/Kg	1	4/6/2011 2:12:53 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/6/2011 2:12:53 PM
Xylenes, Total	ND	0.10		mg/Kg	1	4/6/2011 2:12:53 PM
Surr: 4-Bromofluorobenzene	123	85.3-139		%REC	1	4/6/2011 2:12:53 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	480	30		mg/Kg	20	4/8/2011 8:44:38 PM
Sulfate	350	30		mg/Kg	20	4/8/2011 8:44:38 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Barium	310	1.0		mg/Kg	10	4/5/2011 2:10:35 PM
Chromium	16	1.5		mg/Kg	5	4/5/2011 2:07:50 PM
Copper	4.6	1.5		mg/Kg	5	4/5/2011 2:07:50 PM
Iron	20000	500		mg/Kg	500	4/5/2011 2:13:10 PM
Lead	5.0	1.3		mg/Kg	5	4/5/2011 2:07:50 PM
Manganese	420	1.0		mg/Kg	10	4/5/2011 2:10:35 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	NE OCD-01-033111
Lab Order:	1104008	**Collection Date:**	3/31/2011 8:45:00 AM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-12	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	240	30		mg/Kg	20	4/8/2011 9:54:16 PM
Sulfate	580	30		mg/Kg	20	4/8/2011 9:54:16 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Barium	290	1.0		mg/Kg	10	4/5/2011 2:20:06 PM
Chromium	11	1.5		mg/Kg	5	4/5/2011 2:15:46 PM
Iron	16000	500		mg/Kg	500	4/5/2011 2:22:42 PM
Lead	5.8	1.3		mg/Kg	5	4/5/2011 2:15:46 PM
Manganese	400	1.0		mg/Kg	10	4/5/2011 2:20:06 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	NE OCD-02-033111
Lab Order:	1104008	**Collection Date:**	3/31/2011 9:00:00 AM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-13	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	130	7.5		mg/Kg	5	4/8/2011 10:11:41 PM
Sulfate	290	7.5		mg/Kg	5	4/8/2011 10:11:41 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Barium	350	1.0		mg/Kg	10	4/5/2011 2:40:13 PM
Chromium	13	1.5		mg/Kg	5	4/5/2011 2:37:29 PM
Iron	20000	500		mg/Kg	500	4/5/2011 2:42:52 PM
Lead	7.1	1.3		mg/Kg	5	4/5/2011 2:37:29 PM
Manganese	480	1.0		mg/Kg	10	4/5/2011 2:40:13 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	NE OCD-03-033111
Lab Order:	1104008	**Collection Date:**	3/31/2011 9:25:00 AM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-14	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	290	30		mg/Kg	20	4/8/2011 11:03:56 PM
Sulfate	230	7.5		mg/Kg	5	4/8/2011 10:46:31 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Barium	400	1.0		mg/Kg	10	4/5/2011 3:31:43 PM
Chromium	14	1.5		mg/Kg	5	4/5/2011 3:28:57 PM
Iron	17000	500		mg/Kg	500	4/5/2011 3:34:19 PM
Lead	6.7	1.3		mg/Kg	5	4/5/2011 3:28:57 PM
Manganese	410	1.0		mg/Kg	10	4/5/2011 3:31:43 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	NE OCD-04-033111
Lab Order:	1104008	**Collection Date:**	3/31/2011 9:40:00 AM
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-15	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	110	30		mg/Kg	20	4/8/2011 11:21:21 PM
Sulfate	490	30		mg/Kg	20	4/8/2011 11:21:21 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Barium	440	1.0		mg/Kg	10	4/5/2011 2:48:11 PM
Chromium	14	1.5		mg/Kg	5	4/5/2011 2:45:26 PM
Iron	18000	500		mg/Kg	500	4/5/2011 2:50:46 PM
Lead	6.3	1.3		mg/Kg	5	4/5/2011 2:45:26 PM
Manganese	540	50		mg/Kg	500	4/5/2011 2:50:46 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	Trip Blank
Lab Order:	1104008	**Collection Date:**	
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-16	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
Benzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Toluene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Ethylbenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Naphthalene	ND	2.0		µg/L	1	4/6/2011 6:50:34 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	4/6/2011 6:50:34 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	4/6/2011 6:50:34 PM
Acetone	ND	10		µg/L	1	4/6/2011 6:50:34 PM
Bromobenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Bromodichloromethane	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Bromoform	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Bromomethane	ND	3.0		µg/L	1	4/6/2011 6:50:34 PM
2-Butanone	ND	10		µg/L	1	4/6/2011 6:50:34 PM
Carbon disulfide	ND	10		µg/L	1	4/6/2011 6:50:34 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Chlorobenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Chloroethane	ND	2.0		µg/L	1	4/6/2011 6:50:34 PM
Chloroform	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Chloromethane	ND	3.0		µg/L	1	4/6/2011 6:50:34 PM
2-Chlorotoluene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
4-Chlorotoluene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
cis-1,2-DCE	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/6/2011 6:50:34 PM
Dibromochloromethane	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Dibromomethane	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	4/6/2011 6:50:34 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	Trip Blank
Lab Order:	1104008	**Collection Date:**	
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-16	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: MMS
2-Hexanone	ND	10		µg/L	1	4/6/2011 6:50:34 PM
Isopropylbenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	4/6/2011 6:50:34 PM
Methylene Chloride	ND	3.0		µg/L	1	4/6/2011 6:50:34 PM
n-Butylbenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
n-Propylbenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
sec-Butylbenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Styrene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
tert-Butylbenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/6/2011 6:50:34 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
trans-1,2-DCE	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/6/2011 6:50:34 PM
Vinyl chloride	ND	1.0		µg/L	1	4/6/2011 6:50:34 PM
Xylenes, Total	ND	1.5		µg/L	1	4/6/2011 6:50:34 PM
Surr: 1,2-Dichloroethane-d4	105	65.8-138		%REC	1	4/6/2011 6:50:34 PM
Surr: 4-Bromofluorobenzene	108	72.7-128		%REC	1	4/6/2011 6:50:34 PM
Surr: Dibromofluoromethane	105	69-135		%REC	1	4/6/2011 6:50:34 PM
Surr: Toluene-d8	105	86.1-134		%REC	1	4/6/2011 6:50:34 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BD-02-033111
Lab Order:	1104008	**Collection Date:**	3/31/2011
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-17	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	220	30		mg/Kg	20	4/8/2011 11:56:11 PM
Sulfate	640	30		mg/Kg	20	4/8/2011 11:56:11 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Barium	290	1.0		mg/Kg	10	4/5/2011 2:57:52 PM
Chromium	12	1.5		mg/Kg	5	4/5/2011 2:55:07 PM
Iron	17000	500		mg/Kg	500	4/5/2011 3:00:30 PM
Lead	6.5	1.3		mg/Kg	5	4/5/2011 2:55:07 PM
Manganese	400	1.0		mg/Kg	10	4/5/2011 2:57:52 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *04-May-11*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BD-01-033111
Lab Order:	1104008	**Collection Date:**	3/31/2011
Project:	Gallup OCD Landfarms	**Date Received:**	3/31/2011
Lab ID:	1104008-18	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	260	100		mg/Kg	10	4/6/2011 8:15:20 PM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	4/6/2011 8:15:20 PM
Surr: DNOP	0	81.8-129	S	%REC	10	4/6/2011 8:15:20 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/6/2011 3:39:33 PM
Surr: BFB	104	89.7-125		%REC	1	4/6/2011 3:39:33 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	4/6/2011 3:39:33 PM
Toluene	ND	0.050		mg/Kg	1	4/6/2011 3:39:33 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/6/2011 3:39:33 PM
Xylenes, Total	ND	0.10		mg/Kg	1	4/6/2011 3:39:33 PM
Surr: 4-Bromofluorobenzene	119	85.3-139		%REC	1	4/6/2011 3:39:33 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	820	30		mg/Kg	20	4/9/2011 2:15:31 AM
Sulfate	360	30		mg/Kg	20	4/9/2011 2:15:31 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Barium	300	1.0		mg/Kg	10	4/5/2011 3:14:02 PM
Chromium	18	1.5		mg/Kg	5	4/5/2011 3:03:08 PM
Copper	5.4	1.5		mg/Kg	5	4/5/2011 3:03:08 PM
Iron	18000	500		mg/Kg	500	4/5/2011 3:16:40 PM
Lead	5.9	1.3		mg/Kg	5	4/5/2011 3:03:08 PM
Manganese	430	1.0		mg/Kg	10	4/5/2011 3:14:02 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	110405030
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1104008
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	110405030-001	**Sampling Date**	3/30/2011	**Date/Time Received**	4/5/2011	12:20 PM
Client Sample ID	1104008-01B / BG-NE-033011	**Sampling Time**	12:10 PM			
Matrix	Soil					
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.35	4/13/2011	JTT	EPA 335.4	
%moisture	18.3	Percent		4/13/2011	CRW	%moisture	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Friday, April 15, 2011

Anatek Labs, Inc.

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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 110414047
Project Name: 1104008

Analytical Results Report

Sample Number	110414047-001	**Sampling Date**	4/8/2011	**Date/Time Received**	4/14/2011	12:10 PM
Client Sample ID	1104008-04H / CENTRALOCD-CLOSE-033011			**Extraction Date**		
Matrix	Water			**Sampling Time**		
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	4/20/2011	JTT	EPA 335.4	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 110414047
Project Name: 1104008

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Cyanide	0.474	mg/L	0.5	94.8	80-120	4/20/2011	4/20/2011

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
110408031-007	Cyanide	ND	0.474	mg/L	0.5	94.8	70-130	4/20/2011	4/20/2011

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide	0.487	mg/L	0.5	97.4	2.7	0-25	4/20/2011	4/20/2011

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide	ND	mg/L	0.01	4/20/2011	4/20/2011

AR Acceptable Range
ND Not Detected
PQL Practical Quantitation Limit
RPD Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Wednesday, April 27, 2011

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 03, 2011

Ms. Anne Thorne
Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109

RE: Project: 1104008
Pace Project No.: 3044432

Dear Ms. Thorne:
Enclosed are the analytical results for sample(s) received by the laboratory on April 05, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

cc: Kacey Gutierrez, Hall Environmental Analysis La

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 1104008
Pace Project No.: 3044432

Pennsylvania Certification IDs
1638 Roseytown Road Suites 2,3&4, Greensburg, PA 15601
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/NELAC Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH 0694
Delaware Certification
Florida/NELAC Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/NELAC Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/NELAC Certification #: LA080002
Louisiana/NELAC Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/NELAC Certification #: 2976
New Jersey/NELAC Certification #: PA 051
New Mexico Certification
New York/NELAC Certification #: 10888
North Carolina Certification #: 42706
Oregon/NELAC Certification #: PA200002
Pennsylvania/NELAC Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/NELAC Certification #: T104704188-09 TX
Utah/NELAC Certification #: ANTE
Virgin Island/PADEP Certification
Virginia Certification #: 00112
Washington Certification #: C1941
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

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SAMPLE SUMMARY

Project: 1104008
Pace Project No.: 3044432

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3044432001	1104008-01C	Solid	03/30/11 12:10	04/05/11 09:45
3044432002	1104008-08B	Solid	03/31/11 10:30	04/05/11 09:45
3044432003	1104008-09B	Solid	03/31/11 11:00	04/05/11 09:45
3044432004	1104008-10B	Solid	03/31/11 11:35	04/05/11 09:45
3044432005	1104008-11B	Solid	03/31/11 11:20	04/05/11 09:45
3044432006	1104008-12B	Solid	03/31/11 08:45	04/05/11 09:45
3044432007	1104008-13B	Solid	03/31/11 09:00	04/05/11 09:45
3044432008	1104008-14B	Solid	03/31/11 09:25	04/05/11 09:45
3044432009	1104008-15B	Solid	03/31/11 09:40	04/05/11 09:45
3044432010	1104008-17B	Solid	03/31/11 00:01	04/05/11 09:45
3044432011	1104008-18B	Solid	03/31/11 00:01	04/05/11 09:45

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Greensburg, PA 15601
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SAMPLE ANALYTE COUNT

Project: 1104008
Pace Project No.: 3044432

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
3044432001	1104008-01C	EPA 901.1m	AEH	2	PASI-PA
3044432002	1104008-08B	EPA 901.1m	AEH	2	PASI-PA
3044432003	1104008-09B	EPA 901.1m	AEH	2	PASI-PA
3044432004	1104008-10B	EPA 901.1m	AEH	2	PASI-PA
3044432005	1104008-11B	EPA 901.1m	AEH	2	PASI-PA
3044432006	1104008-12B	EPA 901.1m	AEH	2	PASI-PA
3044432007	1104008-13B	EPA 901.1m	AEH	2	PASI-PA
3044432008	1104008-14B	EPA 901.1m	AEH	2	PASI-PA
3044432009	1104008-15B	EPA 901.1m	AEH	2	PASI-PA
3044432010	1104008-17B	EPA 901.1m	AEH	2	PASI-PA
3044432011	1104008-18B	EPA 901.1m	AEH	2	PASI-PA

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: 1104008
Pace Project No.: 3044432

Method: EPA 901.1m
Description: 901.1 Gamma Spec
Client: Hall Environmental Analysis Laboratory
Date: May 03, 2011

General Information:
11 samples were analyzed for EPA 901.1m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

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

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 1104008
Pace Project No.: 3044432

Sample: 1104008-01C **Lab ID: 3044432001** Collected: 03/30/11 12:10 Received: 04/05/11 09:45 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1m	**1.29 ± 0.182 (0.0340)**	pCi/g	05/02/11 10:11	13982-63-3	
Radium-228	EPA 901.1m	**1.40 ± 0.262 (0.0580)**	pCi/g	05/02/11 10:11	15262-20-1	

Sample: 1104008-08B **Lab ID: 3044432002** Collected: 03/31/11 10:30 Received: 04/05/11 09:45 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1m	**1.19 ± 0.259 (0.0720)**	pCi/g	04/30/11 10:08	13982-63-3	
Radium-228	EPA 901.1m	**1.69 ± 0.453 (0.120)**	pCi/g	04/30/11 10:08	15262-20-1	

Sample: 1104008-09B **Lab ID: 3044432003** Collected: 03/31/11 11:00 Received: 04/05/11 09:45 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1m	**0.908 ± 0.186 (0.0390)**	pCi/g	04/30/11 10:45	13982-63-3	
Radium-228	EPA 901.1m	**0.859 ± 0.349 (0.132)**	pCi/g	04/30/11 10:45	15262-20-1	

Sample: 1104008-10B **Lab ID: 3044432004** Collected: 03/31/11 11:35 Received: 04/05/11 09:45 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1m	**0.870 ± 0.183 (0.0540)**	pCi/g	04/30/11 11:17	13982-63-3	
Radium-228	EPA 901.1m	**1.31 ± 0.412 (0.119)**	pCi/g	04/30/11 11:17	15262-20-1	

Sample: 1104008-11B **Lab ID: 3044432005** Collected: 03/31/11 11:20 Received: 04/05/11 09:45 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1m	**0.764 ± 0.169 (0.0580)**	pCi/g	04/30/11 11:48	13982-63-3	
Radium-228	EPA 901.1m	**1.83 ± 0.409 (0.0470)**	pCi/g	04/30/11 11:48	15262-20-1	

Sample: 1104008-12B **Lab ID: 3044432006** Collected: 03/31/11 08:45 Received: 04/05/11 09:45 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1m	**0.973 ± 0.200 (0.0560)**	pCi/g	04/30/11 12:21	13982-63-3	
Radium-228	EPA 901.1m	**1.18 ± 0.330 (0.0690)**	pCi/g	04/30/11 12:21	15262-20-1	

Date: 05/03/2011 12:57 PM

REPORT OF LABORATORY ANALYSIS

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(724)850-5600

ANALYTICAL RESULTS

Project: 1104008
Pace Project No.: 3044432

Sample: 1104008-13B **Lab ID: 3044432007** Collected: 03/31/11 09:00 Received: 04/05/11 09:45 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1m	**0.967 ± 0.200 (0.0280)**	pCi/g	04/30/11 12:53	13982-63-3	
Radium-228	EPA 901.1m	**1.33 ± 0.337 (0.0620)**	pCi/g	04/30/11 12:53	15262-20-1	

Sample: 1104008-14B **Lab ID: 3044432008** Collected: 03/31/11 09:25 Received: 04/05/11 09:45 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1m	**0.866 ± 0.170 (0.0540)**	pCi/g	04/30/11 13:25	13982-63-3	
Radium-228	EPA 901.1m	**1.55 ± 0.324 (0.0970)**	pCi/g	04/30/11 13:25	15262-20-1	

Sample: 1104008-15B **Lab ID: 3044432009** Collected: 03/31/11 09:40 Received: 04/05/11 09:45 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1m	**1.10 ± 0.207 (0.0490)**	pCi/g	04/30/11 13:59	13982-63-3	
Radium-228	EPA 901.1m	**1.33 ± 0.380 (0.116)**	pCi/g	04/30/11 13:59	15262-20-1	

Sample: 1104008-17B **Lab ID: 3044432010** Collected: 03/31/11 00:01 Received: 04/05/11 09:45 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1m	**1.05 ± 0.227 (0.0450)**	pCi/g	04/30/11 14:30	13982-63-3	
Radium-228	EPA 901.1m	**0.778 ± 0.294 (0.133)**	pCi/g	04/30/11 14:30	15262-20-1	

Sample: 1104008-18B **Lab ID: 3044432011** Collected: 03/31/11 00:01 Received: 04/05/11 09:45 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1m	**0.905 ± 0.203 (0.0430)**	pCi/g	04/30/11 15:02	13982-63-3	
Radium-228	EPA 901.1m	**1.57 ± 0.366 (0.0930)**	pCi/g	04/30/11 15:02	15262-20-1	

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QUALITY CONTROL DATA

Project: 1104008
Pace Project No.: 3044432

QC Batch: RADC/7943 Analysis Method: EPA 901.1m
QC Batch Method: EPA 901.1m Analysis Description: 901.1 Gamma Spec
Associated Lab Samples: 3044432002, 3044432003, 3044432004, 3044432005, 3044432006, 3044432007, 3044432008, 3044432009, 3044432010, 3044432011

METHOD BLANK: 285224 Matrix: Solid
Associated Lab Samples: 3044432002, 3044432003, 3044432004, 3044432005, 3044432006, 3044432007, 3044432008, 3044432009, 3044432010, 3044432011

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Radium-226	-0.029 ± 1.64 (0.0610)	pCi/g	05/02/11 08:49	
Radium-228	0.0190 ± 0.243 (0.145)	pCi/g	05/02/11 08:49	

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QUALITY CONTROL DATA

Project: 1104008
Pace Project No.: 3044432

QC Batch: RADC/7967
QC Batch Method: EPA 901.1m
Analysis Method: EPA 901.1m
Analysis Description: 901.1 Gamma Spec
Associated Lab Samples: 3044432001

METHOD BLANK: 286262
Matrix: Solid
Associated Lab Samples: 3044432001

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Radium-226	0.0250 ± 0.0310 (0.0250)	pCi/g	05/02/11 11:16	
Radium-228	0.0120 ± 0.0670 (0.0410)	pCi/g	05/02/11 11:16	

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QUALIFIERS

Project: 1104008
Pace Project No.: 3044432

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

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Hall Environmental Analysis Laboratory, Inc.
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109-4372
TEL: *5053453975* FAX: *5053454107*

CHAIN-OF-CUSTODY RECORD

Subcontractor:

Pace Analytical Services, Inc.
1638 Roseytown Rd Ste 2,3,4
Greensburg, PA 15601

TEL: (724) 850-5600
FAX: (724) 850-5601
Acct #:

Project Name: 1104008

3044432

04-Apr-11

Lab ID		Client Sample ID	Matrix	Collection Date	Bottle Type	Requested Tests
1104008-01C	001	BG-NE-033011	Soil	3/30/2011 12:10:00 PM	8OZGU	SEE BELOW
1104008-08B	002	Central OCD-01-033111	Soil	3/31/2011 10:30:00 AM	4OZGU	SEE BELOW
1104008-09B	003	Central OCD-02-033111	Soil	3/31/2011 11:00:00 AM	4OZGU	SEE BELOW
1104008-10B	004	Central OCD-03-033111	Soil	3/31/2011 11:35:00 AM	4OZGU	SEE BELOW
1104008-11B	005	Central OCD-04-033111	Soil	3/31/2011 11:20:00 AM	4OZGU	SEE BELOW
1104008-12B	006	NE OCD-01-033111	Soil	3/31/2011 8:45:00 AM	4OZGU	SEE BELOW
1104008-13B	007	NE OCD-02-033111	Soil	3/31/2011 9:00:00 AM	4OZGU	SEE BELOW
1104008-14B	008	NE OCD-03-033111	Soil	3/31/2011 9:25:00 AM	4OZGU	SEE BELOW

ANALYTICAL COMMENTS: 01C, 08B, 09B, 10B, 11B 12B, 13B, 14B, 15B, 17B, 18B-RADIUM 226/228

Standard TAT. Please fax (505) 345-4107 results when completed, or email to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you

		Date/Time			Date/Time
Relinquished by:	[signature]	04/04/11 0930	Received by:	[signature]	4/8/11 0945
Relinquished by:			Received by:		

Hall Environmental Analysis Laboratory, Inc.
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109-4372
TEL: *5053453975* FAX: *5053454107*

CHAIN-OF-CUSTODY RECORD

Subcontractor:

Pace Analytical Services, Inc.
1638 Roseytown Rd Ste 2,3,4
Greensburg, PA 15601

TEL: (724) 850-5600
FAX: (724) 850-5601
Acct #:

Project Name: 1104008

04-Apr-11

Lab ID		Client Sample ID	Matrix	Collection Date	Bottle Type	Requested Tests
1104008-15B	009	NE OCD-04-033111	Soil	3/31/2011 9:40:00 AM	4OZGU	SEE BELOW
1104008-17B	010	BD-02-033111	Soil	3/31/2011	4OZGU	SEE BELOW
1104008-18B	011	BD-01-033111	Soil	3/31/2011	4OZGU	SEE BELOW

ANALYTICAL COMMENTS: 01C, 08B, 09B, 10B, 11B 12B, 13B, 14B, 15B, 17B, 18B-RADIUM 226/228

Standard TAT. Please fax (505) 345-4107 results when completed, or email to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you

		Date/Time			Date/Time
Relinquished by:	[signature]	04/04/11 830	Received by:	[signature]	4/5/11 0945
Relinquished by:			Received by:		

Sample Condition Upon Receipt

Pace Analytical

Client Name: Hull

Project # 3044432

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 7946 1060 5123

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Optional
Proj. Due Date:
Proj. Name:

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____

Thermometer Used 3 5 Type of Ice: Wet (Blue) None ☐ Samples on ice, cooling process has begun

Cooler Temperature N/A Biological Tissue is Frozen: Yes No

Date and initials of person examining contents: 4/6/11

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out:	☒ Yes ☐ No ☐ N/A	2.
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	3.
Sampler Name & Signature on COC:	☐ Yes ☒ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes ☐ No ☐ N/A	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No ☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No ☐ N/A	7.
Sufficient Volume:	☒ Yes ☐ No ☐ N/A	8.
Correct Containers Used:	☒ Yes ☐ No ☐ N/A	9.
-Pace Containers Used:	☐ Yes ☒ No ☐ N/A	
Containers Intact:	☒ Yes ☐ No ☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes ☐ No ☒ N/A	11.
Sample Labels match COC:	☒ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix:	S	
All containers needing preservation have been checked.	☐ Yes ☐ No ☒ N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes ☐ No ☒ N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☒ Yes ☐ No	Initial when completed MB / Lot # of added preservative
Samples checked for dechlorination:	☐ Yes ☐ No ☒ N/A	14.
Headspace in VOA Vials (>6mm):	☐ Yes ☐ No ☒ N/A	15.
Trip Blank Present:	☐ Yes ☐ No ☒ N/A	16.
Trip Blank Custody Seals Present	☐ Yes ☐ No ☒ N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] Date: 4/6/11

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

F-ALL-C003-4 23Feb2010

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April 30, 2011

Ms. Anne Thorne
Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109

RE: Project: 1104008
Pace Project No.: 3044907

Dear Ms. Thorne:
Enclosed are the analytical results for sample(s) received by the laboratory on April 14, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

cc: Kacey Gutierrez, Hall Environmental Analysis La

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CERTIFICATIONS

Project: 1104008
Pace Project No.: 3044907

Pennsylvania Certification IDs
1638 Roseytown Road Suites 2,3&4, Greensburg, PA 15601
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/NELAC Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH 0694
Delaware Certification
Florida/NELAC Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/NELAC Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/NELAC Certification #: LA080002
Louisiana/NELAC Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/NELAC Certification #: 2976
New Jersey/NELAC Certification #: PA 051
New Mexico Certification
New York/NELAC Certification #: 10888
North Carolina Certification #: 42706
Oregon/NELAC Certification #: PA200002
Pennsylvania/NELAC Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/NELAC Certification #: T104704188-09 TX
Utah/NELAC Certification #: ANTE
Virgin Island/PADEP Certification
Virginia Certification #: 00112
Washington Certification #: C1941
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

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SAMPLE SUMMARY

Project: 1104008
Pace Project No.: 3044907

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3044907001	1104008-04I	Water	04/08/11 00:01	04/14/11 10:30
3044907002	1104008-05D	Water	04/08/11 00:01	04/14/11 10:30
3044907003	1104008-04I-MS	Water	04/08/11 00:01	04/14/11 10:30

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SAMPLE ANALYTE COUNT

Project: 1104008
Pace Project No.: 3044907

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
3044907001	1104008-04I	EPA 903.1	RMD	1	PASI-PA
		EPA 904.0	DJL	1	PASI-PA
3044907002	1104008-05D	EPA 903.1	RMD	1	PASI-PA
		EPA 904.0	DJL	1	PASI-PA
3044907003	1104008-04I-MS	EPA 903.1	RMD	1	PASI-PA
		EPA 904.0	DJL	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 1104008
Pace Project No.: 3044907

Method: **EPA 903.1**
Description: 903.1 Radium 226
Client: Hall Environmental Analysis Laboratory
Date: April 30, 2011

General Information:
3 samples were analyzed for EPA 903.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

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

Additional Comments:

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PROJECT NARRATIVE

Project: 1104008
Pace Project No.: 3044907

Method: EPA 904.0
Description: 904.0 Radium 228
Client: Hall Environmental Analysis Laboratory
Date: April 30, 2011

General Information:
3 samples were analyzed for EPA 904.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

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

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: 1104008
Pace Project No.: 3044907

Sample: 1104008-04I | **Lab ID: 3044907001** | Collected: 04/08/11 00:01 | Received: 04/14/11 10:30 | Matrix: Water
PWS: | Site ID: | Sample Type:

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**0.929 ± 0.548 (0.488)**	pCi/L	04/28/11 11:57	13982-63-3	
Radium-228	EPA 904.0	**1.86 ± 0.688 (0.977)**	pCi/L	04/28/11 15:01	15262-20-1	

Sample: 1104008-05D | **Lab ID: 3044907002** | Collected: 04/08/11 00:01 | Received: 04/14/11 10:30 | Matrix: Water
PWS: | Site ID: | Sample Type:

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**0.746 ± 0.457 (0.423)**	pCi/L	04/28/11 11:57	13982-63-3	
Radium-228	EPA 904.0	**2.59 ± 0.837 (0.970)**	pCi/L	04/28/11 15:02	15262-20-1	

Sample: 1104008-04I-MS | **Lab ID: 3044907003** | Collected: 04/08/11 00:01 | Received: 04/14/11 10:30 | Matrix: Water
PWS: | Site ID: | Sample Type:

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**0.367 ± 0.421 (0.659)**	pCi/L	04/28/11 12:11	13982-63-3	
lium-228	EPA 904.0	**21.1 ± 4.34 (1.34)**	pCi/L	04/29/11 12:08	15262-20-1	

Date: 04/30/2011 06:48 PM

REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: 1104008
Pace Project No.: 3044907

QC Batch: RADC/8043 Analysis Method: EPA 903.1
QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226
Associated Lab Samples: 3044907001, 3044907002, 3044907003

METHOD BLANK: 288361 Matrix: Water
Associated Lab Samples: 3044907001, 3044907002, 3044907003

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Radium-226	0.112 ± 0.312 (0.604)	pCi/L	04/28/11 10:26	

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Greensburg, PA 15601
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QUALITY CONTROL DATA

Project: 1104008
Pace Project No.: 3044907

QC Batch: RADC/8099
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Associated Lab Samples: 3044907001, 3044907002

METHOD BLANK: 289569
Matrix: Water
Associated Lab Samples: 3044907001, 3044907002

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Radium-228	0.373 ± 0.453 (0.981)	pCi/L	04/28/11 15:01	

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: 1104008
Pace Project No.: 3044907

QC Batch: RADC/8100
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Associated Lab Samples: 3044907003

METHOD BLANK: 289570
Matrix: Water
Associated Lab Samples: 3044907003

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Radium-228	0.717 ± 0.504 (0.983)	pCi/L	04/29/11 12:11	

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Greensburg, PA 15601
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QUALIFIERS

Project: 1104008
Pace Project No.: 3044907

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

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Hall Environmental Analysis Laboratory, Inc.
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109-4372
TEL: *5053453975* FAX: *5053454107*

CHAIN-OF-CUSTODY RECORD

Subcontractor:
Pace Analytical Services, Inc.
1638 Roseytown Rd Ste 2,3,4
Greensburg, PA 15601

TEL: (724) 850-5600
FAX: (724) 850-5601
Acct #:

Project Name: 1104008

3044907

13-Apr-11

Lab ID	Client Sample ID	Matrix	Collection Date	Bottle Type	Requested Tests
1104008-04I	CentralOCD-Close-033011	Leachate	4/8/2011	1LHDPEHNO3	SEE BELOW
1104008-05D	NEOCD-Close-033011	Leachate	4/8/2011	1LHDPEHNO3	SEE BELOW

ANALYTICAL COMMENTS: LEACHATE SAMPLES-04I, 05D-RADIUM 226.228

Standard TAT. Please fax (505) 345-4107 results when completed, or email to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you

		Date/Time			Date/Time
Relinquished by:		04/13/11 1515	Received by:		4/14/11 1030
Relinquished by:			Received by:		

Ha. Environmental Analysis Laboratory, Inc.
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109-4372
TEL: *5053453975* FAX: *5053454107*

CHAIN-OF-CUSTODY RECORD

Subcontractor:

Pace Analytical Services, Inc.
1638 Roseytown Rd Ste 2,3,4
Greensburg, PA 15601

TEL: (724) 850-5600
FAX: (724) 850-5601
Acct #:

Project Name: 1104008

13-Apr-11

Lab ID	Client Sample ID	Matrix	Collection Date	Bottle Type	Requested Tests
1104008-04I	CentralOCD-Close-033011	Leachate	4/8/2011	1LHDPEHNO3	SEE BELOW
1104008-05D	NEOCD-Close-033011	Leachate	4/8/2011	1LHDPEHNO3	SEE BELOW

Please provide MS /A 4/14/11

ANALYTICAL COMMENTS: LEACHATE SAMPLES-04I, 05D-RADIUM 226.228

Standard TAT. Please fax (505) 345-4107 results when completed, or email to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you

		Date/Time		Date/Time
Relinquished by:	[signature]	04/13/11 1515	Received by:	
Relinquished by:			Received by:	

60

SMB

Sample Condition Upon Receipt

Pace Analytical

Client Name: Hall

Project # 3044907

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 7946485958861

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

Thermometer Used 3 5 Type of Ice: Wet (Blue) None ☐ Samples on ice, cooling process has begun

Cooler Temperature N.A Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 4/14/11

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☑No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13. 4/14/11 1220 21 mL / 6.4460
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☑No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed: LW Lot # of added preservative: RFH-0052-S
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Field Data Required? Y / N

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] Date: 4/14/11

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

F-ALLC003-4 23Feb2010

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 200.7: Metals											
Sample ID: 1104008-04FMSD		*MSD*				Batch ID:	**26407**	Analysis Date:		4/15/2011 4:19:13 PM	
Barium	0.8400	mg/L	0.0020	0.5	0.3858	90.8	70	130	1.18	20	
Cadmium	0.5051	mg/L	0.0020	0.5	0	101	70	130	0.971	20	
Chromium	0.4929	mg/L	0.0060	0.5	0	98.6	70	130	0.923	20	
Copper	0.6197	mg/L	0.0060	0.5	0.0158	121	70	130	1.97	20	
Iron	0.4834	mg/L	0.020	0.5	0.0202	92.6	70	130	0.621	20	
Lead	0.4839	mg/L	0.0050	0.5	0.0036	96.1	70	130	0.899	20	
Silver	0.4725	mg/L	0.0050	0.5	0	94.5	70	130	14.9	20	
Zinc	0.5843	mg/L	0.010	0.5	0.1389	89.1	70	130	0.934	20	
Sample ID: 1104008-05CMSD		*MSD*				Batch ID:	**26389**	Analysis Date:		4/15/2011 5:10:31 PM	
Chromium	0.4804	mg/L	0.0060	0.5	0	96.1	70	130	1.85	20	
Iron	0.4608	mg/L	0.020	0.5	0	92.2	70	130	1.34	20	
Lead	0.4706	mg/L	0.0050	0.5	0.0019	93.7	70	130	1.77	20	
Sample ID: 1104008-05CMSD		*MSD*				Batch ID:	**26389**	Analysis Date:		4/19/2011 10:59:04 AM	
Barium	1.258	mg/L	0.010	0.5	0.8107	89.4	70	130	1.82	20	
Sample ID: MB-26407		*MBLK*				Batch ID:	**26407**	Analysis Date:		4/15/2011 3:52:21 PM	
B[illegible]m	ND	mg/L	0.0020								
C[illegible]ium	ND	mg/L	0.0020								
Chromium	ND	mg/L	0.0060								
Copper	ND	mg/L	0.0060								
Iron	ND	mg/L	0.020								
Lead	ND	mg/L	0.0050								
Manganese	ND	mg/L	0.0020								
Silver	ND	mg/L	0.0050								
Zinc	ND	mg/L	0.010								
Sample ID: LCS-26407		*LCS*				Batch ID:	**26407**	Analysis Date:		4/15/2011 4:05:32 PM	
Barium	0.4663	mg/L	0.0020	0.5	0	93.3	85	115			
Cadmium	0.4894	mg/L	0.0020	0.5	0	97.9	85	115			
Chromium	0.5049	mg/L	0.0060	0.5	0	101	85	115			
Copper	0.5174	mg/L	0.0060	0.5	0.0026	103	85	115			
Iron	0.4818	mg/L	0.020	0.5	0	96.4	85	115			
Lead	0.4986	mg/L	0.0050	0.5	0	99.7	85	115			
Manganese	0.4867	mg/L	0.0020	0.5	0.0002	97.3	85	115			
Silver	0.4184	mg/L	0.0050	0.5	0.0007	83.5	85	115			S
Zinc	0.4798	mg/L	0.010	0.5	0.0006	95.8	85	115			
Sample ID: 1104008-04FMS		*MS*				Batch ID:	**26407**	Analysis Date:		4/15/2011 4:14:24 PM	
Barium	0.8301	mg/L	0.0020	0.5	0.3858	88.9	70	130			
Cadmium	0.5002	mg/L	0.0020	0.5	0	100	70	130			
Chromium	0.4884	mg/L	0.0060	0.5	0	97.7	70	130			
Copper	0.6076	mg/L	0.0060	0.5	0.0158	118	70	130			
Iron	0.4804	mg/L	0.020	0.5	0.0202	92.0	70	130			
Lead	0.4796	mg/L	0.0050	0.5	0.0036	95.2	70	130			
S[illegible]	0.4071	mg/L	0.0050	0.5	0	81.4	70	130			
Zinc	0.5789	mg/L	0.010	0.5	0.1389	88.0	70	130			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 200.7: Metals											
Sample ID: 1104008-05CMS		*MS*				Batch ID:	**26389**	Analysis Date:		4/15/2011 5:05:40 PM	
Chromium	0.4894	mg/L	0.0060	0.5	0	97.9	70	130			
Iron	0.4670	mg/L	0.020	0.5	0	93.4	70	130			
Lead	0.4790	mg/L	0.0050	0.5	0.0019	95.4	70	130			
Sample ID: 1104008-05CMS		*MS*				Batch ID:	**26389**	Analysis Date:		4/19/2011 10:54:11 AM	
Barium	1.281	mg/L	0.010	0.5	0.8107	94.0	70	130			
Method: EPA Method 245.1: Mercury											
Sample ID: 1104008-04FMSD		*MSD*				Batch ID:	**26593**	Analysis Date:		4/28/2011 12:37:48 PM	
Mercury	0.005195	mg/L	0.00020	0.005	0	104	75	125	1.14	20	
Sample ID: MBLK-26593		*MBLK*				Batch ID:	**26593**	Analysis Date:		4/28/2011 12:30:47 PM	
Mercury	ND	mg/L	0.00020								
Sample ID: LCS-26593		*LCS*				Batch ID:	**26593**	Analysis Date:		4/28/2011 12:32:31 PM	
Mercury	0.005076	mg/L	0.00020	0.005	0	102	80	120			
Sample ID: 1104008-04FMS		*MS*				Batch ID:	**26593**	Analysis Date:		4/28/2011 12:36:02 PM	
Mercury	0.005254	mg/L	0.00020	0.005	0	105	75	125			
Method: EPA Method 300.0: Anions											
Sample ID: MB-26291		*MBLK*				Batch ID:	**26291**	Analysis Date:		4/8/2011 11:09:58 A	
Fluoride	ND	mg/Kg	0.30								
Chloride	ND	mg/Kg	1.5								
Nitrogen, Nitrate (As N)	ND	mg/Kg	0.30								
Sulfate	ND	mg/Kg	1.5								
Sample ID: LCS-26291		*LCS*				Batch ID:	**26291**	Analysis Date:		4/9/2011 1:05:51 AM	
Fluoride	1.595	mg/Kg	0.30	1.5	0	106	90	110			
Chloride	13.73	mg/Kg	1.5	15	0	91.5	90	110			
Nitrogen, Nitrate (As N)	7.165	mg/Kg	0.30	7.5	0	95.5	90	110			
Sulfate	29.06	mg/Kg	1.5	30	0	96.9	90	110			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms
Work Order: 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions											
Sample ID: 1104008-04GMSD x		*MSD*				Batch ID:	**R44750**	Analysis Date:		4/14/2011 9:22:02 AM	
Chloride	42.28	mg/L	2.5	25	18.45	95.3	78	107	3.58	20	
Sample ID: MB		*MBLK*				Batch ID:	**R44669**	Analysis Date:		4/11/2011 2:38:42 PM	
Chloride	ND	mg/L	0.50								
Sulfate	ND	mg/L	0.50								
Sample ID: MB		*MBLK*				Batch ID:	**R44698**	Analysis Date:		4/12/2011 10:42:44 AM	
Chloride	ND	mg/L	0.50								
Sulfate	ND	mg/L	0.50								
Sample ID: MB		*MBLK*				Batch ID:	**R44750**	Analysis Date:		4/13/2011 7:08:50 PM	
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.50								
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20								
Sulfate	ND	mg/L	0.50								
Sample ID: MB		*MBLK*				Batch ID:	**R44750**	Analysis Date:		4/14/2011 10:31:42 AM	
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.50								
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20								
S[illegible]e	ND	mg/L	0.50								
Sample ID: MB		*MBLK*				Batch ID:	**R44785**	Analysis Date:		4/15/2011 10:29:51 AM	
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.50								
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20								
Sulfate	ND	mg/L	0.50								
Sample ID: LCS		*LCS*				Batch ID:	**R44669**	Analysis Date:		4/11/2011 2:51:06 PM	
Chloride	4.882	mg/L	0.50	5	0	97.6	90	110			
Sulfate	9.923	mg/L	0.50	10	0	99.2	90	110			
Sample ID: LCS		*LCS*				Batch ID:	**R44698**	Analysis Date:		4/12/2011 11:00:09 AM	
Chloride	4.897	mg/L	0.50	5	0	97.9	90	110			
Sulfate	10.40	mg/L	0.50	10	0	104	90	110			
Sample ID: LCS		*LCS*				Batch ID:	**R44750**	Analysis Date:		4/13/2011 7:26:15 PM	
Fluoride	0.5549	mg/L	0.10	0.5	0	111	90	110			S
Chloride	4.876	mg/L	0.50	5	0	97.5	90	110			
Nitrate (As N)+Nitrite (As N)	3.437	mg/L	0.20	3.5	0	98.2	90	110			
Sulfate	9.824	mg/L	0.50	10	0	98.2	90	110			
Sample ID: LCS		*LCS*				Batch ID:	**R44750**	Analysis Date:		4/14/2011 10:49:06 AM	
Fluoride	0.5486	mg/L	0.10	0.5	0	110	90	110			
Chloride	4.998	mg/L	0.50	5	0	100	90	110			
Nitrate (As N)+Nitrite (As N)	3.537	mg/L	0.20	3.5	0	101	90	110			
Sulfate	10.14	mg/L	0.50	10	0	101	90	110			
Sample ID: LCS		*LCS*				Batch ID:	**R44785**	Analysis Date:		4/15/2011 10:47:15 AM	
Fluoride	0.5384	mg/L	0.10	0.5	0	108	90	110			
C[illegible]de	5.087	mg/L	0.50	5	0	102	90	110			
Ni[illegible] (As N)+Nitrite (As N)	3.574	mg/L	0.20	3.5	0	102	90	110			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions											
Sample ID: LCS		*LCS*				Batch ID:	**R44785**	Analysis Date:		4/15/2011 10:47:15 AM	
Sulfate	10.31	mg/L	0.50	10	0	103	90	110			
Sample ID: 1104008-04GMS x5		*MS*				Batch ID:	**R44750**	Analysis Date:		4/14/2011 9:04:37 AM	
Chloride	43.83	mg/L	2.5	25	18.45	101	78	107			
Method: Total Phenolics											
Sample ID: MB-26404		*MBLK*				Batch ID:	**26405**	Analysis Date:		4/14/2011	
Phenolics, Total Recoverable	ND	µg/L	2.5								
Sample ID: LCS-26404		*LCS*				Batch ID:	**26405**	Analysis Date:		4/14/2011	
Phenolics, Total Recoverable	21.20	µg/L	2.5	20	0	106	74.2	128			
Sample ID: LCSD-26404		*LCSD*				Batch ID:	**26405**	Analysis Date:		4/14/2011	
Phenolics, Total Recoverable	23.70	µg/L	2.5	20	0	119	74.2	128	11.2	20	
Method: EPA Method 504.1 Modified: EDB											
Sample ID: 1104008-01AMSD		*MSD*				Batch ID:	**26347**	Analysis Date:		4/11/2011 8:34:55 PM	
1,2-Dibromoethane	1.121	µg/Kg	0.10	1	0	112	59.361	138.471	4.19	11.2	
Sample ID: MB-26347		*MBLK*				Batch ID:	**26347**	Analysis Date:		4/11/2011 7:17:30 PM	
1,2-Dibromoethane	ND	µg/Kg	0.10								
Sample ID: LCS-26347		*LCS*				Batch ID:	**26347**	Analysis Date:		4/11/2011 7:33:11 P	
1,2-Dibromoethane	1.043	µg/Kg	0.10	1	0	104	70	130			
Sample ID: LCSD-26347		*LCSD*				Batch ID:	**26347**	Analysis Date:		4/11/2011 7:49:03 PM	
1,2-Dibromoethane	1.041	µg/Kg	0.10	1	0	104	70	130	0.192	20	
Sample ID: 1104008-01AMS		*MS*				Batch ID:	**26347**	Analysis Date:		4/11/2011 8:19:45 PM	
1,2-Dibromoethane	1.075	µg/Kg	0.10	1	0	108	59.361	138.471			
Method: EPA Method 8011/504.1: EDB											
Sample ID: 1104008-04CMSD		*MSD*				Batch ID:	**26414**	Analysis Date:		4/14/2011 5:07:45 PM	
1,2-Dibromoethane	0.1170	µg/L	0.010	0.1	0	117	55.6	140	1.69	15.5	
Sample ID: MB-26414		*MBLK*				Batch ID:	**26414**	Analysis Date:		4/14/2011 4:04:13 PM	
1,2-Dibromoethane	ND	µg/L	0.010								
Sample ID: LCS-26414		*LCS*				Batch ID:	**26414**	Analysis Date:		4/14/2011 4:16:54 PM	
1,2-Dibromoethane	0.1060	µg/L	0.010	0.1	0	106	70	130			
Sample ID: LCSD-26414		*LCSD*				Batch ID:	**26414**	Analysis Date:		4/14/2011 4:29:40 PM	
1,2-Dibromoethane	0.1090	µg/L	0.010	0.1	0	109	70	130	2.79	20	
Sample ID: 1104008-04CMS		*MS*				Batch ID:	**26414**	Analysis Date:		4/14/2011 4:55:06 PM	
1,2-Dibromoethane	0.1190	µg/L	0.010	0.1	0	119	55.6	140			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Diesel Range Organics											
Sample ID: MB-26252		*MBLK*				Batch ID:	**26252**	Analysis Date:		4/6/2011 9:45:01 AM	
Diesel Range Organics (DRO)	ND	mg/Kg	10								
Motor Oil Range Organics (MRO)	ND	mg/Kg	50								
Sample ID: LCS-26252		*LCS*				Batch ID:	**26252**	Analysis Date:		4/6/2011 10:19:08 AM	
Diesel Range Organics (DRO)	48.66	mg/Kg	10	50	0	97.3	66.2	120			
Sample ID: LCSD-26252		*LCSD*				Batch ID:	**26252**	Analysis Date:		4/6/2011 10:53:19 AM	
Diesel Range Organics (DRO)	45.97	mg/Kg	10	50	0	91.9	66.2	120	5.69	14.3	
Method: EPA Method 8015B: Gasoline Range											
Sample ID: MB-26239		*MBLK*				Batch ID:	**26239**	Analysis Date:		4/6/2011 7:59:54 PM	
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0								
Sample ID: LCS-26239		*LCS*				Batch ID:	**26239**	Analysis Date:		4/6/2011 6:04:17 PM	
Gasoline Range Organics (GRO)	25.56	mg/Kg	5.0	25	0	102	88.8	124			
Method: EPA Method 8021B: Volatiles											
Sample ID: 1104008-08AMSD		*MSD*				Batch ID:	**26239**	Analysis Date:		4/6/2011 7:02:08 PM	
Methyl tert-butyl ether (MTBE)	0.8702	mg/Kg	0.10	1	0.0124	85.8	61.3	215	1.08	19.6	
Benzene	0.8537	mg/Kg	0.050	1	0	85.4	67.2	113	0.149	14.3	
Toluene	0.8997	mg/Kg	0.050	1	0	90.0	62.1	116	3.49	15.9	
Ethylbenzene	0.9394	mg/Kg	0.050	1	0	93.9	67.9	127	5.82	14.4	
Xylenes, Total	2.846	mg/Kg	0.10	3	0	94.9	60.6	134	4.79	12.6	
Sample ID: MB-26239		*MBLK*				Batch ID:	**26239**	Analysis Date:		4/6/2011 7:59:54 PM	
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.10								
Benzene	ND	mg/Kg	0.050								
Toluene	ND	mg/Kg	0.050								
Ethylbenzene	ND	mg/Kg	0.050								
Xylenes, Total	ND	mg/Kg	0.10								
Sample ID: LCS-26239		*LCS*				Batch ID:	**26239**	Analysis Date:		4/6/2011 7:31:02 PM	
Methyl tert-butyl ether (MTBE)	0.8871	mg/Kg	0.10	1	0	88.7	65.5	229			
Benzene	0.8715	mg/Kg	0.050	1	0.0041	86.7	83.3	107			
Toluene	0.8887	mg/Kg	0.050	1	0	88.9	74.3	115			
Ethylbenzene	0.9217	mg/Kg	0.050	1	0	92.2	80.9	122			
Xylenes, Total	2.769	mg/Kg	0.10	3	0	92.3	85.2	123			
Sample ID: 1104008-08AMS		*MS*				Batch ID:	**26239**	Analysis Date:		4/6/2011 6:33:13 PM	
Methyl tert-butyl ether (MTBE)	0.8796	mg/Kg	0.10	1	0.0124	86.7	61.3	215			
Benzene	0.8524	mg/Kg	0.050	1	0	85.2	67.2	113			
Toluene	0.8688	mg/Kg	0.050	1	0	86.9	62.1	116			
Ethylbenzene	0.8863	mg/Kg	0.050	1	0	88.6	67.9	127			
Xylenes, Total	2.713	mg/Kg	0.10	3	0	90.4	60.6	134			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8082: PCB's											
Sample ID: 1104008-01AMSD		*MSD*				Batch ID:	**26241**	Analysis Date:		4/5/2011 7:23:02 PM	
Aroclor 1260	0.1042	mg/Kg	0.020	0.125	0	83.4	45	117	5.12	20	
Sample ID: MB-26241		*MBLK*				Batch ID:	**26241**	Analysis Date:		4/5/2011 3:03:45 PM	
Aroclor 1016	ND	mg/Kg	0.020								
Aroclor 1221	ND	mg/Kg	0.020								
Aroclor 1232	ND	mg/Kg	0.020								
Aroclor 1242	ND	mg/Kg	0.020								
Aroclor 1248	ND	mg/Kg	0.020								
Aroclor 1254	ND	mg/Kg	0.020								
Aroclor 1260	ND	mg/Kg	0.020								
Sample ID: LCS-26241		*LCS*				Batch ID:	**26241**	Analysis Date:		4/5/2011 5:00:36 PM	
Aroclor 1260	0.06995	mg/Kg	0.020	0.125	0	56.0	42.6	139			
Sample ID: 1104008-01AMS		*MS*				Batch ID:	**26241**	Analysis Date:		4/5/2011 6:35:30 PM	
Aroclor 1260	0.09900	mg/Kg	0.020	0.125	0	79.2	45	117			
Method: EPA Method 8082: PCB's											
Sample ID: 1104008-04DMSD		*MSD*				Batch ID:	**26425**	Analysis Date:		4/19/2011 10:57:12 PM	
Aroclor 1016	1.534	µg/L	1.0	5	0	30.7	70	130	4.40	0	S
Aroclor 1260	1.258	µg/L	1.0	5	0	25.2	61.1	129	7.59	12.9	S
Sample ID: MB-26425		*MBLK*				Batch ID:	**26425**	Analysis Date:		4/19/2011 3:49:31 PM	
Aroclor 1016	ND	µg/L	1.0								
Aroclor 1221	ND	µg/L	1.0								
Aroclor 1232	ND	µg/L	1.0								
Aroclor 1242	ND	µg/L	1.0								
Aroclor 1248	ND	µg/L	1.0								
Aroclor 1254	ND	µg/L	1.0								
Aroclor 1260	ND	µg/L	1.0								
Sample ID: LCS-26425		*LCS*				Batch ID:	**26425**	Analysis Date:		4/19/2011 4:36:59 PM	
Aroclor 1016	3.510	µg/L	1.0	5	0	70.2	33	126			
Aroclor 1260	3.924	µg/L	1.0	5	0	78.5	40.7	130			
Sample ID: 1104008-04DMS		*MS*				Batch ID:	**26425**	Analysis Date:		4/19/2011 10:10:02 PM	
Aroclor 1016	1.468	µg/L	1.0	5	0	29.4	70	130			S
Aroclor 1260	1.166	µg/L	1.0	5	0	23.3	61.1	129			S

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: MB-26239		*MBLK*				Batch ID:	**26239**	Analysis Date:		4/7/2011 1:53:36 PM	
Benzene	ND	mg/Kg	0.050								
Toluene	ND	mg/Kg	0.050								
Ethylbenzene	ND	mg/Kg	0.050								
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050								
1,2,4-Trimethylbenzene	ND	mg/Kg	0.050								
1,3,5-Trimethylbenzene	ND	mg/Kg	0.050								
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050								
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050								
Naphthalene	ND	mg/Kg	0.10								
1-Methylnaphthalene	ND	mg/Kg	0.20								
2-Methylnaphthalene	ND	mg/Kg	0.20								
Acetone	ND	mg/Kg	0.75								
Bromobenzene	ND	mg/Kg	0.050								
Bromodichloromethane	ND	mg/Kg	0.050								
Bromoform	ND	mg/Kg	0.050								
Bromomethane	ND	mg/Kg	0.15								
2-Butanone	ND	mg/Kg	0.50								
C[illegible]n disulfide	ND	mg/Kg	0.50								
Carbon tetrachloride	ND	mg/Kg	0.10								
Chlorobenzene	ND	mg/Kg	0.050								
Chloroethane	ND	mg/Kg	0.10								
Chloroform	ND	mg/Kg	0.050								
Chloromethane	ND	mg/Kg	0.15								
2-Chlorotoluene	ND	mg/Kg	0.050								
4-Chlorotoluene	ND	mg/Kg	0.050								
cis-1,2-DCE	ND	mg/Kg	0.050								
cis-1,3-Dichloropropene	ND	mg/Kg	0.050								
1,2-Dibromo-3-chloropropane	ND	mg/Kg	0.10								
Dibromochloromethane	ND	mg/Kg	0.050								
Dibromomethane	ND	mg/Kg	0.10								
1,2-Dichlorobenzene	ND	mg/Kg	0.050								
1,3-Dichlorobenzene	ND	mg/Kg	0.050								
1,4-Dichlorobenzene	ND	mg/Kg	0.050								
Dichlorodifluoromethane	ND	mg/Kg	0.050								
1,1-Dichloroethane	ND	mg/Kg	0.10								
1,1-Dichloroethene	ND	mg/Kg	0.050								
1,2-Dichloropropane	ND	mg/Kg	0.050								
1,3-Dichloropropane	ND	mg/Kg	0.050								
2,2-Dichloropropane	ND	mg/Kg	0.10								
1,1-Dichloropropene	ND	mg/Kg	0.10								
Hexachlorobutadiene	ND	mg/Kg	0.10								
2-Hexanone	ND	mg/Kg	0.50								
Is[illegible]ropylbenzene	ND	mg/Kg	0.050								
4[illegible]ropyltoluene	ND	mg/Kg	0.050								

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: MB-26239		*MBLK*				Batch ID:	**26239**	Analysis Date:	4/7/2011 1:53:36 PM		
4-Methyl-2-pentanone	ND	mg/Kg	0.50								
Methylene chloride	ND	mg/Kg	0.15								
n-Butylbenzene	ND	mg/Kg	0.050								
n-Propylbenzene	ND	mg/Kg	0.050								
sec-Butylbenzene	ND	mg/Kg	0.050								
Styrene	ND	mg/Kg	0.050								
tert-Butylbenzene	ND	mg/Kg	0.050								
1,1,1,2-Tetrachloroethane	ND	mg/Kg	0.050								
1,1,2,2-Tetrachloroethane	ND	mg/Kg	0.050								
Tetrachloroethene (PCE)	ND	mg/Kg	0.050								
trans-1,2-DCE	ND	mg/Kg	0.050								
trans-1,3-Dichloropropene	ND	mg/Kg	0.050								
1,2,3-Trichlorobenzene	ND	mg/Kg	0.10								
1,2,4-Trichlorobenzene	ND	mg/Kg	0.050								
1,1,1-Trichloroethane	ND	mg/Kg	0.050								
1,1,2-Trichloroethane	ND	mg/Kg	0.050								
Trichloroethene (TCE)	ND	mg/Kg	0.050								
Trichlorofluoromethane	ND	mg/Kg	0.050								
1,2,3-Trichloropropane	ND	mg/Kg	0.10								
Vinyl chloride	ND	mg/Kg	0.050								
Xylenes, Total	ND	mg/Kg	0.10								
Sample ID: b2		*MBLK*				Batch ID:	**R44744**	Analysis Date:	4/13/2011 12:10:41 PM		
Benzene	ND	mg/Kg	0.050								
Toluene	ND	mg/Kg	0.050								
Ethylbenzene	ND	mg/Kg	0.050								
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050								
1,2,4-Trimethylbenzene	ND	mg/Kg	0.050								
1,3,5-Trimethylbenzene	ND	mg/Kg	0.050								
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050								
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050								
Naphthalene	ND	mg/Kg	0.10								
1-Methylnaphthalene	ND	mg/Kg	0.20								
2-Methylnaphthalene	ND	mg/Kg	0.20								
Acetone	ND	mg/Kg	0.75								
Bromobenzene	ND	mg/Kg	0.050								
Bromodichloromethane	ND	mg/Kg	0.050								
Bromoform	ND	mg/Kg	0.050								
Bromomethane	ND	mg/Kg	0.15								
2-Butanone	ND	mg/Kg	0.50								
Carbon disulfide	ND	mg/Kg	0.50								
Carbon tetrachloride	ND	mg/Kg	0.10								
Chlorobenzene	ND	mg/Kg	0.050								
Chloroethane	ND	mg/Kg	0.10								
Chloroform	ND	mg/Kg	0.050								

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: b2		*MBLK*					Batch ID: **R44744**		Analysis Date:	4/13/2011 12:10:41 PM	
Chloromethane	ND	mg/Kg	0.15								
2-Chlorotoluene	ND	mg/Kg	0.050								
4-Chlorotoluene	ND	mg/Kg	0.050								
cis-1,2-DCE	ND	mg/Kg	0.050								
cis-1,3-Dichloropropene	ND	mg/Kg	0.050								
1,2-Dibromo-3-chloropropane	ND	mg/Kg	0.10								
Dibromochloromethane	ND	mg/Kg	0.050								
Dibromomethane	ND	mg/Kg	0.10								
1,2-Dichlorobenzene	ND	mg/Kg	0.050								
1,3-Dichlorobenzene	ND	mg/Kg	0.050								
1,4-Dichlorobenzene	ND	mg/Kg	0.050								
Dichlorodifluoromethane	ND	mg/Kg	0.050								
1,1-Dichloroethane	ND	mg/Kg	0.10								
1,1-Dichloroethene	ND	mg/Kg	0.050								
1,2-Dichloropropane	ND	mg/Kg	0.050								
1,3-Dichloropropane	ND	mg/Kg	0.050								
2,2-Dichloropropane	ND	mg/Kg	0.10								
1,[illegible]-Dichloropropene	ND	mg/Kg	0.10								
Hexachlorobutadiene	ND	mg/Kg	0.10								
2-Hexanone	ND	mg/Kg	0.50								
Isopropylbenzene	ND	mg/Kg	0.050								
4-Isopropyltoluene	ND	mg/Kg	0.050								
4-Methyl-2-pentanone	ND	mg/Kg	0.50								
Methylene chloride	ND	mg/Kg	0.15								
n-Butylbenzene	ND	mg/Kg	0.050								
n-Propylbenzene	ND	mg/Kg	0.050								
sec-Butylbenzene	ND	mg/Kg	0.050								
Styrene	ND	mg/Kg	0.050								
tert-Butylbenzene	ND	mg/Kg	0.050								
1,1,1,2-Tetrachloroethane	ND	mg/Kg	0.050								
1,1,2,2-Tetrachloroethane	ND	mg/Kg	0.050								
Tetrachloroethene (PCE)	ND	mg/Kg	0.050								
trans-1,2-DCE	ND	mg/Kg	0.050								
trans-1,3-Dichloropropene	ND	mg/Kg	0.050								
1,2,3-Trichlorobenzene	ND	mg/Kg	0.10								
1,2,4-Trichlorobenzene	ND	mg/Kg	0.050								
1,1,1-Trichloroethane	ND	mg/Kg	0.050								
1,1,2-Trichloroethane	ND	mg/Kg	0.050								
Trichloroethene (TCE)	ND	mg/Kg	0.050								
Trichlorofluoromethane	ND	mg/Kg	0.050								
1,2,3-Trichloropropane	ND	mg/Kg	0.10								
Vinyl chloride	ND	mg/Kg	0.050								
Xylenes, Total	ND	mg/Kg	0.10								
Sample ID: lcs-26239		*LCS*					Batch ID: **26239**		Analysis Date:	4/7/2011 2:21:45 PM	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: lcs-26239		*LCS*				Batch ID:	**26239**	Analysis Date:		4/7/2011 2:21:45 PM	
Benzene	0.8497	mg/Kg	0.050	1	0	85.0	68.3	120			
Toluene	1.004	mg/Kg	0.050	1	0	100	90.4	118			
Chlorobenzene	1.011	mg/Kg	0.050	1	0	101	94.2	111			
1,1-Dichloroethene	0.8135	mg/Kg	0.050	1	0	81.3	53.7	140			
Trichloroethene (TCE)	0.7352	mg/Kg	0.050	1	0	73.5	64.5	108			
Sample ID: 100ng lcs		*LCS*				Batch ID:	**R44744**	Analysis Date:		4/13/2011 1:07:07 PM	
Benzene	1.090	mg/Kg	0.050	1	0	109	68.3	120			
Toluene	1.005	mg/Kg	0.050	1	0	101	90.4	118			
Chlorobenzene	0.9620	mg/Kg	0.050	1	0	96.2	94.2	111			
1,1-Dichloroethene	1.187	mg/Kg	0.050	1	0	119	53.7	140			
Trichloroethene (TCE)	0.9725	mg/Kg	0.050	1	0	97.3	64.5	108			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: 1104008-06a msd		*MSD*				Batch ID:	**R44594**	Analysis Date:		4/6/2011 5:54:00 PM	
Benzene	18.59	µg/L	1.0	20	0.301	91.4	82	118	8.81	17.1	
Toluene	18.99	µg/L	1.0	20	0.3632	93.1	81.1	122	12.1	16.1	
Chlorobenzene	17.69	µg/L	1.0	20	0	88.4	78.8	114	13.5	15.5	
1,1-Dichloroethene	19.26	µg/L	1.0	20	0	96.3	89	126	1.27	15.8	
Trichloroethene (TCE)	16.51	µg/L	1.0	20	0	82.6	73.9	114	7.69	19.6	
Sample ID: b2		*MBLK*				Batch ID:	**R44594**	Analysis Date:		4/6/2011 10:58:24 AM	
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
1,2,4-Trimethylbenzene	ND	µg/L	1.0								
1,3,5-Trimethylbenzene	ND	µg/L	1.0								
1,2-Dichloroethane (EDC)	ND	µg/L	1.0								
1,2-Dibromoethane (EDB)	ND	µg/L	1.0								
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	4.0								
2[illegible]ylnaphthalene	ND	µg/L	4.0								
Acetone	ND	µg/L	10								
Bromobenzene	ND	µg/L	1.0								
Bromodichloromethane	ND	µg/L	1.0								
Bromoform	ND	µg/L	1.0								
Bromomethane	ND	µg/L	3.0								
2-Butanone	ND	µg/L	10								
Carbon disulfide	ND	µg/L	10								
Carbon Tetrachloride	ND	µg/L	1.0								
Chlorobenzene	ND	µg/L	1.0								
Chloroethane	ND	µg/L	2.0								
Chloroform	ND	µg/L	1.0								
Chloromethane	ND	µg/L	3.0								
2-Chlorotoluene	ND	µg/L	1.0								
4-Chlorotoluene	ND	µg/L	1.0								
cis-1,2-DCE	ND	µg/L	1.0								
cis-1,3-Dichloropropene	ND	µg/L	1.0								
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0								
Dibromochloromethane	ND	µg/L	1.0								
Dibromomethane	ND	µg/L	1.0								
1,2-Dichlorobenzene	ND	µg/L	1.0								
1,3-Dichlorobenzene	ND	µg/L	1.0								
1,4-Dichlorobenzene	ND	µg/L	1.0								
Dichlorodifluoromethane	ND	µg/L	1.0								
1,1-Dichloroethane	ND	µg/L	1.0								
1,1-Dichloroethene	ND	µg/L	1.0								
1,[illegible]hloropropane	ND	µg/L	1.0								
1,3-Dichloropropane	ND	µg/L	1.0								

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: b2		*MBLK*					Batch ID: **R44594**		Analysis Date:	4/6/2011 10:58:24 AM	
2,2-Dichloropropane	ND	µg/L	2.0								
1,1-Dichloropropene	ND	µg/L	1.0								
Hexachlorobutadiene	ND	µg/L	1.0								
2-Hexanone	ND	µg/L	10								
Isopropylbenzene	ND	µg/L	1.0								
4-Isopropyltoluene	ND	µg/L	1.0								
4-Methyl-2-pentanone	ND	µg/L	10								
Methylene Chloride	ND	µg/L	3.0								
n-Butylbenzene	ND	µg/L	1.0								
n-Propylbenzene	ND	µg/L	1.0								
sec-Butylbenzene	ND	µg/L	1.0								
Styrene	ND	µg/L	1.0								
tert-Butylbenzene	ND	µg/L	1.0								
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0								
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0								
Tetrachloroethene (PCE)	ND	µg/L	1.0								
trans-1,2-DCE	ND	µg/L	1.0								
trans-1,3-Dichloropropene	ND	µg/L	1.0								
1,2,3-Trichlorobenzene	ND	µg/L	1.0								
1,2,4-Trichlorobenzene	ND	µg/L	1.0								
1,1,1-Trichloroethane	ND	µg/L	1.0								
1,1,2-Trichloroethane	ND	µg/L	1.0								
Trichloroethene (TCE)	ND	µg/L	1.0								
Trichlorofluoromethane	ND	µg/L	1.0								
1,2,3-Trichloropropane	ND	µg/L	2.0								
Vinyl chloride	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	1.5								
Sample ID: b2		*MBLK*					Batch ID: **R44744**		Analysis Date:	4/13/2011 12:10:41 PM	
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
1,2,4-Trimethylbenzene	ND	µg/L	1.0								
1,3,5-Trimethylbenzene	ND	µg/L	1.0								
1,2-Dichloroethane (EDC)	ND	µg/L	1.0								
1,2-Dibromoethane (EDB)	ND	µg/L	1.0								
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	4.0								
2-Methylnaphthalene	ND	µg/L	4.0								
Acetone	ND	µg/L	10								
Bromobenzene	ND	µg/L	1.0								
Bromodichloromethane	ND	µg/L	1.0								
Bromoform	ND	µg/L	1.0								
Bromomethane	ND	µg/L	3.0								

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: b2		*MBLK*					Batch ID: **R44744**		Analysis Date:	4/13/2011 12:10:41 PM	
2-Butanone	ND	µg/L	10								
Carbon disulfide	ND	µg/L	10								
Carbon Tetrachloride	ND	µg/L	1.0								
Chlorobenzene	ND	µg/L	1.0								
Chloroethane	ND	µg/L	2.0								
Chloroform	ND	µg/L	1.0								
Chloromethane	ND	µg/L	3.0								
2-Chlorotoluene	ND	µg/L	1.0								
4-Chlorotoluene	ND	µg/L	1.0								
cis-1,2-DCE	ND	µg/L	1.0								
cis-1,3-Dichloropropene	ND	µg/L	1.0								
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0								
Dibromochloromethane	ND	µg/L	1.0								
Dibromomethane	ND	µg/L	1.0								
1,2-Dichlorobenzene	ND	µg/L	1.0								
1,3-Dichlorobenzene	ND	µg/L	1.0								
1,4-Dichlorobenzene	ND	µg/L	1.0								
Dichlorodifluoromethane	ND	µg/L	1.0								
1[illegible]chloroethane	ND	µg/L	1.0								
1,1-Dichloroethene	ND	µg/L	1.0								
1,2-Dichloropropane	ND	µg/L	1.0								
1,3-Dichloropropane	ND	µg/L	1.0								
2,2-Dichloropropane	ND	µg/L	2.0								
1,1-Dichloropropene	ND	µg/L	1.0								
Hexachlorobutadiene	ND	µg/L	1.0								
2-Hexanone	ND	µg/L	10								
Isopropylbenzene	ND	µg/L	1.0								
4-Isopropyltoluene	ND	µg/L	1.0								
4-Methyl-2-pentanone	ND	µg/L	10								
Methylene Chloride	ND	µg/L	3.0								
n-Butylbenzene	ND	µg/L	1.0								
n-Propylbenzene	ND	µg/L	1.0								
sec-Butylbenzene	ND	µg/L	1.0								
Styrene	ND	µg/L	1.0								
tert-Butylbenzene	ND	µg/L	1.0								
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0								
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0								
Tetrachloroethene (PCE)	ND	µg/L	1.0								
trans-1,2-DCE	ND	µg/L	1.0								
trans-1,3-Dichloropropene	ND	µg/L	1.0								
1,2,3-Trichlorobenzene	ND	µg/L	1.0								
1,2,4-Trichlorobenzene	ND	µg/L	1.0								
1,1,1-Trichloroethane	ND	µg/L	1.0								
1,1,2-Trichloroethane	ND	µg/L	1.0								

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: b2		*MBLK*				Batch ID:	**R44744**	Analysis Date:	4/13/2011 12:10:41 PM		
Trichloroethene (TCE)	ND	µg/L	1.0								
Trichlorofluoromethane	ND	µg/L	1.0								
1,2,3-Trichloropropane	ND	µg/L	2.0								
Vinyl chloride	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	1.5								
Sample ID: 100ng lcs		*LCS*				Batch ID:	**R44594**	Analysis Date:	4/6/2011 10:30:15 AM		
Benzene	21.43	µg/L	1.0	20	0.261	106	85.2	121			
Toluene	21.28	µg/L	1.0	20	0.142	106	88.3	121			
Chlorobenzene	20.11	µg/L	1.0	20	0.262	99.2	91.9	110			
1,1-Dichloroethene	24.85	µg/L	1.0	20	0	124	91.5	134			
Trichloroethene (TCE)	18.67	µg/L	1.0	20	0	93.3	78.3	102			
Sample ID: 100ng lcs		*LCS*				Batch ID:	**R44744**	Analysis Date:	4/13/2011 1:07:07 PM		
Benzene	21.80	µg/L	1.0	20	0	109	85.2	121			
Toluene	20.11	µg/L	1.0	20	0.1372	99.9	88.3	121			
Chlorobenzene	19.24	µg/L	1.0	20	0	96.2	91.9	110			
1,1-Dichloroethene	23.73	µg/L	1.0	20	0	119	91.5	134			
Trichloroethene (TCE)	19.45	µg/L	1.0	20	0	97.3	78.3	102			
Sample ID: 1104008-06a ms		*MS*				Batch ID:	**R44594**	Analysis Date:	4/6/2011 5:25:48 PM		
Benzene	17.02	µg/L	1.0	20	0.301	83.6	82	118			
Toluene	16.83	µg/L	1.0	20	0.3632	82.3	81.1	122			
Chlorobenzene	15.45	µg/L	1.0	20	0	77.3	78.8	114			S
1,1-Dichloroethene	19.50	µg/L	1.0	20	0	97.5	89	126			
Trichloroethene (TCE)	15.29	µg/L	1.0	20	0	76.5	73.9	114			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles											
Sample ID: 1104008-01Amsd		*MSD*				Batch ID:	**26243**	Analysis Date:		4/7/2011 7:28:39 PM	
4-Chloro-3-methylphenol	2.782	mg/Kg	0.50	3.33	0	83.5	17.4	119	3.60	20.2	
2-Chlorophenol	2.074	mg/Kg	0.20	3.33	0	62.3	25.3	117	3.61	30.6	
4-Nitrophenol	2.755	mg/Kg	0.25	3.33	0	82.7	13.7	165	0.327	43.7	
Pentachlorophenol	2.703	mg/Kg	0.40	3.33	0.061	79.3	26.6	117	5.28	24.2	
Phenol	2.193	mg/Kg	0.20	3.33	0	65.8	26.6	105	3.70	29.5	
Sample ID: mb-26243		*MBLK*				Batch ID:	**26243**	Analysis Date:		4/7/2011 5:30:37 PM	
4-Chloro-3-methylphenol	ND	mg/Kg	0.50								
2-Chlorophenol	ND	mg/Kg	0.20								
2,4-Dichlorophenol	ND	mg/Kg	0.40								
2,4-Dimethylphenol	ND	mg/Kg	0.30								
4,6-Dinitro-2-methylphenol	ND	mg/Kg	0.50								
2,4-Dinitrophenol	ND	mg/Kg	0.40								
2-Methylphenol	ND	mg/Kg	0.50								
3+4-Methylphenol	ND	mg/Kg	0.20								
2-Nitrophenol	ND	mg/Kg	0.20								
4-Nitrophenol	ND	mg/Kg	0.25								
P[illegible]achlorophenol	ND	mg/Kg	0.40								
P[illegible]ol	ND	mg/Kg	0.20								
2,4,5-Trichlorophenol	ND	mg/Kg	0.20								
2,4,6-Trichlorophenol	ND	mg/Kg	0.20								
Sample ID: lcs-26243		*LCS*				Batch ID:	**26243**	Analysis Date:		4/7/2011 6:00:03 PM	
4-Chloro-3-methylphenol	2.586	mg/Kg	0.50	3.33	0	77.7	31.9	112			
2-Chlorophenol	1.982	mg/Kg	0.20	3.33	0	59.5	31.2	110			
4-Nitrophenol	2.306	mg/Kg	0.25	3.33	0	69.2	32.4	114			
Pentachlorophenol	2.016	mg/Kg	0.40	3.33	0	60.5	30.4	101			
Phenol	1.953	mg/Kg	0.20	3.33	0	58.6	27.9	105			
Sample ID: 1104008-01Ams		*MS*				Batch ID:	**26243**	Analysis Date:		4/7/2011 6:59:12 PM	
4-Chloro-3-methylphenol	2.884	mg/Kg	0.50	3.33	0	86.6	17.4	119			
2-Chlorophenol	2.151	mg/Kg	0.20	3.33	0	64.6	25.3	117			
4-Nitrophenol	2.746	mg/Kg	0.25	3.33	0	82.5	13.7	165			
Pentachlorophenol	2.564	mg/Kg	0.40	3.33	0.061	75.2	26.6	117			
Phenol	2.275	mg/Kg	0.20	3.33	0	68.3	26.6	105			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs											
Sample ID: 1104008-01AMSD		*MSD*				Batch ID:	**26348**	Analysis Date:		4/13/2011 2:33:40 PM	
Naphthalene	0.8175	mg/Kg	0.25	2	0	40.9	42.9	109	5.50	20	S
1-Methylnaphthalene	0.9000	mg/Kg	0.25	2	0	45.0	45	117	2.44	20	
2-Methylnaphthalene	0.8260	mg/Kg	0.25	2	0	41.3	41.3	109	7.80	20	
Acenaphthylene	0.8125	mg/Kg	0.25	2	0	40.6	36.1	118	6.81	20	
Acenaphthene	0.9218	mg/Kg	0.25	2	0	46.1	42.1	117	6.00	20	
Fluorene	0.07175	mg/Kg	0.030	0.2	0	35.9	10.2	103	13.9	20	
Phenanthrene	0.05200	mg/Kg	0.015	0.101	0	51.7	25.5	113	0.957	20	
Anthracene	0.05325	mg/Kg	0.015	0.101	0	52.9	38.3	108	11.9	20	
Fluoranthene	0.1108	mg/Kg	0.020	0.201	0	55.2	28.4	121	15.4	20	
Pyrene	0.08925	mg/Kg	0.025	0.2	0	44.6	23.6	115	10.1	20	
Benz(a)anthracene	0.01125	mg/Kg	0.010	0.02	0	56.3	17.5	126	12.5	20	
Chrysene	0.05175	mg/Kg	0.011	0.101	0	51.4	39.7	110	12.7	20	
Benzo(b)fluoranthene	0.01400	mg/Kg	0.010	0.025	0	56.0	38.7	114	11.8	20	
Benzo(k)fluoranthene	ND	mg/Kg	0.010	0.013	0	44.0	30.5	132	0	20	
Benzo(a)pyrene	ND	mg/Kg	0.010	0.013	0	60.0	43.1	115	0	20	
Dibenz(a,h)anthracene	0.01550	mg/Kg	0.010	0.025	0	62.0	38.7	122	9.23	20	
Benzo(g,h,i)perylene	0.01750	mg/Kg	0.010	0.025	0.002	62.0	36.2	121	9.52	20	
Indeno(1,2,3-cd)pyrene	ND	mg/Kg	0.10	0.050	0	56.5	42.5	122	0	20	
Sample ID: MB-26348		*MBLK*				Batch ID:	**26348**	Analysis Date:		4/13/2011 12:46:14 PM	
Naphthalene	ND	mg/Kg	0.25								
1-Methylnaphthalene	ND	mg/Kg	0.25								
2-Methylnaphthalene	ND	mg/Kg	0.25								
Acenaphthylene	ND	mg/Kg	0.25								
Acenaphthene	ND	mg/Kg	0.25								
Fluorene	ND	mg/Kg	0.030								
Phenanthrene	ND	mg/Kg	0.015								
Anthracene	ND	mg/Kg	0.015								
Fluoranthene	ND	mg/Kg	0.020								
Pyrene	ND	mg/Kg	0.025								
Benz(a)anthracene	ND	mg/Kg	0.010								
Chrysene	ND	mg/Kg	0.011								
Benzo(b)fluoranthene	ND	mg/Kg	0.010								
Benzo(k)fluoranthene	ND	mg/Kg	0.010								
Benzo(a)pyrene	ND	mg/Kg	0.010								
Dibenz(a,h)anthracene	ND	mg/Kg	0.010								
Benzo(g,h,i)perylene	ND	mg/Kg	0.010								
Indeno(1,2,3-cd)pyrene	ND	mg/Kg	0.10								
Sample ID: LCS-26348		*LCS*				Batch ID:	**26348**	Analysis Date:		4/13/2011 1:07:34 PM	
Naphthalene	0.9658	mg/Kg	0.25	2	0	48.3	42.5	107			
1-Methylnaphthalene	1.049	mg/Kg	0.25	2	0	52.4	39.9	116			
2-Methylnaphthalene	0.9763	mg/Kg	0.25	2	0	48.8	42.3	107			
Acenaphthylene	0.9048	mg/Kg	0.25	2	0	45.2	44.2	104			
Acenaphthene	1.006	mg/Kg	0.25	2	0	50.3	44.8	112			
Fluorene	0.07525	mg/Kg	0.030	0.2	0	37.6	29	111			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs											
Sample ID: LCS-26348		*LCS*				Batch ID:	**26348**	Analysis Date:		4/13/2011 1:07:34 PM	
Phenanthrene	0.05175	mg/Kg	0.015	0.101	0	51.4	34.5	121			
Anthracene	0.04675	mg/Kg	0.015	0.101	0	46.5	28.8	113			
Fluoranthene	0.09775	mg/Kg	0.020	0.201	0	48.7	27.9	116			
Pyrene	0.07950	mg/Kg	0.025	0.2	0	39.8	19.6	113			
Benz(a)anthracene	ND	mg/Kg	0.010	0.02	0	46.3	35	110			
Chrysene	0.04375	mg/Kg	0.011	0.101	0	43.5	41.6	106			
Benzo(b)fluoranthene	0.01225	mg/Kg	0.010	0.025	0	49.0	24.8	139			
Benzo(k)fluoranthene	ND	mg/Kg	0.010	0.013	0	40.0	35.8	118			
Benzo(a)pyrene	ND	mg/Kg	0.010	0.013	0	52.0	39.2	109			
Dibenz(a,h)anthracene	0.01350	mg/Kg	0.010	0.025	0	54.0	46.7	114			
Benzo(g,h,i)perylene	0.01425	mg/Kg	0.010	0.025	0.0015	51.0	43.3	106			
Indeno(1,2,3-cd)pyrene	ND	mg/Kg	0.10	0.050	0	48.0	41.9	124			
Sample ID: 1104008-01AMS		*MS*				Batch ID:	**26348**	Analysis Date:		4/13/2011 2:12:24 PM	
Naphthalene	0.8638	mg/Kg	0.25	2	0	43.2	42.9	109			
1-Methylnaphthalene	0.9223	mg/Kg	0.25	2	0	46.1	45	117			
2-Methylnaphthalene	0.8930	mg/Kg	0.25	2	0	44.7	41.3	109			
Ac[illegible]ohthylene	0.8698	mg/Kg	0.25	2	0	43.5	36.1	118			
Ac[illegible]phthene	0.9788	mg/Kg	0.25	2	0	48.9	42.1	117			
Fluorene	0.08250	mg/Kg	0.030	0.2	0	41.3	10.2	103			
Phenanthrene	0.05250	mg/Kg	0.015	0.101	0	52.2	25.5	113			
Anthracene	0.06000	mg/Kg	0.015	0.101	0	59.6	38.3	108			
Fluoranthene	0.1293	mg/Kg	0.020	0.201	0	64.4	28.4	121			
Pyrene	0.09875	mg/Kg	0.025	0.2	0	49.4	23.6	115			
Benz(a)anthracene	0.01275	mg/Kg	0.010	0.02	0	63.8	17.5	126			
Chrysene	0.05875	mg/Kg	0.011	0.101	0	58.4	39.7	110			
Benzo(b)fluoranthene	0.01575	mg/Kg	0.010	0.025	0	63.0	38.7	114			
Benzo(k)fluoranthene	ND	mg/Kg	0.010	0.013	0	54.0	30.5	132			
Benzo(a)pyrene	ND	mg/Kg	0.010	0.013	0	72.0	43.1	115			
Dibenz(a,h)anthracene	0.01700	mg/Kg	0.010	0.025	0	68.0	38.7	122			
Benzo(g,h,i)perylene	0.01925	mg/Kg	0.010	0.025	0.002	69.0	36.2	121			
Indeno(1,2,3-cd)pyrene	ND	mg/Kg	0.10	0.050	0	62.5	42.5	122			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs											
Sample ID: 1104008-04DMSD		*MSD*				Batch ID:	**26424**	Analysis Date:		4/21/2011 8:47:41 PM	
Naphthalene	51.63	µg/L	2.0	80	2.54	61.4	70	130	1.38	30	S
1-Methylnaphthalene	51.69	µg/L	2.0	80.2	0	64.5	70	130	2.01	30	S
2-Methylnaphthalene	53.65	µg/L	2.0	80	1.71	64.9	70	130	0.502	30	S
Acenaphthylene	52.23	µg/L	2.5	80.2	0	65.1	70	130	3.74	30	S
Acenaphthene	56.01	µg/L	5.0	80	0	70.0	70	130	2.19	30	
Fluorene	4.680	µg/L	0.80	8.02	0.41	53.2	70	130	2.32	30	S
Phenanthrene	1.380	µg/L	0.60	4.02	0	34.3	70	130	1.44	30	S
Anthracene	2.710	µg/L	0.60	4.02	0	67.4	70	130	10.8	30	S
Fluoranthene	5.610	µg/L	0.30	8.02	0	70.0	70	130	2.34	30	S
Pyrene	4.640	µg/L	0.30	8.02	0	57.9	70	130	14.8	30	S
Benz(a)anthracene	0.6700	µg/L	0.070	0.802	0.07	74.8	70	130	4.38	30	
Chrysene	3.080	µg/L	0.20	4.02	0.13	73.4	70	130	4.75	30	
Benzo(b)fluoranthene	0.8500	µg/L	0.10	1.002	0	84.8	70	130	6.82	30	
Benzo(k)fluoranthene	0.3700	µg/L	0.070	0.5	0	74.0	70	130	7.79	30	
Benzo(a)pyrene	0.3700	µg/L	0.070	0.502	0	73.7	70	130	5.26	30	
Dibenz(a,h)anthracene	0.8200	µg/L	0.070	1.002	0	81.8	70	130	5.92	30	
Benzo(g,h,i)perylene	0.8500	µg/L	0.080	1	0.07	78.0	70	130	5.71	30	
Indeno(1,2,3-cd)pyrene	1.520	µg/L	0.080	2.004	0.06	72.9	70	130	4.50	30	
Sample ID: MB-26424		*MBLK*				Batch ID:	**26424**	Analysis Date:		4/21/2011 6:39:37 P	
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	2.0								
2-Methylnaphthalene	ND	µg/L	2.0								
Acenaphthylene	ND	µg/L	2.5								
Acenaphthene	ND	µg/L	5.0								
Fluorene	ND	µg/L	0.80								
Phenanthrene	ND	µg/L	0.60								
Anthracene	ND	µg/L	0.60								
Fluoranthene	ND	µg/L	0.30								
Pyrene	ND	µg/L	0.30								
Benz(a)anthracene	ND	µg/L	0.070								
Chrysene	ND	µg/L	0.20								
Benzo(b)fluoranthene	ND	µg/L	0.10								
Benzo(k)fluoranthene	ND	µg/L	0.070								
Benzo(a)pyrene	ND	µg/L	0.070								
Dibenz(a,h)anthracene	ND	µg/L	0.070								
Benzo(g,h,i)perylene	ND	µg/L	0.080								
Indeno(1,2,3-cd)pyrene	ND	µg/L	0.080								
Sample ID: LCS-26424		*LCS*				Batch ID:	**26424**	Analysis Date:		4/21/2011 7:01:00 PM	
Naphthalene	56.26	µg/L	2.0	80	0	70.3	53.2	86.7			
1-Methylnaphthalene	57.58	µg/L	2.0	80.2	0	71.8	49.8	96			
2-Methylnaphthalene	58.03	µg/L	2.0	80	0	72.5	51.4	89.8			
Acenaphthylene	60.29	µg/L	2.5	80.2	0	75.2	54.1	91.8			
Acenaphthene	63.12	µg/L	5.0	80	0	78.9	53.5	98.4			
Fluorene	4.920	µg/L	0.80	8.02	0	61.3	23.1	107			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs											
Sample ID: LCS-26424		*LCS*				Batch ID:	**26424**	Analysis Date:		4/21/2011 7:01:00 PM	
Phenanthrene	1.940	µg/L	0.60	4.02	0	48.3	21.9	110			
Anthracene	2.810	µg/L	0.60	4.02	0	69.9	38	104			
Fluoranthene	5.560	µg/L	0.30	8.02	0	69.3	43	101			
Pyrene	4.840	µg/L	0.30	8.02	0	60.3	31.8	99.1			
Benz(a)anthracene	0.6900	µg/L	0.070	0.802	0.03	82.3	38.3	94.3			
Chrysene	3.120	µg/L	0.20	4.02	0.1	75.1	42.4	95.8			
Benzo(b)fluoranthene	0.9100	µg/L	0.10	1.002	0	90.8	29.8	124			
Benzo(k)fluoranthene	0.4000	µg/L	0.070	0.5	0	80.0	40.7	109			
Benzo(a)pyrene	0.4000	µg/L	0.070	0.502	0	79.7	47.7	96.9			
Dibenz(a,h)anthracene	0.8400	µg/L	0.070	1.002	0.04	79.8	50.3	104			
Benzo(g,h,i)perylene	0.8700	µg/L	0.080	1	0.06	81.0	49.4	97.5			
Indeno(1,2,3-cd)pyrene	1.550	µg/L	0.080	2.004	0	77.3	53.5	111			
Sample ID: 1104008-04DMS		*MS*				Batch ID:	**26424**	Analysis Date:		4/21/2011 8:26:22 PM	
Naphthalene	52.35	µg/L	2.0	80	2.54	62.3	70	130			S
1-Methylnaphthalene	52.74	µg/L	2.0	80.2	0	65.8	70	130			S
2-Methylnaphthalene	53.92	µg/L	2.0	80	1.71	65.3	70	130			S
[illegible]aphthylene	54.22	µg/L	2.5	80.2	0	67.6	70	130			S
Acenaphthene	57.25	µg/L	5.0	80	0	71.6	70	130			
Fluorene	4.790	µg/L	0.80	8.02	0.41	54.6	70	130			S
Phenanthrene	1.400	µg/L	0.60	4.02	0	34.8	70	130			S
Anthracene	3.020	µg/L	0.60	4.02	0	75.1	70	130			
Fluoranthene	5.480	µg/L	0.30	8.02	0	68.3	70	130			S
Pyrene	5.380	µg/L	0.30	8.02	0	67.1	70	130			S
Benz(a)anthracene	0.7000	µg/L	0.070	0.802	0.07	78.6	70	130			
Chrysene	3.230	µg/L	0.20	4.02	0.13	77.1	70	130			
Benzo(b)fluoranthene	0.9100	µg/L	0.10	1.002	0	90.8	70	130			
Benzo(k)fluoranthene	0.4000	µg/L	0.070	0.5	0	80.0	70	130			
Benzo(a)pyrene	0.3900	µg/L	0.070	0.502	0	77.7	70	130			
Dibenz(a,h)anthracene	0.8700	µg/L	0.070	1.002	0	86.8	70	130			
Benzo(g,h,i)perylene	0.9000	µg/L	0.080	1	0.07	83.0	70	130			
Indeno(1,2,3-cd)pyrene	1.590	µg/L	0.080	2.004	0.06	76.3	70	130			
Method: EPA Method 7471: Mercury											
Sample ID: 1104008-01AMSD		*MSD*				Batch ID:	**26253**	Analysis Date:		4/5/2011 12:49:59 PM	
Mercury	0.1720	mg/Kg	0.033	0.166	0.0029	102	75	125	1.84	20	
Sample ID: MB-26253		*MBLK*				Batch ID:	**26253**	Analysis Date:		4/5/2011 12:28:34 PM	
Mercury	ND	mg/Kg	0.033								
Sample ID: LCS-26253		*LCS*				Batch ID:	**26253**	Analysis Date:		4/5/2011 12:30:18 PM	
Mercury	0.1530	mg/Kg	0.033	0.167	0	91.8	80	120			
Sample ID: 1104008-01AMS		*MS*				Batch ID:	**26253**	Analysis Date:		4/5/2011 12:44:29 PM	
Mercury	0.1688	mg/Kg	0.033	0.166	0.0029	99.9	75	125			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
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ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Gallup OCD Landfarms **Work Order:** 1104008

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: Soil Metals											
Sample ID: MB-26237		*MBLK*				Batch ID:	**26237**	Analysis Date:		4/5/2011 11:07:03 AM	
Arsenic	ND	mg/Kg	2.5								
Barium	ND	mg/Kg	0.10								
Cadmium	ND	mg/Kg	0.10								
Chromium	ND	mg/Kg	0.30								
Copper	ND	mg/Kg	0.30								
Iron	ND	mg/Kg	1.0								
Lead	ND	mg/Kg	0.25								
Manganese	ND	mg/Kg	0.10								
Selenium	ND	mg/Kg	2.5								
Silver	ND	mg/Kg	0.25								
Uranium	ND	mg/Kg	5.0								
Zinc	ND	mg/Kg	2.5								
Sample ID: LCS-26237		*LCS*				Batch ID:	**26237**	Analysis Date:		4/5/2011 11:09:51 AM	
Arsenic	24.04	mg/Kg	2.5	25	0	96.2	80	120			
Barium	23.07	mg/Kg	0.10	25	0.0671	92.0	80	120			
Cadmium	23.60	mg/Kg	0.10	25	0	94.4	80	120			
Chromium	24.33	mg/Kg	0.30	25	0.0759	97.0	80	120			
Copper	25.25	mg/Kg	0.30	25	0.1513	100	80	120			
Iron	24.02	mg/Kg	1.0	25	0	96.1	80	120			
Lead	22.47	mg/Kg	0.25	25	0	89.9	80	120			
Manganese	23.42	mg/Kg	0.10	25	0	93.7	80	120			
Selenium	23.79	mg/Kg	2.5	25	0	95.2	80	120			
Silver	23.45	mg/Kg	0.25	25	0.0223	93.7	80	120			
Uranium	25.12	mg/Kg	5.0	25	0	100	80	120			
Zinc	23.83	mg/Kg	2.5	25	0.6173	92.9	80	120			
Method: SM2540C MOD: Total Dissolved Solids											
Sample ID: 1104008-04GMSD		*MSD*				Batch ID:	**26401**	Analysis Date:		4/14/2011 8:54:00 PM	
Total Dissolved Solids	13670	mg/L	100	5000	8645	101	80	120	0.547	20	
Sample ID: MB-26401		*MBLK*				Batch ID:	**26401**	Analysis Date:		4/14/2011 8:54:00 PM	
Total Dissolved Solids	ND	mg/L	20.0								
Sample ID: LCS-26401		*LCS*				Batch ID:	**26401**	Analysis Date:		4/14/2011 8:54:00 PM	
Total Dissolved Solids	1000	mg/L	20.0	1000	0	100	80	120			
Sample ID: 1104008-04GMS		*MS*				Batch ID:	**26401**	Analysis Date:		4/14/2011 8:54:00 PM	
Total Dissolved Solids	13750	mg/L	100	5000	8645	102	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name WESTERN REFINING GALLU

Date Received: 3/31/2011

Work Order Number 1104008

Received by: AMF

Sample ID labels checked by: dam
Initials

Checklist completed by: _____ 03/31/11
Signature Date

Matrix:

Carrier name: Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☑	No ☐	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		Number of preserved bottles checked for pH:
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	_____
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	*<2 >12 unless noted below.*
Container/Temp Blank temperature?	**8.6°''**	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Western Refining

Mailing Address: Route 3 Box 7
Gallup NM 87301

Phone #: 505 722-3833

email or Fax#: 505 722-0210

QA/QC Package: EDD

☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☑ EDD (Type) check w/ Trihydro DV team

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: Gallup OCD Landfarms

Project #: 647-039-002

Project Manager: ED Riege

Sampler: G. Price

On Ice: ☒ Yes ☐ No

Sample temperature: 0.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1104008	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	~~8270 (Semi-VOA)~~ List 4 (Normal)	List 1 (Normal)	List 2 (Normal)	List 1 (TCLP)	List 3 (TCLP)	Air Bubbles (Y or N)
3/30/11	12:10	Soil	BG-NE-033011	3-8oz	ice	-1												X				
3/30/11	13:15	Soil	BG-W-033011	2-4oz	ice	-2													X			
3/30/11	14:10	Soil	BG-S-033011	2-4oz	ice	-3													X			
3/30/11	16:30	Soil	CentralOCD-Close-033011	3-8oz	ice	-4														X		
3/30/11	16:30	Soil	Central OCD-Close-033011 MS	3-8oz	ice	-4														X		
3/30/11	16:30	Soil	CentralOCD-Close-033011 MSD	3-8oz	ice	-4														X		
3/30/11	17:50	Soil	NEOCD-close-033011	1-8oz	ice	-5															X	
3/30/11	18:00	W	EB-033011	3 VOA	ice, HCL	-6										X						
3/30/11	18:05	W	FB-033011	3 VOA	ice, HCL	-7										X						
3/31/11	10:30	Soil	CentralOCD-01-033111	3-4oz	ice	-8											X					
3/31/11	11:00	Soil	CentralOCD-02-033111	3-4oz	ice	-9											X					
3/31/11	11:35	Soil	CentralOCD-03-033111	3-4oz	ice	-10											X					

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/31/11	15:20	[signature]	[signature]	3/31/11	1545
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: CentralOCD-Close-033011-MS and CentralOCD-Close-033011-MSD are extra volumes collected for Matrix spike/Matrix spike duplicate. No charge. Please send EDD to gprice@trihydro.com

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

Chain of-Custody Record

Client: Western Refining

Mailing Address: Route 3 Box 7
Gallup, NM 87301

Phone #: 505 722-3833

email or Fax#: 505 722-0210

QA/QC Package: EDD

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☑ EDD (Type) check w/ Trihydro DV team

Turn-Around Time:

☐ Standard ☐ Rush _____

Project Name: Gallup OCD Landfarms

Project #: 697-039-002

Project Manager: Ed Riege

Sampler: G. Price

On Ice: ☑ Yes ☐ No

Sample Temperature: 6

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	List 4 (Normal)	List 3 (Normal)			Air Bubbles (Y or N)
3/31/11	11:20	Soil	Central OCD-04-033111	3-4oz	ice	-11												X				
~~3/31/11~~	~~/~~	~~Soil~~	~~BD-02-033111~~	~~3-4oz~~	~~ice~~													~~X~~				
3/31/11	8:45	Soil	NEOCD-01-033111	1-4oz	ice	-12													X			
3/31/11	9:00	Soil	NEOCD-02-033111	1-4oz	ice	-13													X			
3/31/11	9:25	Soil	NEOCD-03-033111	1-4oz	ice	-14													X			
3/31/11	9:40	Soil	NEOCD-04-033111	1-4oz	ice	-15													X			
~~3/31/11~~	~~/~~	~~Soil~~	~~BD-01-033111~~	~~1-4oz~~	~~ice~~														~~X~~			
3/31/11	/	W	Trip Blank	3 VOA	ice/HCl	-16										X						
			~~BD-02-033111~~	~~3-4oz~~																		
3/31/11	/	Soil	BD-02-033111	1-4oz	ice	-17													X			
3/31/11	/	Soil	BD-01-033111	3-4oz	ice	-18												X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/31/11	1520	[signature]	[signature]	3/31/11	1520
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Call Grant w/ questions
307-399-0890
Christina Haigel (Data Validation)
chaigel@trihydro.com

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