

**GW - 55**

# **REPORTS**

**YEAR(S):**

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February 13, 2012

Glenn von Gonten  
Edward Hansen  
New Mexico Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, New Mexico 87505

**RE: 4th Quarter Remedial Progress Report 2011 for the Thriftway Refinery, 626  
County Road 5500, Bloomfield, New Mexico**

Dear Mr. von Gonten and Mr. Hansen:

Animas Environmental Services, LLC (AES) has prepared this 4<sup>th</sup> Quarter 2011 (Year 2) Remedial Progress Report detailing remedial activities conducted on behalf of Thriftway Company (Thriftway) for the former Thriftway Refinery, located at 626 County Road 5500, Bloomfield, San Juan County, New Mexico. The remedial activities are being conducted in accordance with New Mexico Oil Conservation Division (NMOCD) and New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) regulations.

This progress report details groundwater monitoring and gauging activities, multi-phase extraction (MPE) remediation system operations, and phytoremediation activities conducted at the site between October and December 2011. A General Site Plan is included as Figure 1.

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## 1.0 Groundwater Monitoring and Gauging

BioTech conducted groundwater monitoring and gauging of the monitor wells at the site on November 15 and 16, 2011. Sampling of selected groundwater monitor wells occurred on November 17 and 22, 2011. Based on the current sampling plan, monitoring and gauging events occur during the first and third quarters of 2011, with groundwater sampling scheduled during the second and fourth quarters. The information below lists wells that were gauged and sampled during the November 2011 event.



**Year 2 Quarter #4 Monitor Well Gauging and Sampling List**

Well Name	Gauging Only	Gauging and Sampling
TW-1 through TW-6	X	
TW-7		X
TW-8	X	
TW-9 through TW-10	X	
TW-11		X
TW-12	X	
TW-13* and TW-14*	X	
TW-15 through TW-17	X	
TW-18		X
TW-19* and TW-20*	X	
TW-22*	X	
TW-23	X	
TW-24 through TW-26 (all*)	X	
TW-28* and TW-29*	X	
TW-30 and TW-31		X
TW-32* and TW-33*	X	
TW-34 and TW-35		X
TW-36*	X	
TW-37		X
TW-38*	X	
TW-39		X
TW-40*	X	
TW-41 through TW-43		X
TW-44*		
TW-45	X	
TW-46 and TW-47		X
TW-48 and TW-49	X	
TW-50		X
MW-5 and MW-7	X	
MW-20 and MW-21		X

\* During November 2011, these wells contained free product (including sheen of free product) and were not sampled.

### *1.1 Measurement of Groundwater Elevations*

Depth to groundwater in each of the selected wells was measured with an electronic water level indicator, which has an accuracy of 0.01 feet. Depth to groundwater measurements were recorded on Water Sample Collection Forms. Electronic copies of the Water Sample Collection Forms are included in Appendix A.

## 1.2 Measurement of Free Product

Each well previously known to contain light non-aqueous phase liquid (LNAPL, or “free product”) was measured with an electronic interface probe, and the depths to the top of product and the oil/water interface were recorded on a groundwater measurement form. Free product was measured in November 2011 in 16 wells, including TW-13, TW-14, TW-19, TW-20, TW-22, TW-24, TW-25, TW-26, TW-28, TW-29, TW-32, TW-33, TW-36, TW-38, TW-40, and TW-44.

In monitor wells containing free product, corrected groundwater elevations ( $H_c$ ) were determined using the following formula:

$$H_c = H_m + (H_o * (\rho_o / \rho_w))$$

where:

$H_m$  is the measured elevation of the hydrocarbon-water interface (ft)

$H_o$  is the thickness of the hydrocarbon layer (ft)

$\rho_o$  is the hydrocarbon density of diesel, assumed to be 0.827 (g/ml) (API, 1986)

$\rho_w$  is the water density, assumed to be 1.0 (g/mL)

## 1.3 Groundwater Sampling

Once the depth to groundwater was measured in each well to be sampled, the well was purged with a new disposable bailer to remove stagnant water from the well.

Groundwater samples were then collected. Groundwater sampling procedures included the following:

1. A new disposable bailer was used at each well. Samples were collected using a slow release valve attached to the bottom of the bailer (to ensure a slow flow and less volatilization of contaminants from groundwater). Each sample container was filled completely, ensuring there were no bubbles or headspace in the sample bottles.
2. Each bottle was labeled, and chain-of-custody documentation was filled out as each well was sampled. Clean sample containers, obtained from the analyzing laboratory, were utilized during the sampling events.
3. Samples were placed in an insulated cooler and maintained at temperature below 6°C during transportation to Hall Environmental Analysis Laboratory (Hall), Albuquerque, New Mexico.

In order to reduce the potential for cross-contamination, groundwater samples were collected in the order from the least contaminated sampling location to the most contaminated sampling location, as determined by the previous sampling event.

#### **1.4 Equipment Decontamination Protocols**

In order to ensure data validity and limit cross-contamination, the following decontamination protocols for sampling equipment were employed:

- Wash with detergent (Alconox) and warm water
- Rinse with warm water
- Wash with detergent (Alconox) and warm water
- Rinse with de-ionized water

#### **1.5 Laboratory Analyses**

Samples collected from monitor wells TW-11, TW-31, TW-37, TW-39, TW-42, TW-43, TW-46, MW-20, and MW-21 were analyzed for the following:

- Total Petroleum Hydrocarbons (TPH) for Gasoline Range Organics (GRO), Motor Oil Range Organics (MRO), and Diesel Range Organics (DRO) per U.S. Environmental Protection Agency (USEPA) Method 8015B;
- Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), Methyl-t-Butyl Ether (MTBE), and Naphthalene per USEPA Method 8260;

Samples collected from monitor wells TW-7, TW-18, TW-30, TW-34, TW-35, TW-41, TW-47, and TW-50 were analyzed for the following:

- TPH for GRO, MRO, and DRO per USEPA Method 8015B;
- BTEX, MTBE, and Naphthalene per USEPA Method 8260;
- RCRA 8 Metals per USEPA Method 6010 and 7470;
- Dissolved Metals (Calcium, Magnesium, Potassium, and Sodium) per USEPA Method 6010;
- Bromide, Chloride, Fluoride, and Sulfate per USEPA Method 300.0;
- Hardness as CaCO<sub>3</sub> per USEPA Method 6010;
- Total Dissolved Solids (TDS) per Standard Method 2540C; and
- Specific Conductance per USEPA Method 120.1.

All samples were analyzed at Hall Laboratories in Albuquerque, New Mexico.

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## 2.0 Groundwater Monitoring Results

### 2.1 *Hydraulic Gradient and Water Quality Data*

#### 2.1.1 **Hydraulic Gradient**

Using surveyed top of casing (TOC) elevations and the recorded groundwater depths, AES determined specific groundwater elevations, relative to sea level, for each well measured. Groundwater elevations across the site in November 2011 ranged from 5,423.33 feet above mean sea level (AMSL) in MW-5 to 5,440.47 feet AMSL in TW-1. Groundwater elevations have increased across the site by an average of 0.05 feet since the last sampling event in August 2011. Groundwater gradient was calculated between TW-1 and MW-5, with a magnitude of 0.008 ft/ft to the northwest for November 2011. The groundwater flow direction has remained stable, in a northwesterly direction, and is consistent with historical site data.

Table 1 includes depth to groundwater measurements and elevations. Groundwater elevation contours for November 2011 are included on Figure 2. Electronic copies of the Water Sample Collection Forms are included in Appendix A.

#### 2.1.2 **Water Quality Data**

During the purging of each well prior to sampling, water quality data was recorded until temperature, pH, conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) measurements stabilized. Recorded temperatures during the November 2011 sampling event ranged from 11.31°C in TW-7 to 16.56°C in TW-50. Groundwater pH ranged between 7.16 (MW-21) and 7.39 (TW-46), and conductivity readings were between 3.321 mS/cm in TW-7 and 12.17 mS in TW-47. Dissolved oxygen concentrations ranged from 0.35 mg/L in TW-50 to 2.92 mg/L in TW-11. ORP ranged from -33.2 mV (TW-46) to -20.1 mV (MW-21).

## 2.2 *Free Product*

Free product was measured in 16 monitor wells, including TW-13, TW-14, TW-19, TW-20, TW-22, TW-24 through TW-26, TW-28, TW-29, TW-32, TW-33, TW-36, TW-38, TW-40, and TW-44. Measured LNAPL thicknesses ranged from 0.11 feet (TW-24) to 1.96 feet (TW-20). Free product thickness contours for November 2011 are presented in Figure 3, and Graph 1 includes free product thicknesses over time in the eastern portion of the product plume (TW-13, TW-14, TW-19, and TW-22).

## 2.3 Dissolved Phase Contaminant Concentrations

### 2.3.1 Volatile Organics

Dissolved phase benzene concentrations outside the area of free product exceeded the New Mexico Water Quality Control Commission (WQCC) standard of 10 µg/L in two of the 18 wells sampled, TW-37 (210 µg/L) and TW-41 (110 µg/L). Dissolved phase benzene concentration contours for November 2011 are included on Figure 4.

Toluene and ethylbenzene concentrations outside the area of free product were below laboratory detection limits or below the applicable WQCC standards of 750 µg/L in all sampled wells. Xylene concentrations were also below laboratory detection limits or below the applicable WQCC standard of 620 µg/L in all wells sampled, with the exception of TW-41 (1,800 µg/L).

Dissolved phase MTBE concentrations outside the area of free product were above the WQCC standard of 100 µg/L in four of the wells sampled in November 2011, including TW-37 (110 µg/L) and TW-43 (460 µg/L), TW-45 (630 µg/L), and MW-20 (170 µg/L). All other wells were either below the laboratory detection limits (1.0 µg/L and 5.0 µg/L) or below applicable WQCC standards. MTBE concentration contours for November 2011 are included on Figure 5.

Dissolved phase total naphthalene concentrations outside the area of free product were above the WQCC standard of 30 µg/L in one well, TW-41 (68 µg/L). The remaining wells sampled were either below laboratory detection limits or below the applicable WQCC standard.

BTEX, MTBE, and total naphthalene analytical data are summarized in Table 2, and electronic copies of laboratory analytical reports are presented in Appendix A.

### 2.3.2 Geochemical Parameters

Geochemical analytical results from November 2011 are as follows:

- RCRA 8 Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) were reported below the laboratory detection limit or the below the applicable WQCC standards in all sampled wells. Laboratory analytical results are presented in Table 3, and analytical reports are included in Appendix A.
- Dissolved calcium concentrations ranged from 230 mg/L (TW-41) to 670 mg/L (TW-30);

- Dissolved magnesium concentrations ranged from 49 mg/L (TW-18) to 120 mg/L (TW-47);
- Dissolved potassium concentrations ranged from 2.3 mg/L (TW-7) to 9.3 mg/L (TW-30);
- Dissolved sodium concentrations ranged from 770 mg/L (TW-7) to 2,700 mg/L (TW-47);
- Bromide concentrations ranged from 0.26 mg/L (TW-18) to 3.1 mg/L (TW-30);
- Chloride concentrations were reported above the WQCC standard of 250 mg/L in TW-30 (1,400 mg/L), TW-41 (640 mg/L), TW-47 (1,800 mg/L), and TW-50 (990 mg/L);
- Fluoride concentrations remained below the WQCC of 1.6 mg/L in all sampled wells;
- Sulfate concentrations were reported above the WQCC standard of 600 mg/L in all sampled wells, with the exception of TW-41. Reported sulfate concentrations ranged from 1,100 mg/L (TW-50) to 5,800 mg/L (TW-47);
- Specific conductance in the sampled wells ranged from 4,300  $\mu\text{mhos}/\text{cm}$  to 19,000  $\mu\text{mhos}/\text{cm}$ ;
- Hardness as  $\text{CaCO}_3$  ranged from 890 mg/L (TW-41) and 2,000 mg/L (TW-47);
- TDS concentrations were above the WQCC standard of 1,000 mg/L in all wells sampled, with the highest TDS concentrations detected in TW-47 (10,700 mg/L).

Groundwater geochemical results have been summarized in Table 4. Electronic copies of laboratory analytical reports are included in Appendix A

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### 3.0 Measurement of Groundwater and Free Product in MPE Wells

BioTech personnel measured depth to groundwater in the Phase 1, 2, and 3 MPE wells on November 10 and 15, 2011. Depth to water ranged from 14.30 feet below TOC in MPE-56 to 24.14 feet below TOC in MPE-26. On November 10 and 15, 2011, measured free

product thickness ranged from 0.02 feet in MPE-37 to 1.12 feet in MPE-44. MPE well data are included in Table 5.

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## 4.0 MPE Remediation System Operations

The MPE remediation system was brought online on March 10, 2010. The MPE system consists of an RSI internal combustion engine (ICE) unit with two engines (Engine #1 and Engine #2) to extract soil vapors and free product from the MPE extractions wells.

Both Engine #1 and Engine #2 were shut-down during September 2010 due to extensive mechanical problems, and as a result no data report has been generated since September 2010. Following an engine rebuild, Engine #2 was installed at the site on January 4, 2011. Engine #2 operated at the site from January 4, 2011, until June 23, 2011, when the engine was taken off-line as part of pulsing of the remediation system. The system remained off-line during the fourth quarter 2011. A total of 19,157 lbs of petroleum hydrocarbons have been removed from the site to date.

### 4.1 Air Emissions Sampling

The site remained in pulse mode during the fourth quarter. At this time, the MPE unit was not in operation, and therefore, no air sample was collected.

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## 5.0 Phytoremediation Project

BioTech operated the irrigation system through mid-September when it was turned off and drained in anticipation for the upcoming winter season. Plants in the phytoremediation project have entered into winter dormancy state. A full update on the survival rate will be included in the second quarter 2012 report. No New Mexico State University plant inspections were conducted during the fourth quarter of 2011.

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## 6.0 Summary and Conclusions

BioTech Remediation completed groundwater monitoring and gauging at the site in November 2011. Groundwater elevations in November 2011 increased by an average of 0.05 feet since August 2011 and are consistent with historical seasonal fluctuations. The

groundwater gradient was calculated to be approximately 0.008 ft/ft in a northwest direction across the site, which is also consistent with historical site data.

In November 2011, free product was observed and measured in 16 monitor wells, including TW-13, TW-14, TW-19, TW-20, TW-22, TW-24 through TW-26, TW-28, TW-29, TW-32, TW-33, TW-36, TW-38, TW-40, and TW-44. Measured thicknesses ranged from 0.11 feet (TW-24) and 1.96 feet (TW-20). Free product was also observed in remediation wells MPE-2, MPE-5, MPE-6, MPE-13, MPE-14, MPE-26, MPE-35 through MPE-38, MPE-44, MPE-45, MPE-47, MPE-50, and MPE-52 through MPE-54.

Based upon the analytical results for the November 2011 sampling event, dissolved phase contaminant concentrations of benzene, xylenes, MTBE, and TDS exceeded the New Mexico WQCC standards in several wells. The highest benzene concentration was reported at 210 µg/L in TW-37. Xylene concentrations above the applicable WQCC standard of 620 µg/L was reported in TW-41 (1,800 µg/L). The highest dissolved phase MTBE concentration was detected in TW-45 (630 µg/L). Monitor well TW-41 exceeded the WQCC standard for naphthalene with 68 µg/L.

Geochemical data for the November 2011 sampling event showed that chloride concentrations exceeded the WQCC standard of 250 mg/L in four of the eight sampled wells with the highest concentration being reported in TW-47 (1,800 mg/L). All sampled wells, except TW-41, had concentrations of sulfate above the WQCC standard of 600 mg/L, with the highest concentration reported in TW-47 with 5,800 mg/L. All sampled wells exceeded the WQCC standard of 1,000 mg/L for TDS with the highest concentration reported in TW-47 (10,700 mg/L). The groundwater monitor wells at the site have historically shown elevated TDS concentrations, which is attributable to the site's proximity to the Kutz Wash and shallow depth to groundwater.

The MPE remediation unit was installed in March 2010. Both engines (Engine #1 and Engine #2) were operated through mid September 2010, when both were removed from the site for scheduled rebuilds. Engine #2, following an engine rebuild, was installed and turned on at the site on January 4, 2011, and was in operation during the first and second quarters of 2011. A total of **19,157 lbs** of petroleum hydrocarbons have been mechanically removed from the site since system startup on March 10, 2010. Engine #2 was taken off-line on June 23, 2011, as part of pulsing of the system. Pulsing of the system continued during the third quarter and fourth quarters of 2011.

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## 7.0 Recommendations and Scheduled Site Activities

The following items are scheduled to occur during the 1st Quarter of 2012:

1. In accordance with the conditions of the Interim Groundwater Sampling Plan approval by NMOCD, the quarterly groundwater and NAPL monitoring and gauging event will be conducted in February.
2. No monitoring activities of the phytoremediation project are scheduled during the first quarter of 2012. Phytoremediation monitoring activities should resume during the second quarter of 2012.
3. Installation of 21 Phase 4 wells (MPE-55 through MPE-75). MPE start-up in Engine #2 is planned for March 2012. Once the MPE unit is in operation, BioTech will collect air emission samples from the well gas influent and from the pre-cat and post-cat sample ports. Air samples will be analyzed for BTEX and MTBE per EPA Method 8021B and EPA Method 8015B GRO.

If you have any questions regarding this report or scheduled site activities, please do not hesitate to contact Ross Kennemer or Elizabeth McNally at (505) 564-2281.

Sincerely,



Deborah Watson, Project Manager



Elizabeth McNally, P.E.  
New Mexico Registration #15799

Attachments:

**Tables**

- Table 1. Summary of Groundwater Measurements and Water Quality Data  
Table 2. Summary of Groundwater Analytical Results (VOC, Total Petroleum Hydrocarbons, and TDS)  
Table 3. Summary of Groundwater RCRA 8 Metals Analytical Results  
Table 4. Summary of Groundwater Dissolved Cations, Anions, Specific Conductance, Hardness, and Total Dissolved Solids Analytical Results  
Table 5. Summary of Groundwater and Free Product Measurements for Phase 1, 2, and 3 MPE Wells

**Figures**

- Figure 1. General Site Plan  
Figure 2. Groundwater Elevations, November 2011  
Figure 3. Free Product Thickness Contours, November 2011  
Figure 4. Dissolved Benzene Concentration Contours, November 2011  
Figure 5. Dissolved MTBE Concentration Contours, November 2011

**Graphs**

- Graph 1. Free Product Thicknesses over Time in TW-13, TW-14, TW-19, and TW-22

**Appendices**

- Appendix A. *Electronic*  
Water Sample Collection Forms  
Laboratory Analytical Reports Hall #1111806 and #1111901

cc: Robert Moss  
Thriftway Company  
501 Airport Drive  
Farmington, NM 87401

TABLE 1  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date</i>	<i>T.O.C. (ft amsl)</i>	<i>Depth to Product (ft)</i>	<i>Depth to Water (ft)</i>	<i>NAPL Thickness (ft)</i>	<i>Corrected GW Elev. (ft)</i>	<i>Conductivity (mS)</i>	<i>Dissolved Oxygen (mg/L)</i>	<i>Temp. (°C)</i>	<i>ORP (mV)</i>	<i>Purge Volume (gallons)</i>
TW-1	15-Dec-08	5471.58	27.95			5443.63	6.24	2.772	7.51*	14.64	113.8
TW-1	26-Jan-09	5471.58	30.53			5441.05	NM	NM	NM	NM	NM
TW-1	19-Aug-09	5471.58	30.73			5440.85	7.09	1.795	8.08	16.17	289.1
TW-1	19-Feb-10	5471.58	30.68			5440.90	NM	NM	NM	NM	NM
TW-1	07-May-10	5471.58	30.43			5441.15	NM	NM	NM	NM	NM
TW-1	18-Aug-10	5471.58	30.64			5440.94	NM	NM	NM	NM	NM
TW-1	15-Nov-10	5471.58	30.88			5440.70	NM	NM	NM	NM	NM
TW-1	17-Feb-11	5471.58	30.74			5440.84	NM	NM	NM	NM	NM
TW-1	17-May-11	5471.58	30.62			5440.96	NM	NM	NM	NM	NM
TW-1	22-Aug-11	5471.58	31.14			5440.44	NM	NM	NM	NM	NM
TW-1	15-Nov-11	5471.58	31.11			5440.47	NM	NM	NM	NM	NM
TW-2	15-Dec-08	5469.31	28.91			5440.40	6.63	4.421	3.60	13.08	125.5
TW-2	26-Jan-09	5469.31	28.80			5440.51	NM	NM	NM	NM	NM
TW-2	19-Aug-09	5469.31	28.97			5440.34	7.03	2.948	2.68	16.85	291.3
TW-2	19-Feb-10	5469.31	28.93			5440.38	NM	NM	NM	NM	NM
TW-2	07-May-10	5469.31	28.71			5440.60	NM	NM	NM	NM	NM
TW-2	18-Aug-10	5469.31	28.88			5440.43	NM	NM	NM	NM	NM
TW-2	15-Nov-10	5469.31	29.11			5440.20	NM	NM	NM	NM	NM
TW-2	17-Feb-11	5469.31	28.97			5440.34	NM	NM	NM	NM	NM
TW-2	17-May-11	5469.31	28.85			5440.46	NM	NM	NM	NM	NM
TW-2	22-Aug-11	5469.31	29.34			5439.97	NM	NM	NM	NM	NM
TW-2	15-Nov-11	5469.31	29.33			5439.98	NM	NM	NM	NM	NM
TW-3	15-Dec-08	5468.14	27.99			5440.15	6.63	4.249	2.01	14.44	-1.6
TW-3	26-Jan-09	5468.14	27.87			5440.27	NM	NM	NM	NM	NM
TW-3	19-Aug-09	5468.14	28.05			5440.09	6.95	4.16	2.120	16.34	289.5

**TABLE 1**  
**SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

Well ID	Date	T.O.C. (ft. amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-3	19-Feb-10	5468.14		27.96		5440.18	NM	NM	NM	NM	NM	NM
TW-3	10-May-10	5468.14		27.73		5440.41	NM	NM	NM	NM	NM	NM
TW-3	18-Aug-10	5468.14		27.95		5440.19	NM	NM	NM	NM	NM	NM
TW-3	15-Nov-10	5468.14		28.16		5439.98	NM	NM	NM	NM	NM	NM
TW-3	17-Feb-11	5468.14		28.01		5440.13	NM	NM	NM	NM	NM	NM
TW-3	17-May-11	5468.14		27.88		5440.26	NM	NM	NM	NM	NM	NM
TW-3	22-Aug-11	5468.14		28.41		5439.73	NM	NM	NM	NM	NM	NM
TW-3	15-Nov-11	5468.14		28.67		5439.47	NM	NM	NM	NM	NM	NM
TW-4	16-Dec-08	5458.72		19.16		5439.56	6.67	7.258	4.09	13.40	170.6	1.25
TW-4	26-Jan-09	5458.72		NM		NM	NM	NM	NM	NM	NM	NM
TW-4	19-Aug-09	5458.72		19.22		5439.50	7.08	6.739	4.19	16.19	289.9	4.30
TW-4	19-Feb-10	5458.72		19.09		5439.63	NM	NM	NM	NM	NM	NM
TW-4	10-May-10	5458.72		18.86		5439.86	NM	NM	NM	NM	NM	NM
TW-4	18-Aug-10	5458.72		19.12		5439.60	NM	NM	NM	NM	NM	NM
TW-4	15-Nov-10	5458.72		19.31		5439.41	NM	NM	NM	NM	NM	NM
TW-4	17-Feb-11	5458.72		19.12		5439.60	NM	NM	NM	NM	NM	NM
TW-4	17-May-11	5458.72		19.01		5439.71	NM	NM	NM	NM	NM	NM
TW-4	22-Aug-11	5458.72		19.53		5439.19	NM	NM	NM	NM	NM	NM
TW-4	15-Nov-11	5458.72		19.50		5439.22	NM	NM	NM	NM	NM	NM
TW-5	15-Dec-08	5465.18		25.54		5439.64	6.56	3.704	3.26	14.25	16.0	1.25
TW-5	26-Jan-09	5465.18		25.44		5439.74	NM	NM	NM	NM	NM	NM
TW-5	19-Aug-09	5465.18		25.58		5439.60	6.96	3.636	5.53	16.55	298.9	3.60
TW-5	19-Feb-10	5465.18		25.53		5439.65	NM	NM	NM	NM	NM	NM
TW-5	10-May-10	5465.18		25.31		5439.87	NM	NM	NM	NM	NM	NM
TW-5	18-Aug-10	5465.18		25.49		5439.69	NM	NM	NM	NM	NM	NM

TABLE 1  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date</i>	<i>T.O.C. (ft amsl)</i>	<i>Depth to Product (ft)</i>	<i>Depth to Water (ft)</i>	<i>NAPL Thickness (ft)</i>	<i>GW Elev. (ft)</i>	<i>Corrected pH</i>	<i>Conductivity (mS)</i>	<i>Dissolved Oxygen (mg/L)</i>	<i>Temp. (°C)</i>	<i>ORP (mV)</i>	<i>Purge Volume (gallons)</i>
TW-5	15-Nov-10	5465.18		25.70		5439.48	NM	NM	NM	NM	NM	
TW-5	17-Feb-11	5465.18		25.55		5439.63	NM	NM	NM	NM	NM	
TW-5	17-May-11	5465.18		25.42		5439.76	NM	NM	NM	NM	NM	
TW-5	22-Aug-11	5465.18		25.89		5439.29	NM	NM	NM	NM	NM	
TW-5	15-Nov-11	5465.18		25.93		5439.25	NM	NM	NM	NM	NM	
TW-6	15-Dec-08	5463.57		24.78		5438.79	6.50	4.719	0.99	14.50	9.0	1.25
TW-6	26-Jan-09	5463.57		24.67		5438.90	NM	NM	NM	NM	NM	
TW-6	19-Aug-09	5463.57		24.82		5438.75	6.95	4.535	1.81	16.24	295.6	4.00
TW-6	19-Feb-10	5463.57		24.74		5438.83	NM	NM	NM	NM	NM	
TW-6	10-May-10	5463.57		24.54		5439.03	NM	NM	NM	NM	NM	
TW-6	18-Aug-10	5463.57		24.73		5438.84	NM	NM	NM	NM	NM	
TW-6	15-Nov-10	5463.57		24.90		5438.67	NM	NM	NM	NM	NM	
TW-6	17-Feb-11	5463.57		24.57		5439.00	NM	NM	NM	NM	NM	
TW-6	17-May-11	5463.57		24.64		5438.93	NM	NM	NM	NM	NM	
TW-6	22-Aug-11	5463.57		25.10		5438.47	NM	NM	NM	NM	NM	
TW-6	15-Nov-11	5463.57		25.11		5438.46	NM	NM	NM	NM	NM	
TW-7	15-Dec-08	5461.17		22.25		5438.92	6.47	5.302	0.82	14.88	0.8	1.25
TW-7	26-Jan-09	5461.17		22.14		5439.03	NM	NM	NM	NM	NM	
TW-7	19-Aug-09	5461.17		22.25		5438.92	6.92	4.780	1.67	16.37	290.3	3.00
TW-7	19-Feb-10	5461.17		22.17		5439.00	NM	NM	NM	NM	NM	
TW-7	10-May-10	5461.17		21.97		5439.20	NM	NM	NM	NM	NM	
TW-7	18-Aug-10	5461.17		22.17		5439.00	NM	NM	NM	NM	NM	
TW-7	15-Nov-10	5461.17		22.37		5438.80	NM	NM	NM	NM	NM	
TW-7	17-Feb-11	5461.17		22.78		5438.39	NM	NM	NM	NM	NM	
TW-7	18-May-11	5461.17		22.10		5439.07	7.19	3.455	0.49	14.65	-21.8	2

TABLE 1  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft. amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-7	22-Aug-11	5461.17		22.55		5438.62	NM	NM	NM	NM	NM	NM
TW-7	17-Nov-11	5461.17		22.59		5438.58	7.25	3.321	1.66	11.31	-25.1	1.00
TW-8	16-Dec-08	5458.29		19.76		5438.53	6.42	5.575	0.51	12.78	-258.2	1.25
TW-8	26-Jan-09	5458.29		19.62		5438.67	NM	NM	NM	NM	NM	NM
TW-8	20-Aug-09	5458.29		19.88		5438.41	7.12	4.523	1.40	14.52	264.7	4.00
TW-8	19-Feb-10	5458.29		19.59		5438.70	NM	NM	NM	NM	NM	NM
TW-8	10-May-10	5458.29		19.73		5438.56	NM	NM	NM	NM	NM	NM
TW-8	18-Aug-10	5458.29		19.72		5438.57	NM	NM	NM	NM	NM	NM
TW-8	15-Nov-10	5458.29		19.87		5438.42	NM	NM	NM	NM	NM	NM
TW-8	17-Feb-11	5458.29		20.21		5438.08	NM	NM	NM	NM	NM	NM
TW-8	18-May-11	5458.29		19.59		5438.70	7.13	4.364	0.25	13.05	-18.3	2
TW-8	22-Aug-11	5458.29		20.12		5438.17	NM	NM	NM	NM	NM	NM
TW-8	15-Nov-11	5458.29		20.03		5438.26	NM	NM	NM	NM	NM	NM
TW-9	16-Dec-08	5450.61		12.20		5438.41	6.90	3.473	2.27	14.53	15.6	1.25
TW-9	26-Jan-09	5450.61		12.05		5438.56	NM	NM	NM	NM	NM	NM
TW-9	20-Aug-09	5450.61		12.49		5438.12	7.57	2.397	1.33	16.93	269.2	2.50
TW-9	19-Feb-10	5450.61		11.99		5438.62	NM	NM	NM	NM	NM	NM
TW-9	10-May-10	5450.61		11.89		5438.72	NM	NM	NM	NM	NM	NM
TW-9	18-Aug-10	5450.61		12.30		5438.31	NM	NM	NM	NM	NM	NM
TW-9	15-Nov-10	5450.61		12.36		5438.25	NM	NM	NM	NM	NM	NM
TW-9	17-Feb-11	5450.61		12.09		5438.52	NM	NM	NM	NM	NM	NM
TW-9	17-May-11	5450.61		12.13		5438.48	NM	NM	NM	NM	NM	NM
TW-9	22-Aug-11	5450.61		12.77		5437.84	NM	NM	NM	NM	NM	NM
TW-9	15-Nov-11	5450.61		12.54		5438.07	NM	NM	NM	NM	NM	NM

**TABLE 1**  
**SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA**  
**Thrifway Refinery, 626 CR 5500, Bloomfield, New Mexico**

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-10	16-Dec-08	5450.16	12.42			5437.74	6.49	3.876	0.98	11.97	-189.3	1.25
TW-10	26-Jan-09	5450.16	12.25			5437.91	NM	NM	NM	NM	NM	NM
TW-10	20-Aug-09	5450.16	12.70			5437.46	7.37	4.019	1.42	16.75	254.7	4.00
TW-10	19-Feb-10	5450.16	12.19			5437.97	NM	NM	NM	NM	NM	NM
TW-10	10-May-10	5450.16	12.15			5438.01	NM	NM	NM	NM	NM	NM
TW-10	18-Aug-10	5450.16	12.52			5437.64	NM	NM	NM	NM	NM	NM
TW-10	15-Nov-10	5450.16	12.54			5437.62	NM	NM	NM	NM	NM	NM
TW-10	17-Feb-11	5450.16	12.87			5437.29	NM	NM	NM	NM	NM	NM
TW-10	17-May-11	5450.16	12.36			5437.80	NM	NM	NM	NM	NM	NM
TW-10	22-Aug-11	5450.16	12.94			5437.22	NM	NM	NM	NM	NM	NM
TW-10	15-Nov-11	5450.16	12.73			5437.43	NM	NM	NM	NM	NM	NM
TW-11	16-Dec-08	5456.31	18.12			5438.19	6.75	6.941	1.41	14.32	72.0	1.25
TW-11	26-Jan-09	5456.31	18.02			5438.29	NM	NM	NM	NM	NM	NM
TW-11	20-Aug-09	5456.31	18.22			5438.09	7.43	6.704	2.52	15.35	261.4	4.00
TW-11	17-Feb-10	5456.31	18.04			5438.27	7.14	10.42	3.98	12.88	49.7	4.20
TW-11	11-May-10	5456.31	17.89			5438.42	7.22	6.44	2.32	13.25	232.1	3.75
TW-11	18-Aug-10	5456.31	18.04			5438.27	NM	NM	NM	NM	NM	NM
TW-11	15-Nov-10	5456.31	18.24			5438.07	NM	NM	NM	NM	NM	NM
TW-11	17-Feb-11	5456.31	18.15			5438.16	NM	NM	NM	NM	NM	NM
TW-11	17-May-11	5456.31	18.01			5438.30	NM	NM	NM	NM	NM	NM
TW-11	23-Aug-11	5456.31	18.43			5437.88	NM	NM	NM	NM	NM	NM
TW-11	17-Nov-11	5456.31	18.44			5437.87	7.36	5.238	2.92	13.92	-31.4	1.00
TW-12	15-Dec-08	5460.44	22.44			5438.00	6.49	4.247	0.95	16.15	-97.3	1.25
TW-12	26-Jan-09	5460.44	22.34	0.10		5438.08	NM	NM	NM	NM	NM	NM
TW-12	20-Aug-09	5460.44	22.50			5437.94	7.02	3.881	2.34	17.09	266.5	2.50

**TABLE 1**  
**SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

Well ID	Date	T.O.C. (ft. amsl)	Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-12	17-Feb-10	5460.44		22.39		5438.05	6.94	5.727	1.46	15.59	206.2	3.00
TW-12	11-May-10	5460.44		22.21		5438.23	7.05	3.295	0.76	15.56	217.9	3.75
TW-12	19-Aug-10	5460.44		22.39		5438.05	6.93	3.343	0.55	16.74	399.3	2.50
TW-12	15-Nov-10	5460.44		22.54		5437.90	6.93	3.343	0.55	16.74	399.3	2.50
TW-12	17-Feb-11	5460.44		22.39		5438.05	NM	NM	NM	NM	NM	NM
TW-12	17-May-11	5460.44		22.30		5438.14	NM	NM	NM	NM	NM	NM
TW-12	22-Aug-11	5460.44		22.73		5437.71	NM	NM	NM	NM	NM	NM
TW-12	16-Nov-11	5460.44		22.74		5437.70	NM	NM	NM	NM	NM	NM
TW-13	16-Dec-08	5458.17		20.64	21.48	0.84	5437.38					
TW-13	26-Jan-09	5458.17		20.52	21.46	0.94	5437.49	NM	NM	NM	NM	NM
TW-13	12-Aug-09	5458.17		20.75	21.77	1.02	5437.24	NM	NM	NM	NM	NM
TW-13	11-Nov-09	5458.17		20.76	21.86	1.10	5437.22	NM	NM	NM	NM	NM
TW-13	15-Feb-10	5458.17		20.59	21.48	0.89	5437.43	NM	NM	NM	NM	NM
TW-13	07-May-10	5458.17		20.44	21.03	0.59	5437.63	NM	NM	NM	NM	NM
TW-13	21-Jun-10	5458.17		20.48	21.15	0.67	5437.57	NM	NM	NM	NM	NM
TW-13	18-Aug-10	5458.17		20.77	21.15	0.38	5437.33	NM	NM	NM	NM	NM
TW-13	15-Nov-10	5458.17		20.79	21.39	0.60	5437.28	NM	NM	NM	NM	NM
TW-13	23-Feb-11	5458.17		20.58	21.50	0.92	5437.43	NM	NM	NM	NM	NM
TW-13	18-May-11	5458.17			20.66		5437.51					
TW-13	23-Aug-11	5458.17		21.08	21.57	0.49	5437.01					
TW-13	16-Nov-11	5458.17		20.90	22.04	1.14	5437.07					
TW-14	16-Dec-08	5454.24			16.82		5437.42					
TW-14	26-Jan-09	5454.24		16.71	17.02	0.31	5437.48	NM	NM	NM	NM	NM
TW-14	20-Aug-09	5454.24		16.89	17.02	0.13	5437.33					
TW-14	11-Nov-09	5454.24		17.20	17.67	0.47	5436.96	NM	NM	NM	NM	NM

TABLE 1  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA  
Thrifway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date</i>	<i>T.O.C. (ft amsl)</i>	<i>Depth to Product (ft)</i>	<i>Depth to Water (ft)</i>	<i>NAPL Thickness (ft)</i>	<i>Corrected GW Elev. (ft)</i>	<i>Conductivity (mS)</i>	<i>Dissolved Oxygen (mg/L)</i>	<i>Temp. (°C)</i>	<i>ORP (mV)</i>	<i>Purge Volume (gallons)</i>
TW-14	15-Feb-10	5454.24	16.98	17.22	0.24	5437.22	NM	NM	NM	NM	NM
TW-14	11-May-10	5454.24		16.85	sheen	5437.39	7.25	3.49	0.11	16.95	214.6
TW-14	18-Aug-10	5454.24	17.01	17.03	0.02	5437.23	NM	NM	NM	NM	NM
TW-14	15-Nov-10	5454.24		17.17		5437.07	NM	NM	NM	NM	NM
TW-14	17-Feb-11	5454.24	17.04	17.05	0.01	5437.20	NM	NM	NM	NM	NM
TW-14	18-May-11	5454.24		16.99		5437.25					
TW-14	23-Aug-11	5454.24		17.48		5436.76	NM	NM	NM	NM	NM
TW-14	16-Nov-11	5454.24	17.34	17.99	0.65	5436.79	NM	NM	NM	NM	NM
TW-15	16-Dec-08	5450.44		13.15		5437.29	6.69	6.647	1.25	13.17	-176.5
TW-15	26-Jan-09	5450.44		12.99		5437.45	NM	NM	NM	NM	NM
TW-15	20-Aug-09	5450.44		13.35		5437.09	7.26	6.056	3.64	16.49	320.0
TW-15	17-Feb-10	5450.44		12.93		5437.51	NM	NM	NM	NM	NM
TW-15	10-May-10	5450.44		12.86		5437.58	NM	NM	NM	NM	NM
TW-15	18-Aug-10	5450.44		13.21		5437.23	NM	NM	NM	NM	NM
TW-15	15-Nov-10	5450.44		13.24		5437.20	NM	NM	NM	NM	NM
TW-15	17-Feb-11	5450.44		13.05		5437.39	NM	NM	NM	NM	NM
TW-15	17-May-11	5450.44		13.09		5437.35	NM	NM	NM	NM	NM
TW-15	23-Aug-11	5450.44		13.58		5436.86	NM	NM	NM	NM	NM
TW-15	16-Nov-11	5450.44		13.42		5437.02	NM	NM	NM	NM	NM
TW-16	16-Dec-08	5448.45		8.76		5439.69	6.71	6.593	1.64	14.90	7.3
TW-16	26-Jan-09	5448.45		11.11		5437.34	NM	NM	NM	NM	NM
TW-16	20-Aug-09	5448.45		11.85		5436.60	7.40	6.025	3.66	16.57	285.2
TW-16	17-Feb-10	5448.45		11.10		5437.35	NM	NM	NM	NM	NM
TW-16	17-May-10	5448.45		11.25		5437.2	7.33	3.684	2.19	13.64	227.1
TW-16	18-Aug-10	5448.45		11.45		5437.00	NM	NM	NM	NM	NM

**TABLE 1**  
**SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

Well ID	Date	T.O.C. (ft. amsl)	Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-16	15-Nov-10	5448.45		11.52		5436.93	NM	NM	NM	NM	NM	NM
TW-16	17-Feb-11	5448.45		11.21		5437.24	NM	NM	NM	NM	NM	NM
TW-16	17-May-11	5448.45		11.32		5437.13	NM	NM	NM	NM	NM	NM
TW-16	22-Aug-11	5448.45		11.23		5437.22	NM	NM	NM	NM	NM	NM
TW-16	16-Nov-11	5448.45		11.67		5436.78	NM	NM	NM	NM	NM	NM
TW-17	16-Dec-08	5446.24		9.99		5436.25	6.68	6.643	1.26	14.10	-31.3	1.25
TW-17	26-Jan-09	5446.24		9.82		5436.42	NM	NM	NM	NM	NM	NM
TW-17	21-Aug-09	5446.24		10.31		5435.93	7.13	6.100	8.37	17.86	289.9	3.00
TW-17	17-Feb-10	5446.24		9.75		5436.49	NM	NM	NM	NM	NM	NM
TW-17	10-May-10	5446.24		9.83		5436.41	NM	NM	NM	NM	NM	NM
TW-17	18-Aug-10	5446.24		10.21		5436.03	NM	NM	NM	NM	NM	NM
TW-17	15-Nov-10	5446.24		10.18		5436.06	NM	NM	NM	NM	NM	NM
TW-17	17-Feb-11	5446.24		9.92		5436.32	NM	NM	NM	NM	NM	NM
TW-17	17-May-11	5446.24		10.03		5436.21	NM	NM	NM	NM	NM	NM
TW-17	22-Aug-11	5446.24		10.51		5435.73	NM	NM	NM	NM	NM	NM
TW-17	16-Nov-11	5446.24		10.29		5435.95	NM	NM	NM	NM	NM	NM
TW-18	16-Dec-08	5452.73		16.40		5436.33	6.65	5.094	0.88	16.42	-170.9	1.25
TW-18	26-Jan-09	5452.73		16.29		5436.44	NM	NM	NM	NM	NM	NM
TW-18	21-Aug-09	5452.73		16.48		5436.25	6.94	5.273	7.64	17.32	285.8	4.00
TW-18	17-Feb-10	5452.73		16.21		5436.52	6.8	7.990	2.04	15.58	210	3.30
TW-18	10-May-10	5452.73		16.11		5436.62	7.1	4.830	0.75	15.40	222	3.75
TW-18	18-Aug-10	5452.73		16.31		5436.42	NM	NM	NM	NM	NM	NM
TW-18	16-Nov-10	5452.73		16.50		5436.23	7.1	4.730	0.82	16.85	-19	3.00
TW-18	17-Feb-11	5452.73		16.33		5436.40	NM	NM	NM	NM	NM	NM
TW-18	18-May-11	5452.73		16.30		5436.43	NM	NM	NM	NM	NM	NM

TABLE 1  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA  
Thrifway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date</i>	<i>T.O.C. (ft amsl)</i>	<i>Depth to Product (ft)</i>	<i>NAPL Thickness (ft)</i>	<i>Corrected GW Elev. (ft)</i>	<i>Conductivity (mS)</i>	<i>Dissolved Oxygen (mg/L)</i>	<i>Temp. (°C)</i>	<i>ORP (mV)</i>	<i>Purge Volume (gallons)</i>
TW-18	23-Aug-11	5452.73	16.64		5436.09	NM	NM	NM	NM	NM
TW-18	17-Nov-11	5452.73	16.66		5436.07	7.25	4.639	0.64	15.59	-25.1
TW-19	16-Dec-08	5458.49	22.15	22.62	0.47	5436.26				
TW-19	26-Jan-09	5458.49	22.01	22.57	0.56	5436.38	NM	NM	NM	NM
TW-19	13-Aug-09	5458.49	22.13	22.86	0.73	5436.23				
TW-19	11-Nov-09	5458.49								
TW-19	15-Feb-10	5458.49								
TW-19	07-May-10	5458.49	17.45	17.52	0.07	5441.03	NM	NM	NM	NM
TW-19	18-Aug-10	5458.49	17.66	Sheen	5440.83	NM	NM	NM	NM	NM
TW-19	15-Nov-10	5458.49	17.79	18.02	0.23	5440.66	NM	NM	NM	NM
TW-19	17-Feb-11	5458.49								
TW-19	18-May-11	5458.49		17.63		5440.86				
TW-19	23-Aug-11	5458.49	17.84	18.34	0.50	5440.56				
TW-19	16-Nov-11	5458.49	17.90	18.60	0.70	5440.47				
TW-20	17-Dec-08	5453.74	15.14	15.86	0.72	5438.48				
TW-20	26-Jan-09	5453.74	17.36	18.62	1.26	5436.16	NM	NM	NM	NM
TW-20	13-Aug-09	5453.74	17.64	19.17	1.53	5435.84				
TW-20	11-Nov-09	5453.74	17.52	19.45	1.93	5435.89	NM	NM	NM	NM
TW-20	15-Feb-10	5453.74	17.4	18.73	1.33	5436.11	NM	NM	NM	NM
TW-20	07-May-10	5453.74	17.28	18.25	0.97	5436.29	NM	NM	NM	NM
TW-20	07-May-10	5453.74	17.28	18.25	0.97	5436.29	NM	NM	NM	NM
TW-20	18-Aug-10	5453.74								
TW-20	15-Nov-10	5453.74	17.56	18.88	1.32	5435.95	NM	NM	NM	NM
TW-20	17-Feb-11	5453.74	17.40	17.45	0.05	5436.33				
TW-20	17-May-11	5453.74								

**TABLE 1**  
**SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

Well ID	Date	T.O.C. (ft. amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-20	23-Aug-11	5453.74	17.87	19.40	1.53	5435.61						Not Sampled - NAPL Present
TW-20	16-Nov-11	5453.74	17.64	19.60	1.96	5435.76						Not Sampled - NAPL Present
TW-21	17-Dec-08	5451.85	15.42	17.19	1.77	5436.12						Not Sampled - NAPL Present
TW-21	26-Jan-09	5451.85	16.35	16.94	0.59	5435.40	NM	NM	NM	NM	NM	NM
TW-21	13-Aug-09	5451.85	16.50	16.94	0.44	5435.27						Not Sampled - NAPL present
TW-21	12-Nov-09	5451.85										
TW-21	15-Feb-10	5451.85										
TW-21	07-May-10	5451.85										
TW-21	18-Aug-10	5451.85										
TW-21	15-Nov-10	5451.85										
TW-21	23-Feb-11	5451.85										
TW-21	17-May-11	5451.85										
TW-21	23-Aug-11	5451.85										
TW-21	16-Nov-11	5451.85										
TW-22	17-Dec-08	5450.19	14.75	14.76	0.01	5435.44						Not Sampled - NAPL Present
TW-22	26-Jan-09	5450.19	14.69	15.26	0.57	5435.40	NM	NM	NM	NM	NM	NM
TW-22	13-Aug-09	5450.19	14.79	15.39	0.60	5435.30						Not Sampled - NAPL present
TW-22	12-Nov-09	5450.19	14.88	15.58	0.70	5435.19	NM	NM	NM	NM	NM	NM
TW-22	15-Feb-10	5450.19	14.72	15.03	0.31	5435.42	NM	NM	NM	NM	NM	NM
TW-22	07-May-10	5450.19	14.63	14.73	0.10	5435.54	NM	NM	NM	NM	NM	NM
TW-22	18-Aug-10	5450.19	14.74	15.01	0.27	5435.40	NM	NM	NM	NM	NM	NM
TW-22	15-Nov-10	5450.19	14.94	15.14	0.20	5435.22	NM	NM	NM	NM	NM	NM
TW-22	23-Feb-11	5450.19	14.80	15.14	0.34	5435.33	NM	NM	NM	NM	NM	NM
TW-22	17-May-11	5450.19	14.79	15.02	0.23	5435.36						
TW-22	23-Aug-11	5450.19	15.13	15.16	0.03	5435.05						

TABLE 1  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
												Not Sampled - NAPL Present
TW-22	16-Nov-11	5450.19	15.10	15.62	0.52	5435.00						
TW-23	18-Dec-08	5443.64		6.60		5437.04	7.09	6.727	3.77	13.65	-138.4	1.25
TW-23	26-Jan-08	5443.64		8.73		5434.91	NM	NM	NM	NM	NM	NM
TW-23	21-Aug-09	5443.64		9.07		5434.57	7.17	7.95	5.40	18.47	286.8	3.00
TW-23	17-Feb-10	5443.64		8.61		5435.03	NM	NM	NM	NM	NM	NM
TW-23	10-May-10	5443.64		8.64		5435.00	NM	NM	NM	NM	NM	NM
TW-23	18-Aug-10	5443.64		8.94		5434.70	NM	NM	NM	NM	NM	NM
TW-23	15-Nov-10	5443.64		9.10		5434.54	NM	NM	NM	NM	NM	NM
TW-23	17-Feb-11	5443.64		9.51		5434.13	NM	NM	NM	NM	NM	NM
TW-23	17-May-11	5443.64		8.99		5434.65	NM	NM	NM	NM	NM	NM
TW-23	22-Aug-11	5443.64		9.05		5434.59	NM	NM	NM	NM	NM	NM
TW-23	16-Nov-11	5443.64		9.05		5434.59	NM	NM	NM	NM	NM	NM
TW-24	17-Dec-08	5444.79		10.97		5433.82	6.21	5.942	4.88	15.60	-64.3	1.25
TW-24	26-Jan-09	5444.79	11.84	11.85	0.01	5432.95	NM	NM	NM	NM	NM	NM
TW-24	21-Aug-09	5444.79	11.10	11.22	0.12	5433.67						
TW-24	13-Nov-09	5444.79	11.07	11.15	0.08	5433.71	NM	NM	NM	NM	NM	NM
TW-24	17-Feb-10	5444.79		10.78		5434.01	6.62	7.86	0.74	13.77	436.8	3.00
TW-24	11-May-10	5444.79		10.63		5434.16	7.05	4.70	0.33	14.39	229	3.75
TW-24	18-Aug-10	5444.79		11.09	Sheen	5433.70	NM	NM	NM	NM	NM	NM
TW-24	15-Nov-10	5444.79	11.17	11.30	0.13	5433.60	NM	NM	NM	NM	NM	NM
TW-24	23-Feb-11	5444.79	11.09	11.15	0.06	5433.69	NM	NM	NM	NM	NM	NM
TW-24	17-May-11	5444.79	11.09	11.15	0.06	5433.69						
TW-24	23-Aug-11	5444.79	11.34	11.47	0.13	5433.43						
TW-24	*16-Nov-11	5444.79	11.26	11.37	0.11	5433.51						

**TABLE 1**  
**SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA**  
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft. amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected		Dissolved		ORP (mV)	Purge Volume (gallons)
						Elev. (ft)	pH	GW	Conductivity (mS)	Oxygen (mg/L)	
TW-25	17-Dec-08	5448.80	14.13	14.62	0.49	5434.59		NM	NM	Not Sampled - NAPL Present	
TW-25	26-Jan-09	5448.80	14.05	14.41	0.36	5434.69		NM	NM	NM	NM
TW-25	13-Aug-09	5448.80	14.14	14.63	0.49	5434.58		NM	NM	Not Sampled - NAPL present	
TW-25	12-Nov-09	5448.80	14.24	14.91	0.67	5434.44		NM	NM	NM	NM
TW-25	15-Feb-10	5448.80	14.03	14.41	0.38	5434.70		NM	NM	NM	NM
TW-25	07-May-10	5448.80	13.88	14.18	0.30	5434.87		NM	NM	NM	NM
TW-25	18-Aug-10	5448.80	14.00	14.39	0.39	5434.73		NM	NM	NM	NM
TW-25	15-Nov-10	5448.80	14.40	14.71	0.31	5434.35		NM	NM	NM	NM
TW-25	23-Feb-11	5448.80	14.21	14.45	0.24	5434.55		NM	NM	NM	NM
TW-25	17-May-11	5448.80	14.09	14.29	0.20	5434.68		NM	NM	Not Sampled - NAPL Present	
TW-25	23-Aug-11	5448.80	14.35	14.85	0.50	5434.36		NM	NM	Not Sampled - NAPL Present	
TW-25	16-Nov-11	5448.80	14.30	15.12	0.82	5434.36		NM	NM	Not Sampled - NAPL Present	
TW-26	17-Dec-08	5450.34	13.49	14.47	0.98	5436.68		NM	NM	Not Sampled - NAPL Present	
TW-26	26-Jan-09	5450.34	15.80	16.76	0.96	5434.37		NM	NM	NM	NM
TW-26	13-Aug-09	5450.34	15.83	17.29	1.46	5434.26		NM	NM	Not Sampled - NAPL present	
TW-26	12-Nov-09	5450.34	15.91	17.47	1.56	5434.16		NM	NM	NM	NM
TW-26	15-Feb-10	5450.34	15.81	16.86	1.05	5434.35		NM	NM	NM	NM
TW-26	07-May-10	5450.34	15.68	16.22	0.54	5434.57		NM	NM	NM	NM
TW-26	18-Aug-10	5450.34	15.75	16.75	1.00	5434.42		NM	NM	NM	NM
TW-26	15-Nov-10	5450.34	15.85	17.06	1.21	5434.28		NM	NM	NM	NM
TW-26	23-Feb-11	5450.34	15.81	16.75	0.94	5434.37		NM	NM	NM	NM
TW-26	17-May-11	5450.34	15.74	16.50	0.76	5434.47		NM	NM	Not Sampled - NAPL Present	
TW-26	24-Aug-11	5450.34	16.02	17.44	1.42	5434.07		NM	NM	Not Sampled - NAPL Present	
TW-26	16-Nov-11	5450.34	15.98	17.40	1.42	5434.11		NM	NM	Not Sampled - NAPL Present	
TW-28	17-Dec-08	5449.24	15.37	15.96	0.59	5433.77		NM	NM	Not Sampled - NAPL Present	

TABLE 1  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date</i>	<i>T.O.C. (ft. amsl)</i>	<i>Depth to Product (ft)</i>	<i>Depth to Water (ft)</i>	<i>NAPL Thickness (ft)</i>	<i>Corrected GW Elev. (ft)</i>	<i>Conductivity (mS)</i>	<i>Dissolved Oxygen (mg/L)</i>	<i>Temp. (°C)</i>	<i>ORP (mV)</i>	<i>Purge Volume (gallons)</i>	
TW-28	26-Jan-09	5449.24	15.28	15.79	0.51	5433.87	NM	NM	NM	NM	NM	
TW-28	13-Aug-09	5449.24	15.27	16.31	1.04	5433.79	Not Sampled - NAPL present					
TW-28	12-Nov-09	5449.24	15.35	16.74	1.39	5433.65	NM	NM	NM	NM	NM	
TW-28	15-Feb-10	5449.24	15.22	16.10	0.88	5433.87	NM	NM	NM	NM	NM	
TW-28	07-May-10	5449.24	15.08	15.47	0.39	5434.09	NM	NM	NM	NM	NM	
TW-28	18-Aug-10	5449.24	15.12	16.09	0.97	5433.95	NM	NM	NM	NM	NM	
TW-28	15-Nov-10	5449.24	15.49	16.67	1.18	5433.55	NM	NM	NM	NM	NM	
TW-28	23-Feb-11	5449.24	15.24	16.39	1.15	5433.80	NM	NM	NM	NM	NM	
TW-28	17-May-11	5449.24	15.19	16.09	0.90	5433.89	Not Sampled - NAPL Present					
TW-28	24-Aug-11	5449.24	15.33	16.87	1.54	5433.64	Not Sampled - NAPL Present					
TW-28	16-Nov-11	5449.24	15.40	16.94	1.54	5433.57	Not Sampled - NAPL Present					
TW-29	17-Dec-08	5441.87	9.19	9.20	0.01	5432.68	Not Sampled - NAPL Present					
TW-29	26-Jan-09	5441.87	9.12	9.14	0.02	5432.75	NM	NM	NM	NM	NM	
TW-29	13-Aug-09	5441.87	9.22	10.06	0.84	5432.50	Not Sampled - NAPL present					
TW-29	13-Nov-09	5441.87	9.25	9.91	0.66	5432.51	NM	NM	NM	NM	NM	
TW-29	17-Feb-10	5441.87		8.96		5432.91	6.00	8.583	0.60	13.79	357.9	
TW-29	07-May-10	5441.87	8.91	8.96	0.05	5432.95	NM	NM	NM	NM	3.60	
TW-29	18-Aug-10	5441.87	9.14	9.69	0.55	5432.63	NM	NM	NM	NM	NM	
TW-29	15-Nov-10	5441.87	9.43	10.23	0.80	5432.30	NM	NM	NM	NM	NM	
TW-29	23-Feb-11	5441.87	10.31	10.90	0.59	5431.46	NM	NM	NM	NM	NM	
TW-29	17-May-11	5441.87	9.35	9.83	0.48	5432.44	Not Sampled - NAPL Present					
TW-29	24-Aug-11	5441.87	9.43	10.38	0.95	5432.28	Not Sampled - NAPL Present					
TW-29	16-Nov-11	5441.87	9.46	10.16	0.70	5432.29	Not Sampled - NAPL Present					
TW-30	18-Dec-08	5437.93		5.90		5432.03	6.46	6.328	6.25*	12.89	-66.2	
TW-30	26-Jan-09	5437.93		5.69		5432.24	NM	NM	NM	NM	NM	

TABLE 1  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected Elev. (ft)	GW	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-30	21-Aug-09	5437.93	6.07		5431.86	6.61	7.238	5.52	18.52	304.0	5.50	
TW-30	17-Feb-10	5437.93	5.65		5432.28	6.26	8.169	1.47	11.21	476.9	5.60	
TW-30	11-May-10	5437.93	5.67		5432.26	6.77	5.188	0.76	12.56	238.8	3.75	
TW-30	18-Aug-10	5437.93	5.99		5431.94	NM	NM	NM	NM	NM	NM	
TW-30	16-Nov-10	5437.93	6.34		5431.59	6.96	6.832	0.61	15.28	-8.8	3.00	
TW-30	17-Feb-11	5437.93	6.24		5431.69	NM	NM	NM	NM	NM	NM	
TW-30	17-May-11	5437.93	6.22		5431.71	NM	NM	NM	NM	NM	NM	
TW-30	24-Aug-11	5437.93	6.47		5431.46	NM	NM	NM	NM	NM	NM	
TW-30	17-Nov-11	5437.93	6.25		5431.68	7.21	6.482	0.54	12.97	-23.1	1.00	
TW-31	16-Dec-08	5438.54	7.03		5431.51	6.37	7.298	2.97	14.00	12.8	1.25	
TW-31	26-Jan-09	5438.54	6.94		5431.60	NM	NM	NM	NM	NM	NM	
TW-31	21-Aug-09	5438.54	7.18		5431.36	6.84	10.35	6.90	21.75	319.9	3.00	
TW-31	17-Feb-10	5438.54	6.82		5431.72	6.63	9.906	3.95	9.75	358.8	3.00	
TW-31	11-May-10	5438.54	6.78		5431.76	6.96	7.523	1.31	13.25	228.9	4.00	
TW-31	18-Aug-10	5438.54	6.98		5431.56	NM	NM	NM	NM	NM	NM	
TW-31	16-Nov-10	5438.54	7.24		5431.30	6.98	5.526	0.99	15.87	-10.0	3.00	
TW-31	17-Feb-11	5438.54	7.16		5431.38	NM	NM	NM	NM	NM	NM	
TW-31	17-May-11	5438.54	7.07		5431.47	NM	NM	NM	NM	NM	NM	
TW-31	24-Aug-11	5438.54	7.30		5431.24	NM	NM	NM	NM	NM	NM	
TW-31	17-Nov-11	5438.54	7.18		5431.36	7.24	5.432	1.94	14.67	-24.7	1.00	
TW-32	17-Dec-08	5441.61	7.22	8.79	1.57	5434.12				Not Sampled - NAPL Present		
TW-32	26-Jan-09	5441.61	9.02	10.31	1.29	5432.37	NM	NM	NM	NM	NM	NM
TW-32	13-Aug-09	5441.61	9.12	10.86	1.74	5432.19				Not Sampled - NAPL present		
TW-32	12-Nov-09	5441.61	9.26	10.88	1.62	5432.07	NM	NM	NM	NM	NM	NM
TW-32	16-Feb-10	5441.61	8.97	9.98	1.01	5432.47	NM	NM	NM	NM	NM	NM

TABLE 1  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date</i>	<i>T.O.C. (ft amsl)</i>	<i>Depth to Product (ft)</i>	<i>Depth to Water (ft)</i>	<i>NAPL Thickness (ft)</i>	<i>Corrected GW Elev. (ft)</i>	<i>pH</i>	<i>Conductivity (mS)</i>	<i>Dissolved Oxygen (mg/L)</i>	<i>Temp. (°C)</i>	<i>ORP (mV)</i>	<i>Purge Volume (gallons)</i>
TW-32	07-May-10	5441.61	8.92	9.34	0.42	5432.62	NM	NM	NM	NM	NM	NM
TW-32	18-Aug-10	5441.61	9.00	10.18	1.18	5432.41	NM	NM	NM	NM	NM	NM
TW-32	15-Nov-10	5441.61	9.30	10.87	1.57	5432.04	NM	NM	NM	NM	NM	NM
TW-32	23-Feb-11	5441.61	9.23	10.79	1.56	5432.11	NM	NM	NM	NM	NM	NM
TW-32	17-May-11	5441.61	9.26	10.72	1.46	5432.10						
TW-32	24-Aug-11	5441.61	9.40	10.92	1.52	5431.95						
TW-32	16-Nov-11	5441.61	9.38	11.01	1.63	5431.95						
TW-33	17-Dec-08	5445.85	12.96	13.02	0.06	5432.88						
TW-33	26-Jan-09	5445.85	12.92	13.02	0.10	5432.91	NM	NM	NM	NM	NM	NM
TW-33	13-Aug-09	5445.85	12.96	13.10	0.14	5432.87						
TW-33	12-Nov-09	5445.85	13.10	13.40	0.30	5432.70	NM	NM	NM	NM	NM	NM
TW-33	16-Feb-10	5445.85	12.89	12.93	0.04	5432.95	NM	NM	NM	NM	NM	NM
TW-33	07-May-10	5445.85	12.68	12.70	0.02	5433.17	NM	NM	NM	NM	NM	NM
TW-33	18-Aug-10	5445.85	12.81	12.99	0.18	5433.01	NM	NM	NM	NM	NM	NM
TW-33	15-Nov-10	5445.85	12.97	13.15	0.18	5432.85	NM	NM	NM	NM	NM	NM
TW-33	17-Feb-11	5445.85	12.98	13.05	0.07	5432.86	NM	NM	NM	NM	NM	NM
TW-33	17-May-11	5445.85	12.80	12.82	0.02	5433.05						
TW-33	24-Aug-11	5445.85	13.20	13.33	0.13	5432.63						
TW-33	16-Nov-11	5445.85	13.13	13.42	0.29	5432.67						
TW-34	18-Dec-08	5455.80		19.82		5435.98	7.48	6.744	3.97	14.29	-183.8	1.25
TW-34	26-Jan-09	5455.80		19.74		5436.06	NM	NM	NM	NM	NM	NM
TW-34	19-Aug-09	5455.80		20.23		5435.57	7.06	10.07	6.19	15.43	303.7	3.00
TW-34	18-Feb-10	5455.80		19.79		5436.01	7.06	9.266	2.40	12.35	-55.0	3.00
TW-34	12-May-10	5455.80		19.6		5436.20	7.03	5.825	2.18	13.57	133.5	3.75
TW-34	18-Aug-10	5455.80		20.10		5435.70	NM	NM	NM	NM	NM	NM

**TABLE 1**  
**SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-34	15-Nov-10	5455.80		19.93		5435.87	NM	NM	NM	NM	NM	NM
TW-34	23-Feb-11	5455.80		19.83		5435.97	NM	NM	NM	NM	NM	NM
TW-34	17-May-11	5455.80		19.73		5436.07	NM	NM	NM	NM	NM	NM
TW-34	24-Aug-11	5455.80		20.43		5435.37	NM	NM	NM	NM	NM	NM
TW-34	22-Nov-11	5455.80		20.14		5435.66	7.25	6.078	2.31	14.58	-25.4	1.00
TW-35	18-Dec-08	5449.14		15.21		5433.93	7.04	7.929	4.39	14.98	-189.4	1.25
TW-35	26-Jan-09	5449.14		15.12		5434.02	NM	NM	NM	NM	NM	NM
TW-35	24-Aug-09	5449.14		15.29		5433.85	7.02	11.80	6.40	16.41	295.1	3.30
TW-35	18-Feb-10	5449.14		15.15		5433.99	7.20	11.52	2.91	12.99	-283.0	3.60
TW-35	12-May-10	5449.14		14.91		5434.23	7.17	6.714	1.91	12.77	197.4	3.75
TW-35	18-Aug-10	5449.14		15.08		5434.06	NM	NM	NM	NM	NM	NM
TW-35	17-Nov-10	5449.14		15.23		5433.91	7.13	7.175	0.72	15.97	-18.3	3.00
TW-35	23-Feb-11	5449.14		15.17		5433.97	NM	NM	NM	NM	NM	NM
TW-35	17-May-11	5449.14		15.03		5434.11	NM	NM	NM	NM	NM	NM
TW-35	24-Aug-11	5449.14		15.35		5433.79	NM	NM	NM	NM	NM	NM
TW-35	22-Nov-11	5449.14		15.35		5433.79	7.38	6.901	1.21	15.24	-32.9	1.00
TW-36	18-Dec-08	5441.91		13.03		5428.88	6.94	7.874	3.6	15.28	-270.7	1.25
TW-36	26-Jan-09	5441.91	12.94	12.97	0.03	5428.96	NM	NM	NM	NM	NM	NM
TW-36	13-Aug-09	5441.91	13.17	13.35	0.18	5428.71				Not Sampled - NAPL present		
TW-36	13-Nov-09	5441.91	13.25	13.63	0.38	5428.59	NM	NM	NM	NM	NM	NM
TW-36	16-Feb-10	5441.91	12.96	12.98	0.02	5428.95	NM	NM	NM	NM	NM	NM
TW-36	12-May-10	5441.91		12.70		5429.21	7.08	6.193	1.42	12.75	388.4	3.75
TW-36	18-Aug-10	5441.91	13.10	13.18	0.08	5428.80	NM	NM	NM	NM	NM	NM
TW-36	15-Nov-10	5441.91	13.20	13.35	0.15	5428.68	NM	NM	NM	NM	NM	NM
TW-36	23-Feb-11	5441.91		13.03		5428.88	NM	NM	NM	NM	NM	NM

TABLE 1  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<b>Well ID</b>	<b>Date</b>	<b>T.O.C. (ft amsl)</b>	<b>Depth to Product (ft)</b>	<b>Depth to Water (ft)</b>	<b>NAPL Thickness (ft)</b>	<b>Corrected GW Elev. (ft)</b>	<b>pH</b>	<b>Conductivity (mS)</b>	<b>Dissolved Oxygen (mg/L)</b>	<b>Temp. (°C)</b>	<b>ORP (mV)</b>	<b>Purge Volume (gallons)</b>
TW-36	17-May-11	5441.91	12.97	12.98	0.01	5428.94						Not Sampled - NAPL Present
TW-36	24-Aug-11	5441.91	13.43	13.68	0.25	5428.44						Not Sampled - NAPL Present
TW-36	15-Nov-11	5441.91	13.36	13.55	0.19	5428.52						Not Sampled - NAPL Present
TW-37	17-Dec-08	5439.59		10.57		5429.02	6.51	4.698	3.5	14.02	-221.3	1.25
TW-37	26-Jan-09	5439.59		10.47		5429.12	NM	NM	NM	NM	NM	NM
TW-37	21-Aug-09	5439.59		10.71		5428.88	7.22	6.162	4.35	18.77	296.1	3.00
TW-37	16-Feb-10	5439.59		10.44		5429.15	6.77	6.700	1.11	12.18	430.5	3.00
TW-37	11-May-10	5439.59		10.16		5429.43	6.98	4.092	1.27	12.84	224.6	3.75
TW-37	19-Aug-10	5439.59		10.53		5429.06	7.05	4.268	0.41	18.90	324.2	1.50
TW-37	16-Nov-10	5439.59		10.68		5428.91	7.05	4.503	0.61	16.79	-13.6	3.00
TW-37	17-Feb-11	5439.59		10.58		5429.01	NM	NM	NM	NM	NM	NM
TW-37	18-May-11	5439.59		10.50		5429.09	7.05	4.162	0.77	13.42	-13.9	0.50
TW-37	24-Aug-11	5439.59		10.86		5428.73	NM	NM	NM	NM	NM	NM
TW-37	22-Nov-11	5439.59		10.83		5428.76	7.26	4.513	1.63	15.31	-25.8	1.00
TW-38	17-Dec-08	5442.11		9.55		5432.56	6.95	5.466	4.06	12.82	-179.3	1.25
TW-38	26-Jan-09	5442.11		11.36		5430.75	NM	NM	NM	NM	NM	NM
TW-38	21-Aug-09	5442.11	11.57	11.58	0.01	5430.54						Not Sampled - NAPL Present
TW-38	12-Nov-09	5442.11	11.64	11.70	0.06	5430.46	NM	NM	NM	NM	NM	NM
TW-38	18-Feb-10	5442.11		11.28		5430.83	6.73	7.314	0.57	12.54	549.0	2.10
TW-38	12-May-10	5442.11		11.09		5431.02	7.06	4.741	2.37	12.83	205.3	3.75
TW-38	19-Aug-10	5442.11		11.30		5430.81	6.99	4.573	0.48	18.42	353.8	2.50
TW-38	16-Nov-10	5442.11		11.54		5430.57	7.10	4.657	0.79	16.96	-16.7	3.00
TW-38	17-Feb-11	5442.11		11.49		5430.62	NM	NM	NM	NM	NM	NM
TW-38	18-May-11	5442.11		11.42		5430.69	7.06	3.756	0.97	13.91	-14.3	0.50
TW-38	24-Aug-11	5442.11		11.72		5430.39	NM	NM	NM	NM	NM	NM

**TABLE 1**  
**SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

Well ID	Date	T.O.C. (ft. amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)	
		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
TW-38	16-Nov-11	5442.11	11.68	11.83	0.15	5430.40	NM	NM	NM	NM	NM	
TW-39	18-Dec-08	5438.43	7.7	7.71	0.01	5430.73	Not Sampled - Sheen of NAPL Present					
TW-39	26-Jan-09	5438.43		7.44		5430.99	NM	NM	NM	NM	NM	
TW-39	21-Aug-09	5438.43		7.96		5430.47	6.93	8.946	4.48	23.34	328.1	
TW-39	17-Feb-10	5438.43		7.11		5431.32	6.64	6.092	1.22	8.11	244.4	
TW-39	12-May-10	5438.43		6.98		5431.45	6.93	6.104	1.91	12.70	214.3	
TW-39	19-Aug-10	5438.43		7.42		5431.01	7.19	3.956	0.30	22.67	359.2	
TW-39	16-Nov-10	5438.43		7.95		5430.48	7.17	4.224	0.85	15.29	-20.8	
TW-39	17-Feb-11	5438.43		9.01		5429.42	NM	NM	NM	NM	NM	
TW-39	19-May-11	5438.43		7.73		5430.70	7.13	4.654	1.00	11.84	-18.2	
TW-39	24-Aug-11	5438.43		7.97		5430.46	NM	NM	NM	NM	NM	
TW-39	17-Nov-11	5438.43		7.98		5430.45	7.18	4.189	0.63	14.26	-21.5	
TW-40	18-Dec-08	5437.50		5.30		5432.20	Not Sampled - Sheen of NAPL Present					
TW-40	26-Jan-09	5437.50		7.27		5430.23	NM	NM	NM	NM	NM	
TW-40	13-Aug-09	5437.50	7.90	8.53	0.63	5429.49	Not Sampled - NAPL present					
TW-40	13-Nov-09	5437.50	7.93	8.49	0.56	5429.47	NM	NM	NM	NM	NM	
TW-40	16-Feb-10	5437.50	6.84	7.76	0.92	5430.50	NM	NM	NM	NM	NM	
TW-40	07-May-10	5437.50	6.78	7.90	1.12	5430.53	NM	NM	NM	NM	NM	
TW-40	18-Aug-10	5437.50	7.50	7.88	0.38	5429.93	NM	NM	NM	NM	NM	
TW-40	15-Nov-10	5437.50	7.97	8.51	0.54	5429.44	NM	NM	NM	NM	NM	
TW-40	17-Feb-11	5437.50	7.94	8.38	0.44	5429.48	NM	NM	NM	NM	NM	
TW-40	17-May-11	5437.50	7.72	8.19	0.47	5429.70	Not Sampled - NAPL Present					
TW-40	24-Aug-11	5437.50	8.07	8.69	0.62	5429.32	Not Sampled - NAPL Present					
TW-40	16-Nov-11	5437.50	8.01	8.51	0.50	5429.40	Not Sampled - NAPL Present					

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Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-41	18-Dec-08	5434.77	5.85			5428.92	6.16	5.669	3.92	10.95	-339.4
TW-41	26-Jan-09	5434.77	5.59			5429.18	NM	NM	NM	NM	NM
TW-41	24-Aug-09	5434.77	6.27			5428.50	6.72	9.811	8.50	20.12	126.3
TW-41	16-Feb-10	5434.77	5.34			5429.43	6.06	8.192	0.46	8.01	461.4
TW-41	12-May-10	5434.77	5.17			5429.60	7.01	5.881	1.30	12.95	229.2
TW-41	20-Aug-10	5434.77	5.70			5429.07	7.07	5.434	0.52	20.38	197.0
TW-41	16-Nov-10	5434.77	6.12			5428.65	6.93	5.792	0.69	14.43	-6.7
TW-41	17-Feb-11	5434.77	6.06			5428.71	NM	NM	NM	NM	NM
TW-41	18-May-11	5434.77	5.92			5428.85	7.05	5.675	0.78	13.17	-13.9
TW-41	24-Aug-11	5434.77	6.36			5428.41	NM	NM	NM	NM	NM
TW-41	22-Nov-11	5434.77	6.27			5428.50	7.19	3.813	0.59	12.23	-21.6
TW-42	16-Dec-08	5433.76	6.09			5427.67	6.48	6.036	1.07	12.04	23.5
TW-42	26-Jan-09	5433.76	5.97			5427.79	NM	NM	NM	NM	NM
TW-42	24-Aug-09	5433.76	6.37			5427.39	7.23	10.81	6.43	19.48	219.0
TW-42	16-Feb-10	5433.76	5.84			5427.92	6.43	7.885	2.50	7.78	456.9
TW-42	12-May-10	5433.76	5.55			5428.21	7.27	5.816	2.60	12.54	233.5
TW-42	20-Aug-10	5433.76	6.05			5427.71	7.34	6.146	1.34	19.81	266.2
TW-42	16-Nov-10	5433.76	6.21			5427.55	7.26	6.589	1.84	14.17	-25.8
TW-42	17-Feb-11	5433.76	6.07			5427.69	NM	NM	NM	NM	NM
TW-42	17-May-11	5433.76	6.02			5427.74	NM	NM	NM	NM	NM
TW-42	24-Aug-11	5433.76	6.47			5427.29	NM	NM	NM	NM	NM
TW-42	22-Nov-11	5433.76	6.43			5427.33	7.31	4.216	0.88	12.53	-28.4
TW-43	16-Dec-08	5440.42	12.19			5428.23	6.35	6.716	1.01	14.39	7.0
TW-43	26-Jan-09	5440.42	12.10			5428.32	NM	NM	NM	NM	NM
TW-43	24-Aug-09	5440.42	12.44			5427.98	6.94	8.834	6.92	17.73	204.1

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<i>Well ID</i>	<i>Date</i>	<i>T.O.C. (ft amsl)</i>	<i>Depth to Product (ft)</i>	<i>Depth to Water (ft)</i>	<i>NAPL Thickness (ft)</i>	<i>Corrected GW Elev. (ft)</i>	<i>pH</i>	<i>Conductivity (mS)</i>	<i>Dissolved Oxygen (mg/L)</i>	<i>Temp. (°C)</i>	<i>ORP (mV)</i>	<i>Purge Volume (gallons)</i>
TW-43	16-Feb-10	5440.42		12.11		5428.31	6.79	7.655	3.56	12.46	431.3	3.00
TW-43	12-May-10	5440.42		11.82		5428.60	7.01	4.736	1.60	12.89	225.4	3.75
TW-43	20-Aug-10	5440.42		12.29		5428.13	6.98	4.873	1.00	17.72	299.0	2.50
TW-43	16-Nov-10	5440.42		12.34		5428.08	6.94	5.273	0.84	16.58	-7.3	3.00
TW-43	17-Feb-11	5440.42		12.19		5428.23	NM	NM	NM	NM	NM	NM
TW-43	18-May-11	5440.42		12.15		5428.27	6.93	5.144	0.44	13.07	-7.1	0.50
TW-43	24-Aug-11	5440.42		12.58		5427.84	NM	NM	NM	NM	NM	NM
TW-43	22-Nov-11	5440.42		12.47		5427.95	7.21	3.383	1.52	13.06	-23.1	NM
TW-44	17-Dec-08	5444.08		12.66		5431.42	6.71	6.494	2.75	15.75	-43.4	1.25
TW-44	26-Jan-09	5444.08		14.93		5429.15	NM	NM	NM	NM	NM	NM
TW-44	24-Aug-09	5444.08		15.15		5428.93	6.74	9.788	6.47	16.80	248.3	1.50
TW-44	18-Feb-10	5444.08		15.02		5429.06	NM	NM	NM	NM	NM	NM
TW-44	07-May-10	5444.08		14.66		5429.42	NM	NM	NM	NM	NM	NM
TW-44	18-Aug-10	5444.08		14.98		5429.10	NM	NM	NM	NM	NM	NM
TW-44	15-Nov-10	5444.08		15.12		5428.95	NM	NM	NM	NM	NM	NM
TW-44	17-Feb-11	5444.08		15.02		5429.06	NM	NM	NM	NM	NM	NM
TW-44	17-May-11	5444.08		14.96		5429.11						
TW-44	23-Aug-11	5444.08		15.34		5428.73						
TW-44	16-Nov-11	5444.08		15.32		5428.63						
TW-45	13-May-10	TBS		6.58								
TW-45	20-Aug-10	TBS		7.06								
TW-45	17-Nov-10	TBS		7.09								
TW-45	23-Feb-11	TBS		7.01								
TW-45	18-May-11	TBS		7.20								
TW-45	24-Aug-11	TBS		7.40								

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Well ID	Date	T.O.C. (ft. amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-45	15-Nov-11	TBS		7.23			NM	NM	NM	NM	NM	NM
TW-46	13-May-10	TBS		6.86			7.15	4.889	4.72	12.28	206.5	3.75
TW-46	20-Aug-10	TBS		7.31			7.13	5.262	1.14	19.45	241.2	0.50
TW-46	15-Nov-10	TBS		7.41			NM	NM	NM	NM	NM	NM
TW-46	23-Feb-11	TBS		7.34			NM	NM	NM	NM	NM	NM
TW-46	18-May-11	TBS		6.89			7.12	2.778	0.72	12.26	-17.7	0.50
TW-46	24-Aug-11	TBS		7.71			NM	NM	NM	NM	NM	NM
TW-46	22-Nov-11	TBS		7.67			7.39	5.122	1.53	13.16	-33.2	NM
TW-47	13-May-10	TBS		6.04			7.23	11.86	3.36	12.89	214.8	3.75
TW-47	20-Aug-10	TBS		6.67			7.20	11.46	1.16	20.71	241.0	0.50
TW-47	17-Nov-10	TBS		6.93			7.08	10.79	2.09	14.87	-15.4	0.50
TW-47	23-Feb-11	TBS		6.94			NM	NM	NM	NM	NM	NM
TW-47	17-May-11	TBS		6.79			NM	NM	NM	NM	NM	NM
TW-47	24-Aug-11	TBS		7.31			NM	NM	NM	NM	NM	NM
TW-47	22-Nov-11	TBS		6.79			7.22	12.17	1.55	12.67	-23.4	1.00
TW-48	12-May-10	TBS		6.90								
TW-48	19-Aug-10	TBS		7.18			6.95	5.924	3.43	13.25	231.8	3.75
TW-48	15-Nov-10	TBS		7.39			6.85	5.861	1.75	21.73	405.2	2.50
TW-48	17-Feb-11	TBS		7.31			NM	NM	NM	NM	NM	NM
TW-48	17-May-11	TBS		7.30			NM	NM	NM	NM	NM	NM
TW-48	24-Aug-11	TBS		7.50			NM	NM	NM	NM	NM	NM
TW-48	16-Nov-11	TBS		7.39			NM	NM	NM	NM	NM	NM
TW-49	17-May-10	TBS		5.32			7.73	6.88	3.06	15.48	228.50	0.00

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<i>Well ID</i>	<i>Date</i>	<i>T.O.C. (ft amsl)</i>	<i>Depth to Product (ft)</i>	<i>Depth to Water (ft)</i>	<i>NAPL Thickness (ft)</i>	<i>Corrected GW Elev. (ft)</i>	<i>pH</i>	<i>Conductivity (mS)</i>	<i>Dissolved Oxygen (mg/L)</i>	<i>Temp. (°C)</i>	<i>ORP (mV)</i>	<i>Purge Volume (gallons)</i>
<b>TW-49</b>	20-Aug-10	TBS		5.84		NM	NM	NM	NM	NM	NM	NM
<b>TW-49</b>	15-Nov-10	TBS		6.36		NM	NM	NM	NM	NM	NM	NM
<b>TW-49</b>	23-Feb-11	TBS		6.27		NM	NM	NM	NM	NM	NM	NM
<b>TW-49</b>	17-May-11	TBS		6.24		NM	NM	NM	NM	NM	NM	NM
<b>TW-49</b>	24-Aug-11	TBS		6.61		NM	NM	NM	NM	NM	NM	NM
<b>TW-49</b>	22-Nov-11	TBS		6.14					NM - Roots in well			
<b>TW-50</b>	12-May-10	TBS		7.30								
<b>TW-50</b>	19-Aug-10	TBS		7.67		6.92	5.815	1.25		13.27	231.5	3.75
<b>TW-50</b>	15-Nov-10	TBS		8.06		6.96	5.946	0.45		22.26	334.4	2.50
<b>TW-50</b>	17-Feb-11	TBS		7.99		NM	NM	NM	NM	NM	NM	NM
<b>TW-50</b>	19-May-11	TBS		7.89		NM	NM	NM	NM	NM	NM	NM
<b>TW-50</b>	24-Aug-11	TBS		8.08		NM	NM	NM	NM	NM	NM	NM
<b>TW-50</b>	17-Nov-11	TBS		8.08		7.19	4.889	0.35		16.56	-21.9	1.00
<b>MW-5</b>	30-Jan-02	5428.97		5.33							P	
<b>MW-5</b>	25-Jul-02	5428.97		5.73		7.8	4.78	1.18		69		P
<b>MW-5</b>	21-Nov-02	5428.97		5.43								
<b>MW-5</b>	05-Jun-03	5428.97		5.02		8.0	3.07	1.44		59.4		B
<b>MW-5</b>	19-Jan-04	5428.97		5.25		7.7	1.14	2.61		47.6		P
<b>MW-5</b>	25-May-04	5428.97		5.04		7.5	3.21	0.45		60.4		3.00
<b>MW-5</b>	27-Jul-04	5428.97		5.43		8.1	4.07			75.5		B
<b>MW-5</b>	28-Dec-04	5428.97		5.26		8.0					MP	
<b>MW-5</b>	31-Mar-05	5428.97		4.62		7.3	2.77	0.39		52.7		MP
<b>MW-5</b>	19-Sep-05	5428.97	DRY	DRY	DRY	NM	NM	NM		NM		
<b>MW-5</b>	5-Jan-06	5428.97	DRY	DRY	DRY	NM	NM	NM		NM		3
<b>MW-5</b>	27-Jun-06	5428.97		5.43		7.2	4.197	0.37		16		

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<b>MW-5</b>	28-Dec-06	5428.97		4.88				7.3	7.927	0.54	10.4	3
<b>MW-5</b>	3-Jul-07	5428.97		5.07				7.86	4.478	2.93	16.4	
<b>MW-5</b>	18-Dec-07	5428.97										1.7
Not Sampled - Filled with Roots												
<b>MW-5</b>	19-Dec-08	5428.97		5.04				5423.93	6.76	7.748	4.02	11.73
<b>MW-5</b>	19-Dec-08	5428.97		5.04				5423.93	6.76	7.748	4.02	11.73
<b>MW-5</b>	18-Feb-10	5428.97		4.73				5424.24	7.39	8.422	3.30	9.93
<b>MW-5</b>	12-May-10	5428.97		4.32				5424.65	7.35	6.146	2.68	11.52
<b>MW-5</b>	18-Aug-10	5428.97		4.99				5423.98	NM	NM	NM	NM
<b>MW-5</b>	17-Nov-10	5428.97		5.17				5423.80	7.62	6.121	1.36	14.15
<b>MW-5</b>	17-Feb-11	5428.97		5.08				5423.89	NM	NM	NM	NM
<b>MW-5</b>	17-May-11	5428.97		5.03				5423.94	NM	NM	NM	NM
<b>MW-5</b>	24-Aug-11	5428.97		5.69				5423.28	NM	NM	NM	NM
<b>MW-5</b>	16-Nov-11	5428.97		5.64				5423.33	NM	NM	NM	NM
<b>MW-7</b>	1-Feb-02	5435.28		5.32				37288.00				No Sample
<b>MW-7</b>	29-Jul-02	5435.28		6.11				37466.00				No Sample
<b>MW-7</b>	6-Jun-03	5435.28		9.06				37778.00				No Sample
<b>MW-7</b>	19-Jan-04	5435.28		9.06				38005.00	7.0	2.827	0.93	49.7
<b>MW-7</b>	25-May-04	5435.28		9.14				38132.00	6.8	3.76	0.27	63.2
<b>MW-7</b>	27-Jul-04	5435.28		9.08				38195.00	7.3	5.32		72.8
<b>MW-7</b>	28-Dec-04	5435.28		9.05				38349.00	7.8			MP
<b>MW-7</b>	31-Mar-05	5435.28		7.67				38442.00	6.5	3.011	0.5	52
<b>MW-7</b>	19-Sep-05	5435.28		9.20				38614.00	7.0	4.802	0.41	70.8
<b>MW-7</b>	4-Jan-06	5435.28		8.14				38721.00	7.0	3.625	0.48	14.5
<b>MW-7</b>	02-Jan-07	5435.28		8.75				39084.00	NM	NM	NM	No Sample
<b>MW-7</b>	19-Dec-07	5435.28		8.43				39435.00	NM	NM	NM	No Sample
<b>MW-7</b>	17-May-10	5435.28		8.50				5426.78	6.95	6.66	3.08	13.83
												217.6
												3.75

**TABLE 1**  
**SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

Well ID	Date	T.O.C. (ft. amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected Elev. (ft)	GW	Conductivity (mS)	Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
MW-7	19-Aug-10	5435.28		8.20		5427.08	7.07	5.994	1.33	20.45	325.3	2.50
MW-7	15-Nov-10	5435.28		8.83		5426.45	NM	NM	NM	NM	No Sample	
MW-7	17-Feb-11	5435.28		8.76		5426.52	NM	NM	NM	NM	NM	
MW-7	17-May-11	5435.28		8.58		5426.70	NM	NM	NM	NM	NM	
MW-7	24-Aug-11	5435.28		9.03		5426.25	NM	NM	NM	NM	NM	
MW-7	16-Nov-11	5435.28		8.86		5426.42	NM	NM	NM	NM	NM	
MW-20	31-Jan-02	5430.45		6.04							P	
MW-20	26-Jul-02	5430.45		6.31			7.2	2.95	1.22	79.6	P	
MW-20	20-Nov-02	5430.45		5.85			7.1	1.9	0.30	55.0	P	
MW-20	5-Jun-03	5430.45		5.89			7.1	3.43	1.58	58.1		
MW-20	20-Jan-04	5430.45		6.08			7.5	0.35	3.23	51.8	P	
MW-20	25-May-04	5430.45		5.90			7.1	4.01	1.2	72.3		1.5
MW-20	27-Jul-04	5430.45		6.29			7.0	5.12		66.1	B	
MW-20	29-Dec-04	5430.45		6.07							MP	
MW-20	1-Apr-05	5430.45		5.69			6.5	2.378	0.55	54.4		
MW-20	19-Sep-05	5430.45		6.02			7.0	3.466	0.37	66.1		
MW-20	4-Jan-06	5430.45		5.85			7.0	3.47	0.6	12.3		3
MW-20	28-Jun-06	5430.45		6.18			6.7	4.979	0.34	17.8		3
MW-20	28-Dec-06	5430.45		5.50			7.0	8.505	0.51	8.9		3
MW-20	2-Jul-07	5430.45		5.75			7.0	4.841	1.32	16.09		2.6
MW-20	18-Dec-07	5430.45		5.89			7.05	5.621	2.89	12.10		1.25
MW-20	21-Jan-09	5430.45		5.86			6.73	5.996	3.58	8.34		0.5
MW-20	18-Feb-10	5430.45		5.81			6.67	7.249	3.67	8.20	395.0	2.50
MW-20	13-May-10	5430.45		5.52			6.96	4.948	2.09	10.89	216.9	3.75
MW-20	20-Aug-10	5430.45		6.01			5424.44	7.12	4.836	1.09	236.4	2.50
MW-20	17-Nov-10	5430.45		6.05			5424.40	6.94	5.167	0.40	13.63	-7.7
												0.50

TABLE 1  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date</i>	<i>T.O.C. (ft amsl)</i>	<i>Depth to Product (ft)</i>	<i>Depth to Water (ft)</i>	<i>NAPL Thickness (ft)</i>	<i>Corrected GW Elev. (ft)</i>	<i>Conductivity (mS)</i>	<i>Dissolved Oxygen (mg/L)</i>	<i>Temp. (°C)</i>	<i>ORP (mV)</i>	<i>Purge Volume (gallons)</i>
MW-20	23-Feb-11	5430.45		5.92		5424.53	NM	NM	NM	NM	NM
MW-20	18-May-11	5430.45		5.88		5424.57	6.99	3.637	0.69	11.33	-10.6
MW-20	24-Aug-11	5430.45		6.35		5424.10	NM	NM	NM	NM	NM
MW-20	22-Nov-11	5430.45		6.22		5424.23	7.20	4.983	1.02	12.81	-22.1
MW-21	30-Jan-02	5428.62		3.41							P
MW-21	26-Jul-02	5428.62		4.15							P
MW-21	22-Nov-02	5428.62		3.51							P
MW-21	5-Jun-03	5428.62		3.21							P
MW-21	20-Jan-04	5428.62		3.57							P
MW-21	25-May-04	5428.62		3.49							2.5
MW-21	28-Jul-04	5428.62		4.12							B
MW-21	29-Dec-04	5428.62		3.36							MP
MW-21	1-Apr-05	5428.62		2.77							MP
MW-21	19-Sep-05	5428.62		3.84							MP
MW-21	4-Jan-06	5428.62		3.27							MP
MW-21	28-Jun-06	5428.62		3.81							MP
MW-21	02-Jan-07	5428.62		3.23							MP
MW-21	02-Jul-07	5428.62		3.54							MP
MW-21	18-Dec-07	5428.62		3.54							MP
MW-21	19-Dec-08	5428.62		3.43							MP
MW-21	18-Feb-10	5428.62		2.86							MP
MW-21	13-May-10	5428.62		2.69							MP
MW-21	20-Aug-10	5428.62		3.31							MP
MW-21	17-Nov-10	5428.62		3.68							MP
MW-21	23-Feb-11	5428.62		3.65							MP
MW-21	18-May-11	5428.62		3.52							MP

TABLE 1  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date</i>	<i>T.O.C. (ft amsl)</i>	<i>Depth to Product (ft)</i>	<i>Depth to Water (ft)</i>	<i>NAPL Thickness (ft)</i>	<i>Corrected GW Elev. (ft)</i>	<i>Conductivity (mS)</i>	<i>Dissolved Oxygen (mg/l)</i>	<i>Temp. (°C)</i>	<i>ORP (mV)</i>	<i>Purge Volume (gallons)</i>
MW-21	24-Aug-11	5428.62		4.04		5424.58	NM	NM	NM	NM	NM
MW-21	22-Nov-11	5428.62		3.64		5424.98	7.16	6.972	1.09	13.16	-20.1

NOTES: NM - Not Measured

\* Denotes erroneous DO measurement - sensor malfunction

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**(VOCs, TOTAL PETROLEUM HYDROCARBONS, and TDS)**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

Well ID	Date Sampled	Sample Method	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
<b>EPA Method 8260</b>												
<b>NM WQCC STANDARD</b>		<b>10</b>	<b>750</b>	<b>750</b>	<b>620</b>	<b>100</b>	<b>30</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>
<b>TW-1</b>	15-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA	
<b>TW-1</b>	19-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	2,530	
<b>TW-2</b>	15-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA	
<b>TW-2</b>	19-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	4,020	
<b>TW-3</b>	15-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA	
<b>TW-3</b>	19-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	4,170	
<b>TW-4</b>	16-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA	
<b>TW-4</b>	19-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	6,530	
<b>TW-5</b>	15-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA	
<b>TW-5</b>	19-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	3,180	
<b>TW-6</b>	15-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA	
<b>TW-6</b>	19-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	4,020	
<b>TW-7</b>	15-Dec-08	<b>67</b>	<b>1,700</b>	<b>710</b>	<b>4,200</b>	<b>&lt;10</b>	<b>308</b>	<b>15</b>	<b>2.1</b>	<b>&lt;5.0</b>	NA	
<b>TW-7</b>	19-Aug-09	3.8	11	98	15	<1.0	19	0.79	<1.0	<5.0	3,930	
<b>TW-7</b>	18-May-11	<5.0	23	310	37	<5.0	<b>49</b>	NA	NA	NA	4,330	
<b>TW-7</b>	17-Nov-11	1.5	19	100	45	<1.0	25	1.40	<1.0	<5.0	4,230	

TABLE 2  
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
(VOCs, TOTAL PETROLEUM HYDROCARBONS, and TDS)  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	
<i>Sample Method</i>												
<i>NIM WQCC STANDARD</i>												
TW-8	16-Dec-08	120	15	330	950	<5.0	92	8.9	1.4	<5.0	NA	
TW-8	19-Aug-09	26	<1.0	82	130	<1.0	<2.0	1.7	<1.0	<5.0	4,490	
TW-8	18-May-11	32	<5.0	150	130	<5.0	<10	NA	NA	NA	4,140	
TW-9	16-Dec-08	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA		
TW-9	20-Aug-09	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	2,070		
TW-10	16-Dec-08	1.4	<1.0	3.9	9.9	<1.0	<10	0.29	<1.0	<5.0	NA	
TW-10	20-Aug-09	<1.0	<1.0	1.1	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	3,250	
TW-11	16-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA	
TW-11	20-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	6,290	
TW-11	17-Feb-10	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.050	<1.0	<5.0	6,260	
TW-11	11-May-10	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.050	<1.0	<5.0	6,400	
TW-11	17-Nov-11	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.050	<1.0	<5.0	NA	
TW-12	15-Dec-08	6.9	33	670	1,700	<5.0	317	3.4	1.9	<5.0	NA	
TW-12	20-Aug-09	<1.0	<1.0	19	25	<1.0	<2.0	0.25	<1.0	<5.0	3,490	
TW-12	17-Feb-10	1.3	<1.0	35	48	<1.0	2.4	0.43	<1.0	<5.0	3,470	
TW-12	11-May-10	1.7	2.0	49	72	<1.0	<2.0	0.18	1.2	<5.0	3,340	
TW-12	19-Aug-10	1.4	<1.0	53	65	<1.0	<2.0	0.40	<1.0	<5.0	3,300	
TW-13	17-Dec-08										Not Sampled-NAPL present	

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
(VOCs, TOTAL PETROLEUM HYDROCARBONS, and TDS)  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	EPA Method 8260						EPA Method 8015M					
		Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids	mg/L	mg/L
NM WQCC STANDARD		1.0	750	750	620	100	30	NE	NE	NE	1,000		
TW-13	21-Aug-09							Not Sampled-NAPL present					
TW-13	17-Feb-10							Not Sampled-NAPL present					
TW-13	7-May-10							Not Sampled-NAPL present					
TW-13	18-Aug-10							Not Sampled-NAPL present					
TW-13	15-Nov-10							Not Sampled-NAPL present					
TW-13	18-May-11							Not Sampled-NAPL present (sheen)					
TW-13	15-Nov-11							Not Sampled-NAPL present					
TW-14	17-Dec-08												
TW-14	21-Aug-09							Not Sampled-NAPL present					
TW-14	17-Feb-10							Not Sampled-NAPL present					
TW-14	11-May-10							Not Sampled-NAPL present (sheen)					
TW-14	18-Aug-10							Not Sampled-NAPL present					
TW-14	18-May-11							Not Sampled-NAPL present (sheen)					
TW-14	15-Nov-11							Not Sampled-NAPL present					
TW-15	16-Dec-08	22	9.2	190	10	<1.0	10	1.1	1.2	<5.0	NA		
TW-15	20-Aug-09	6.2	1.7	94	<1.5	<1.0	<2.0	0.69	<1.0	<5.0	5,240		
TW-16	16-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA		
TW-16	20-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	4,240		
TW-17	16-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA		

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	
<i>Sample Method</i>												
<i>EPA Method 8260</i>												
NM WQCC STANDARD	10	750	750	620	100	30	NE	NE	NE	NE	1,000	
TW-17	21-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	4,640	
TW-18	16-Dec-08	8.9	<1.0	31	18	1.9	<10	0.70	<1.0	<5.0	NA	
TW-18	21-Aug-09	2.5	<1.0	12	<1.5	3.2	<2.0	0.11	<1.0	<5.0	4,440	
TW-18	17-Feb-10	8.0	<1.0	38	12	1.2	<2.0	0.37	<1.0	<5.0	4,440	
TW-18	11-May-10	3.1	<1.0	21	<2.0	2.5	<2.0	0.21	<1.0	<5.0	4,860	
TW-18	16-Nov-10	1.8	5.5	15	<1.5	1.6	<2.0	0.12	<1.0	<5.0	4,790	
TW-18	17-Nov-11	1.9	<1.0	13	<2.0	<1.0	<2.0	0.12	<1.0	<5.0	5,360	
TW-19	17-Dec-08											
TW-19	21-Aug-09											
TW-19	17-Feb-10											
TW-19	7-May-10											
TW-19	18-Aug-10											
TW-19	15-Nov-10											
TW-19	18-May-11											
TW-19	15-Nov-11											
TW-20	17-Dec-08											
TW-20	21-Aug-09											
TW-20	17-Feb-10											
TW-20	7-May-10											
TW-20	18-Aug-10											

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
(VOCs, TOTAL PETROLEUM HYDROCARBONS, and TDS)  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			
NM WQCC STANDARD	10	750	750	620	100	30	NE	NE	NE	NE	1,000
TW-20	18-Aug-10						Not Sampled-NAPL present				
TW-20	18-May-11						Not Sampled-NAPL present				
TW-20	15-Nov-11						Not Sampled-NAPL present				
TW-21	17-Dec-08						Not Sampled-NAPL present				
TW-21	21-Aug-09						Not Sampled-NAPL present				
TW-21	17-Feb-10						Not Sampled-Surface Casing Damaged				
TW-21	7-May-10						Not Sampled-Surface Casing Damaged				
TW-21	18-Aug-10						Not Sampled-Surface Casing Damaged				
TW-21	15-Nov-10						Not Sampled-Surface Casing Damaged				
TW-21	18-May-11						Not Sampled-Surface Casing Damaged				
TW-22	17-Dec-08						Not Sampled-NAPL present				
TW-22	21-Aug-09						Not Sampled-NAPL present				
TW-22	17-Feb-10						Not Sampled-NAPL present				
TW-22	7-May-10						Not Sampled-NAPL present				
TW-22	18-Aug-10						Not Sampled-NAPL present				
TW-22	15-Nov-10						Not Sampled-NAPL present				
TW-22	18-May-11						Not Sampled-NAPL present				
TW-22	15-Nov-11						Not Sampled-NAPL present				
TW-23	18-Dec-08	<1.0	<1.0	93	<1.5	<1.0	<10	0.77	1.4	<5.0	NA
TW-23	21-Aug-09	<1.0	<1.0	24	<1.5	<1.0	<2.0	0.34	<1.0	<5.0	5,440

TABLE 2  
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
(VOCs, TOTAL PETROLEUM HYDROCARBONS, and TDS)  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
<i>Sample Method</i>											
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
TW-24	17-Dec-08	7.5	<1.0	10	<1.5	5.6	2.6	0.26	<1.0	<5.0	NA
TW-24	21-Aug-09										
TW-24	17-Feb-10	1.7	<1.0	7.0	<2.0	4.3	<2.0	0.62	2.4	<5.0	4,170
TW-24	11-May-10	9.1	<1.0	25	<2.0	3.8	3.0	0.92	8.7	<5.0	4,280
TW-24	18-Aug-10										
TW-24	15-Nov-10										
TW-24	18-May-11										
TW-24	15-Nov-11										
TW-25	17-Dec-08										
TW-25	21-Aug-09										
TW-25	17-Feb-10										
TW-25	7-May-10										
TW-25	18-Aug-10										
TW-25	15-Nov-10										
TW-25	18-May-11										
TW-25	15-Nov-11										
TW-26	17-Dec-08										
TW-26	21-Aug-09										
TW-26	17-Feb-10										
TW-26	7-May-10										

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
 (VOCs, TOTAL PETROLEUM HYDROCARBONS, and TDS)  
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			
NM WQCC STANDARD	10	750	750	620	100	30	NE	NE	NE	NE	1,000
TW-26	18-Aug-10						Not Sampled-NAPL present				
TW-26	15-Nov-10						Not Sampled-NAPL present				
TW-26	18-May-11						Not Sampled-NAPL present				
TW-26	15-Nov-11						Not Sampled-NAPL present				
TW-28	17-Dec-08						Not Sampled-NAPL present				
TW-28	21-Aug-09						Not Sampled-NAPL present				
TW-28	17-Feb-10						Not Sampled-NAPL present				
TW-28	7-May-10						Not Sampled-NAPL present				
TW-28	18-Aug-10						Not Sampled-NAPL present				
TW-28	15-Nov-10						Not Sampled-NAPL present				
TW-28	18-May-11						Not Sampled-NAPL present				
TW-28	15-Nov-11						Not Sampled-NAPL present				
TW-29	17-Dec-08						Not Sampled-NAPL present				
TW-29	21-Aug-09						Not Sampled-NAPL present				
TW-29	17-Feb-10	34	<1.0	16	260	7.9	40	2.7	13	<5.0	3,250
TW-29	7-May-10						Not Sampled-NAPL present				
TW-29	18-Aug-10						Not Sampled-NAPL present				
TW-29	15-Nov-10						Not Sampled-NAPL present				
TW-29	18-May-11						Not Sampled-NAPL present				
TW-29	15-Nov-11						Not Sampled-NAPL present				

TABLE 2  
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
(VOCs, TOTAL PETROLEUM HYDROCARBONS, and TDS)  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-c22	MRO	Total Dissolved Solids	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	
Sample Method												
NM WQCC STANDARD												
TW-30	18-Dec-08	<1.0	<1.0	<1.0	<1.5	24	<10	0.087	2.8	<5.0	NA	
TW-30	21-Aug-09	<1.0	<1.0	<1.0	<1.5	20	<2.0	0.055	<1.0	<5.0	4,550	
TW-30	17-Feb-10	<1.0	<1.0	<1.0	<2.0	21	<2.0	0.056	<1.0	<5.0	4,290	
TW-30	11-May-10	<1.0	<1.0	<1.0	<2.0	21	<2.0	0.071	<1.0	<5.0	4,310	
TW-30	15-Nov-10	3.8	<1.0	<1.0	<1.5	14	<2.0	0.15	<1.0	<5.0	5,630	
TW-30	17-Nov-11	4.9	<1.0	<1.0	<2.0	7.9	<2.0	0.16	<1.0	<5.0	6,310	
TW-31	16-Dec-08	<1.0	<1.0	<1.0	<1.5	12	<10	<0.050	<1.0	<5.0	NA	
TW-31	21-Aug-09	<1.0	<1.0	<1.0	<1.5	16	<2.0	<0.050	<1.0	<5.0	4,790	
TW-31	17-Feb-10	<1.0	<1.0	<1.0	<2.0	10	<2.0	<0.050	<1.0	<5.0	4,690	
TW-31	11-May-10	<1.0	<1.0	<1.0	<2.0	9.2	<2.0	<0.050	<1.0	<5.0	5,280	
TW-31	16-Nov-10	<1.0	<1.0	<1.0	<1.5	6.5	<2.0	<0.050	<1.0	<5.0	4,680	
TW-31	17-Nov-11	<1.0	<1.0	<1.0	<2.0	1.7	<2.0	<0.050	<1.0	<5.0		
TW-32	17-Dec-08											
TW-32	21-Aug-09											
TW-32	17-Feb-10											
TW-32	7-May-10											
TW-32	18-Aug-10											
TW-32	15-Nov-10											
TW-32	18-May-11											
TW-32	15-Nov-11											

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
 (VOCS, TOTAL PETROLEUM HYDROCARBONS, and TDS)  
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			
NM WQC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
TW-33	17-Dec-08							Not Sampled-NAPL present			
TW-33	21-Aug-09							Not Sampled-NAPL present			
TW-33	17-Feb-10							Not Sampled-NAPL present			
TW-33	7-May-10							Not Sampled-NAPL present			
TW-33	18-Aug-10							Not Sampled-NAPL present			
TW-33	15-Nov-10							Not Sampled-NAPL present			
TW-33	18-May-11							Not Sampled-NAPL present			
TW-33	15-Nov-11							Not Sampled-NAPL present			
TW-34	18-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA
TW-34	24-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	5,460
TW-34	18-Feb-10	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<0.050	<1.0	<5.0	5,520
TW-34	12-May-10	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<0.050	<1.0	<5.0	5,470
TW-34	22-Nov-11	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<0.050	<1.0	<5.0	5,420
TW-35	18-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA
TW-35	24-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	6,700
TW-35	18-Feb-10	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<0.050	<1.0	<5.0	6,870
TW-35	12-May-10	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<0.050	<1.0	<5.0	6,250
TW-35	17-Nov-10	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	6,770
TW-35	22-Nov-11	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<0.050	<1.0	<5.0	7,180
TW-36	18-Dec-08	<1.0	<1.0	16	22	<1.0	91.9	0.30	4.3	<5.0	

TABLE 2

**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
(VOCs, TOTAL PETROLEUM HYDROCARBONS, and TDS)**  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			
NM WQCC STANDARD	10	750	750	620	100	30	NE	NE	NE	NE	1,000
TW-36	21-Aug-09						Not Sampled-NAPL present				
TW-36	17-Feb-10						Not Sampled-NAPL present				
TW-36	12-May-10	<1.0	<1.0	6.5	11	<1.0	<2.0	0.18	6.1	<5.0	5,750
TW-36	18-Aug-10						Not Sampled-NAPL present				
TW-36	15-Nov-10						Not Sampled-NAPL present				
TW-36	18-May-11						Not Sampled-NAPL present				
TW-36	15-Nov-11						Not Sampled-NAPL present				
TW-37	17-Dec-08	820	<50	560	1,800	180	<500	8.4	19	<5.0	NA
TW-37	21-Aug-09	250	<5.0	51	32	180	<10	1.7	1.2	<5.0	3,740
TW-37	18-Feb-10	290	<5.0	53	61	130	<10	2.0	1.4	<5.0	3,400
TW-37	11-May-10	490	<5.0	150	140	150	<10	3.8	4.3	<5.0	3,250
TW-37	19-Aug-10	310	<5.0	65	53	140	<10	3.2	22	9.6	3,360
TW-37	16-Nov-10	280	<1.0	58	46	120	<2.0	1.9	2.3	<5.0	3,380
TW-37	18-May-11	420	<5.0	21	<10	230	<10	NA	NA	NA	3,680
TW-37	22-Nov-11	210	<1.0	<1.0	5	110	<2.0	1.7	2	<5.0	NA
TW-38	17-Dec-08	140	<5.0	36	220	190	<50	0.99	<1.0	<5.0	NA
TW-38	21-Aug-09						Not Sampled-NAPL present				
TW-38	18-Feb-10	26	<1.0	6.3	18	88	<2.0	0.50	<1.0	<5.0	4,070
TW-38	12-May-10	63	<1.0	15	50	110	3.5	0.67	<1.0	<5.0	4,210
TW-38	19-Aug-10	140	<1.0	30	58	95	2.2	1.20	<1.0	<5.0	3,910
TW-38	16-Nov-10	140	<1.0	41	71	83	<2.0	1.1	<1.0	<5.0	3,930

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
(VOCS, TOTAL PETROLEUM HYDROCARBONS, and TDS)  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
<b>Sample Method</b>											
NM WQCC STANDARD		1.0	750	750	620	100	30	NE	NE	NE	1,000
TW-38	18-May-11	37	<5.0	6.1	22	140	<10	NA	NA	NA	4,010
TW-38	15-Nov-11										
TW-39	17-Dec-08										
TW-39	21-Aug-09	1.7	<1.0	2.8	<1.5	16	<2.0	0.47	<1.0	<5.0	4,460
TW-39	17-Feb-10	2.6	<1.0	2.5	3.5	9.8	<2.0	0.45	<1.0	<5.0	3,580
TW-39	12-May-10	17	<1.0	32	14	19	<2.0	0.45	<1.0	<5.0	4,740
TW-39	19-Aug-10	87	<1.0	77	100	1.5	2.9	1.2	<1.0	<5.0	3,290
TW-39	16-Nov-10	92	<1.0	110	1.8	5.9	<2.0	1.4	<1.0	<5.0	3,070
TW-39	19-May-11	41	<5.0	65	<10	<5.0	<10	NA	NA	NA	3,980
TW-39	17-Nov-11	9	<5.0	82	<10	<5.0	<10	1.4	<1.0	<5.0	NA
TW-40	17-Dec-08										
TW-40	21-Aug-09										
TW-40	17-Feb-10										
TW-40	7-May-10										
TW-40	18-Aug-10										
TW-40	15-Nov-10										
TW-40	18-May-11										
TW-40	15-Nov-11										
TW-41	18-Dec-08	480	<50	570	4,000	<50	<500	8.4	2.0	<5.0	NA
TW-41	24-Aug-09	170	6.6	400	2,000	24	49	7.0	1.1	<5.0	3,510

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

Well ID	Date Sampled	Benzene	Toluene	Ethy-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-c22	MRO	Total Dissolved Solids	
		µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
<i>Sample Method</i>												
<i>NM WQCC STANDARD</i>												
TW-41	18-Feb-10	140	<10	400	2,500	24	49	7.7	1.5	<5.0	4,230	
TW-41	12-May-10	180	<10	530	2,300	20	41	6.9	<3.0	<15	4,590	
TW-41	20-Aug-10	190	<10	420	1,400	24	43	8.2	<1.0	<5.0	3,880	
TW-41	16-Nov-10	96	<10	480	2,200	17	55	6.6	1.4	<5.0	3,670	
TW-41	18-May-11	110	8.5	500	2,700	22	70	NA	NA	NA	3,940	
TW-41	22-Nov-11	110	<10	470	1,800	13	68	10	2.3	<5.0	3,300	
TW-42	16-Dec-08	<1.0	<1.0	31	<1.5	130	<10	0.18	1.2	<5.0	NA	
TW-42	24-Aug-09	<1.0	<1.0	<1.0	<1.5	70	<2.0	0.10	<1.0	<5.0	4,260	
TW-42	18-Feb-10	<1.0	<1.0	<1.0	<2.0	75	<2.0	0.15	<1.0	<5.0	4,070	
TW-42	12-May-10	<1.0	<1.0	<1.0	<2.0	39	<2.0	0.15	<1.0	<5.0	4,510	
TW-42	20-Aug-10	<1.0	<1.0	<1.0	<2.0	57	<2.0	0.16	<1.0	<5.0	4,920	
TW-42	16-Nov-10	<1.0	<1.0	<1.0	<1.5	53	<2.0	0.16	<1.0	<5.0	5,040	
TW-42	18-May-11	<5.0	<5.0	<10	600	<10	NA	NA	NA	NA	4,720	
TW-42	22-Nov-11	<1.0	<1.0	<2.0	53	<2.0	0.17	<1.0	<5.0	NA		
TW-43	16-Dec-08	<1.0	<1.0	31	<1.5	1,700	<10	0.80	<1.0	<5.0		
TW-43	24-Aug-09	<1.0	<1.0	<1.0	<1.5	500	<10	0.17	<1.0	<5.0	4,610	
TW-43	18-Feb-10	<1.0	<1.0	<1.0	<2.0	430	<2.0	0.37	<1.0	<5.0	4,390	
TW-43	12-May-10	<1.0	<1.0	<1.0	<2.0	380	<2.0	0.31	<1.0	<5.0	4,200	
TW-43	20-Aug-10	<1.0	<1.0	<1.0	<2.0	380	<2.0	0.38	<1.0	<5.0	4,510	
TW-43	16-Nov-10	<1.0	<1.0	<1.0	<1.5	370	<2.0	0.48	<1.0	<5.0	4,450	
TW-43	22-Nov-11	<1.0	1.1	<1.0	<2.0	460	<2.0	0.41	<1.0	<5.0	NA	

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
 (VOCs, TOTAL PETROLEUM HYDROCARBONS, and TDS)  
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	EPA Method 8260						EPA Method 8015M						Total Dissolved Solids mg/L
		Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	MTBE µg/L	Naphthalene µg/L	GRO C6-C10 mg/L	DRO C10-C22 mg/L	MRO mg/L	DRD mg/L	MRD mg/L	NRD mg/L	
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	NE	NE	1,000	
TW-44	17-Dec-08	58	<5.0	69	340	330	245	2.0	1.8	<5.0	NA	NA		
TW-44	24-Aug-09	56	<1.0	6.9	7.3	360	<2.0	0.20	1.2	<5.0	5,520	5,520		
TW-44	18-Feb-10													
TW-44	7-May-10													
TW-44	18-Aug-10													
TW-44	15-Nov-10													
TW-44	18-May-11													
TW-44	15-Nov-11													
TW-45	13-May-10	<1.0	<1.0	<2.0	160	<2.0	0.20	<1.0	<1.0	<5.0	4,480	4,480		
TW-45	20-Aug-10	<1.0	<1.0	<2.0	300	<2.0	0.33	<1.0	<1.0	<5.0	4,750	4,750		
TW-45	17-Nov-10	<1.0	<1.0	<1.5	170	<2.0	0.23	<1.0	<1.0	<5.0	4,530	4,530		
TW-45	18-May-11	<5.0	<5.0	<10	630	<10	NA	NA	NA	NA	4,700	4,700		
TW-46	13-May-10	<1.0	<1.0	<2.0	110	<2.0	0.14	<1.0	<1.0	<5.0	4,080	4,080		
TW-46	20-Aug-10	<1.0	<1.0	<2.0	88	<2.0	0.13	<1.0	<1.0	<5.0	4,430	4,430		
TW-46	18-May-11	<5.0	<5.0	<10	160	<10	NA	NA	NA	NA	3,640	3,640		
TW-46	22-Nov-11	<1.0	<1.0	<2.0	35	<2.0	0.054	<1.0	<1.0	<5.0	NA	NA		
TW-47	13-May-10	<1.0	<1.0	<2.0	94	<2.0	<0.050	<1.0	<1.0	<5.0	10,000	10,000		
TW-47	20-Aug-10	<1.0	<1.0	<2.0	18	<2.0	<0.050	<1.0	<1.0	<5.0	9,940	9,940		
TW-47	17-Nov-10	<1.0	<1.0	<1.5	8.2	<2.0	<0.050	<1.0	<1.0	<5.0	8,800	8,800		

TABLE 2

**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
(VOCs, TOTAL PETROLEUM HYDROCARBONS, and TDS)**  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	
<i>Sample Method</i>												
<i>NM WQCC STANDARD</i>												
TW-47	22-Nov-11	<1.0	<1.0	<1.0	<2.0	1.5	<2.0	<0.050	<1.0	<5.0	10,700	
TW-48	12-May-10	<1.0	<1.0	<1.0	<2.0	13	<2.0	0.061	<1.0	<5.0	4,560	
TW-48	19-Aug-10	<1.0	<1.0	<1.0	<2.0	16	<2.0	0.067	<1.0	<5.0	4,440	
TW-49	17-May-10	<1.0	<1.0	<1.0	<2.0	17	<2.0	<0.050	<1.0	<5.0	5,580	
TW-49	20-Aug-10	<1.0	<1.0	<1.0	<2.0	14	<2.0	<0.050	<1.0	<5.0	8,120	
TW-49	17-Nov-10	<1.0	<1.0	<1.0	<1.5	28	<2.0	0.12	<1.0	<5.0	7,470	
TW-50	12-May-10	72	<10	260	1,200	16	63	7.7	4.0	<5.0	4,320	
TW-50	19-Aug-10	6.9	<5.0	69	100	19	<10	2.4	<1.0	<5.0	4,500	
TW-50	18-May-11	13	<5.0	150	190	<5.0	<10	NA	NA	NA	4,150	
TW-50	17-Nov-11	<1.0	<1.0	14	10	18	<2.0	0.84	<1.0	<5.0	4,160	
MW-5	30-Jan-02	5.1	<0.5	<0.5	<1.50	43	NA	NA	NA	NA	NA	
MW-5	25-Jul-02	4.7	ND	ND	ND	51	NA	NA	NA	NA	NA	
MW-5	26-Nov-02	5.1	ND	ND	ND	47	NA	NA	NA	NA	NA	
MW-5	5-Jun-03	1.5	ND	ND	ND	25	NA	NA	NA	NA	NA	
MW-5	3-Nov-03	ND	ND	ND	ND	26	NA	NA	NA	NA	NA	
MW-5	19-Jan-04	3.8	0.9	<0.5	1.4	44	NA	NA	NA	NA	NA	
MW-5	25-May-04	1.8	0.5	<0.5	<1.0	36	NA	0.14	NA	NA	NA	
MW-5	27-Jul-04	<0.5	<0.5	<0.5	<1.0	29	NA	<0.10	NA	NA	NA	
MW-5	28-Dec-04	<0.5	<0.5	<0.5	<1.0	27	NA	<0.10	NA	NA	NA	

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**(VOCs, TOTAL PETROLEUM HYDROCARBONS, and TDS)**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

Well ID	Date Sampled	Sample Method 8260						EPA Method 8015M						2540C	
		Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	MTBE µg/L	Naphthalene µg/L	GRO C6-C10 mg/L	DRO C10-C22 mg/L	MRO mg/L	Total Dissolved Solids mg/L	NE	NE	NE	1,000
MW-5	WQCC STANDARD	10	750	750	620	100	30	NE	NE	NE	NA	<0.10	<2.5	NA	NA
MW-5	27-Jun-06	1.5	<0.5	<0.5	<2.0	37	NA	<0.10	<2.5	NA	NA	<0.10	<1.0	NA	NA
MW-5	28-Dec-06	<0.5	<0.5	<0.5	<2.0	37	NA	<0.10	<2.0	NA	NA	<0.10	<2.0	NA	NA
MW-5	5-Jul-07*	2.4	<0.5	0.8	<2.0	28*	NA	0.14	<2.0	NA	NA	<0.14	<2.0	NA	NA
MW-5	19-Dec-08	<1.0	<1.0	<1.0	<1.5	46	<10	0.066	<1.0	NA	NA	<0.066	<1.0	<5.0	NA
MW-5	18-Feb-10	<1.0	<1.0	<1.0	<2.0	49	<2.0	0.12	<1.0	NA	NA	<0.12	<1.0	<5.0	4,350
MW-5	12-May-10	<1.0	<1.0	<1.0	<2.0	63	<2.0	0.10	<1.0	NA	NA	<0.10	<1.0	<5.0	4,590
MW-5	17-Nov-10	<1.0	<1.0	<1.0	<1.5	54	<2.0	0.11	<1.0	NA	NA	<0.11	<1.0	<5.0	4,630
MW-7	4-Jan-06*	1.9	<0.5	1.7	2.1	120	NA	0.16	<1.0	NA	NA	<0.16	<1.0	<5.0	5,480
MW-7	17-May-10	17	<1.0	<1.0	<2.0	23	<2.0	0.14	<1.0	NA	NA	<0.14	<1.0	<5.0	5,480
MW-7	19-Aug-10	6.9	<1.0	<1.0	<2.0	74	<2.0	0.22	<1.0	NA	NA	<0.22	<1.0	<5.0	4,720
MW-20	30-Jan-02	1.6	3.7	6.3	1.2	670	NA	NA	NA	NA	NA	<0.16	<1.0	NA	NA
MW-20	26-Jul-02	ND	ND	ND	ND	950	NA	NA	NA	NA	NA	<0.16	<1.0	NA	NA
MW-20	26-Nov-02	1.6	ND	ND	2	350	NA	NA	NA	NA	NA	<0.16	<1.0	NA	NA
MW-20	5-Jun-03	7	ND	7.1	7.2	630	NA	NA	NA	NA	NA	<0.16	<1.0	NA	NA
MW-20	4-Nov-03	3.2	ND	ND	5.1	480	NA	NA	NA	NA	NA	<0.16	<1.0	NA	NA
MW-20	19-Jan-04	2.8	<0.5	1.4	3.3	680	NA	NA	NA	NA	NA	<0.16	<1.0	NA	NA
MW-20	25-May-04	1.9	<0.5	3.3	7.6	400	NA	0.82	NA	NA	NA	<0.16	<1.0	NA	NA
MW-20	27-Jul-04	2.1	<0.5	<0.5	2.3	590	NA	0.91	NA	NA	NA	<0.16	<1.0	NA	NA
MW-20	29-Dec-04	2.0	<0.5	<0.5	7.2	300	NA	0.89	NA	NA	NA	<0.16	<1.0	NA	NA
MW-20	19-Sep-05	<2.5	<2.5	5.4	160	NA	1.2	NA	NA	NA	NA	<0.16	<1.0	NA	NA
MW-20	4-Jan-06	<0.5	<0.5	<0.5	<2.0	400	NA	0.50	<1.0	NA	NA	<0.16	<1.0	NA	NA

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	
<i>Sample Method</i>												
<i>EPA Method 8260</i>												
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000	
MW-20	28-Jun-06	0.6	<0.5	<0.5	<2.0	310	NA	0.23	3.2	NA	NA	
MW-20	28-Dec-06	<5.0	20	<5.0	<20	170	NA	1.6	<1.0	NA	NA	
MW-20	3-Jul-07	<1.0	4.0	1.7	<4.0	180*	NA	0.34	<2.0	NA	NA	
MW-20	18-Dec-07*	<0.5	8.3	<0.5	3.6	360	NA	0.52	<2.0	NA	NA	
MW-20	21-Jan-09	<1.0	<1.0	<1.0	<1.5	170	<10	0.47	1.8	<5.0	NA	
MW-20	18-Feb-10	2.5	<1.0	<1.0	<2.0	190	<2.0	0.32	<1.0	<5.0	4,420	
MW-20	13-May-10	1.7	<1.0	<1.0	<2.0	180	<2.0	0.60	<1.0	<5.0	4,180	
MW-20	20-Aug-10	<1.0	<1.0	<1.0	<2.0	200	<2.0	0.50	<1.0	<5.0	4,190	
MW-20	17-Nov-10	1.6	<1.0	<1.0	<1.5	160	<2.0	1.0	<1.0	<5.0	3,950	
MW-20	18-May-11	<5.0	<5.0	<5.0	<1.5	<10	<10	NA	NA	NA	4,260	
MW-20	22-Nov-11	<1.0	<1.0	<1.0	<2.0	170	<2.0	0.97	<1.0	<5.0	NA	
MW-21	30-Jan-02	<0.5	<0.5	<0.5	<1.5	44	NA	NA	NA	NA	NA	
MW-21	26-Jul-02	ND	ND	ND	ND	34	NA	NA	NA	NA	NA	
MW-21	26-Nov-02	1.4	ND	ND	ND	34	NA	NA	NA	NA	NA	
MW-21	5-Jun-03	ND	ND	ND	ND	14	NA	NA	NA	NA	NA	
MW-21	4-Nov-03	ND	ND	ND	ND	25	NA	NA	NA	NA	NA	
MW-21	19-Jan-04	<0.5	<0.5	<0.5	<1.0	<2.5	NA	NA	NA	NA	NA	
MW-21	25-May-04	<0.5	<0.5	<0.5	<1.0	18	NA	0.11	NA	NA	NA	
MW-21	28-Jul-04	<0.5	<0.5	<0.5	<1.0	24	NA	<0.10	NA	NA	NA	
MW-21	29-Dec-04	<0.5	<0.5	<0.5	<1.0	25	NA	<0.10	NA	NA	NA	
MW-21	19-Sep-05	<0.5	<0.5	<0.5	<1.0	29	NA	<0.10	NA	NA	NA	
MW-21	4-Jan-06	<0.5	<0.5	<0.5	<2.0	24	NA	<0.10	<1.0	NA	NA	

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
 (VOCS, TOTAL PETROLEUM HYDROCARBONS, and TDS)  
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphthalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	
<b>Sample Method</b>												
<b>EPA Method 8260</b>												
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000	
MW-21	28-Jun-06	2.9	<0.5	<0.5	<2.0	17	NA	<0.10	<2.5	NA	NA	
MW-21	2-Jan-07	<0.5	<0.5	<0.5	<2.0	29	NA	<0.10	<1.0	NA	NA	
MW-21	3-Jul-07	<0.5	<0.5	<0.5	<2.0	39*	NA	<0.10	<2.0	NA	NA	
MW-21	18-Dec-07*	<0.5	<0.5	<0.5	<2.0	79	NA	<0.10	<2.0	NA	NA	
MW-21	19-Dec-08	<1.0	<1.0	<1.0	<1.5	100	<10	0.11	<1.0	<5.0	NA	
MW-21	18-Feb-10	<1.0	<1.0	<1.0	<2.0	85	<2.0	0.11	<1.0	<5.0	5,220	
MW-21	13-May-10	<1.0	<1.0	<1.0	<2.0	82	<2.0	0.10	<1.0	<5.0	5,840	
MW-21	20-Aug-10	<1.0	<1.0	<1.0	<2.0	120	<2.0	0.12	<1.0	<5.0	5,520	
MW-21	17-Nov-10	<1.0	<1.0	<1.0	<1.5	83	<2.0	0.12	<1.0	<5.0	6,270	
MW-21	18-May-11	<5.0	<5.0	<1.5	160	<10	NA	NA	NA	NA	5,500	
MW-21	22-Nov-11	<1.0	<1.0	<1.0	<2.0	74	<2.0	0.11	<1.0	<5.0	NA	

**Notes:**

\* Sample analyzed per EPA Method 8021 instead of EPA Method 8260  
 < Analyte not detected above listed method limit  
 NA Not analyzed  
 NE Not established

µg/L Micrograms per liter (ppb)  
 mg/L Milligrams per liter (ppm)  
 GRO Gasoline range organics  
 DRO Diesel range organics  
 MRO Motor oil range organics

TABLE 3  
SUMMARY OF GROUNDWATER RCRA 8 METALS ANALYTICAL RESULTS  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<b>Well ID</b>	<b>Sample Date</b>	<b>Arsenic</b> <b>mg/L</b>	<b>Barium</b> <b>mg/L</b>	<b>Cadmium</b> <b>mg/L</b>	<b>Chromium</b> <b>mg/L</b>	<b>Lead</b> <b>mg/L</b>	<b>Mercury</b> <b>mg/L</b>	<b>Selenium</b> <b>mg/L</b>	<b>Silver</b> <b>mg/L</b>
<b>Analytical Method</b>	<b>6010B</b>	<b>6010B</b>	<b>6010B</b>	<b>6010B</b>	<b>6010B</b>	<b>7470</b>	<b>6010B</b>	<b>6010B</b>	<b>6010B</b>
<b>NM WQCC Standard</b>	<b>0.10</b>	<b>1.0</b>	<b>0.01</b>	<b>0.05</b>	<b>0.05</b>	<b>0.002</b>	<b>0.05</b>	<b>0.005</b>	<b>0.005</b>
<b>TW-1</b>	19-Aug-09	<0.020	0.036	<0.0020	0.01	0.018	<0.00020	<0.050	<0.0050
<b>TW-2</b>	19-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.0053	<0.00020	<0.050	<0.0050
<b>TW-3</b>	19-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.0058	<0.00020	<0.050	<0.0050
<b>TW-4</b>	19-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.0053	<0.00020	<0.050	<0.0050
<b>TW-5</b>	19-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.0050	<0.00020	<0.050	<0.0050
<b>TW-6</b>	19-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.011	<0.00020	<0.050	<0.0050
<b>TW-7</b>	19-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.011	<0.00020	<0.050	<0.0050
<b>TW-7</b>	17-Nov-11	<0.020	0.21	<0.0020	0.0064	<0.0050	<0.00020	<0.050	<0.0050
<b>TW-8</b>	20-Aug-09	<0.020	0.021	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
<b>TW-9</b>	20-Aug-09	<0.020	0.033	<0.0020	<0.0060	0.0077	<0.00020	<0.050	<0.0050
<b>TW-10</b>	20-Aug-09	<0.020	0.038	<0.0020	<0.0060	0.021	<0.00020	<0.050	<0.0050
<b>TW-11</b>	20-Aug-09	<0.20	<0.20	<0.020	<0.060	<0.050	<0.00020	<0.50	<0.050
<b>TW-12</b>	20-Aug-09	<0.020	0.020	<0.0020	<0.0060	0.0072	<0.00020	<0.050	<0.0050
<b>TW-15</b>	20-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.0092	<0.00020	<0.050	<0.0050

**TABLE 3**  
**SUMMARY OF GROUNDWATER RCRA 8 METALS ANALYTICAL RESULTS**  
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Sample Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Analytical Method	6010B	6010B	6010B	6010B	6010B	7470	6010B		
NM WQCC Standard	0.10	1.0	0.01	0.05	0.05	0.002	0.05	0.005	
TW-16	20-Aug-09	<0.020	0.047	<0.0020	<0.0060	0.0095	<0.00020	<0.050	<0.0050
TW-17	21-Aug-09	0.063	<0.020	<0.0020	<0.0060	0.0083	<0.00020	<0.050	<0.0050
TW-18	21-Aug-09	<0.020	<0.020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050	
TW-18	16-Nov-10	<0.020	<0.020	<0.0060	0.0055	<0.00020	<0.050	<0.0050	
TW-18	17-Nov-11	<0.020	0.14	<0.0020	0.0088	<0.0058	<0.00020	<0.050	<0.0050
TW-23	21-Aug-09	<0.020	0.023	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-30	21-Aug-09	0.032	0.039	<0.0020	<0.0060	0.019	<0.00020	<0.050	<0.0050
TW-30	16-Nov-10	<0.020	<0.020	<0.0020	<0.0060	0.0071	<0.00020	<0.050	<0.0050
TW-30	17-Nov-11	0.040	0.41	<0.0020	0.011	<0.0050	<0.00020	<0.050	<0.0050
TW-31	21-Aug-09	0.066	0.064	<0.0020	<0.0060	0.015	<0.00020	<0.050	<0.0050
TW-31	16-Nov-10	0.034	0.025	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-34	24-Aug-09	<0.020	<0.020	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-34	22-Nov-11	<0.020	0.33	<0.0020	0.032	<0.0050	0.00025	<0.050	<0.0050
TW-35	24-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.0061	<0.00020	<0.050	<0.0050
TW-35	17-Nov-10	<0.020	<0.020	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-35	22-Nov-11	0.036	0.028	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-37	21-Aug-09	<0.020	0.041	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050

TABLE 3  
SUMMARY OF GROUNDWATER RCRA 8 METALS ANALYTICAL RESULTS  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Sample Date</i>	<i>Arsenic mg/L</i>	<i>Barium mg/L</i>	<i>Cadmium mg/L</i>	<i>Chromium mg/L</i>	<i>Lead mg/L</i>	<i>Mercury mg/L</i>	<i>Selenium mg/L</i>	<i>Silver mg/L</i>
<b>Analytical Method</b>	<b>6010B</b>	<b>6010B</b>	<b>6010B</b>	<b>6010B</b>	<b>6010B</b>	<b>7470</b>	<b>6010B</b>	<b>6010B</b>	<b>6010B</b>
<b>NM WQCC Standard</b>	<b>0.10</b>	<b>1.0</b>	<b>0.01</b>	<b>0.05</b>	<b>0.05</b>	<b>0.002</b>	<b>0.05</b>	<b>0.005</b>	<b>0.005</b>
<b>TW-37</b>	16-Nov-10	<0.020	0.061	<0.0020	<0.0060	<0.0050	<0.0020	<0.050	<0.0050
<b>TW-38</b>	16-Nov-10	<0.020	0.023	<0.0020	<0.0060	<0.0050	<0.0020	<0.050	<0.0050
<b>TW-39</b>	21-Aug-09	<0.020	0.08	<0.0020	0.0077	<0.0050	<0.0020	<0.050	<0.0050
<b>TW-39</b>	16-Nov-10	<0.020	0.029	<0.0020	<0.0060	<0.0050	<0.0020	<0.050	<0.0050
<b>TW-41</b>	24-Aug-09	<0.020	0.11	<0.0020	<0.0060	<0.0050	<0.0020	<0.050	<0.0050
<b>TW-41</b>	16-Nov-10	<0.020	0.069	<0.0020	<0.0060	<0.0050	<0.0020	<0.050	<0.0050
<b>TW-41</b>	22-Nov-11	0.029	0.75	<0.0020	<0.0060	<0.0050	<0.0020	<0.050	<0.0050
<b>TW-42</b>	24-Aug-09	<0.020	0.042	<0.0020	<0.0060	<0.0050	<0.0020	<0.050	<0.0050
<b>TW-42</b>	16-Nov-10	<0.020	<0.020	<0.0020	<0.0060	<0.0050	<0.0020	<0.050	<0.0050
<b>TW-43</b>	24-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.0061	<0.0020	<0.050	<0.0050
<b>TW-43</b>	16-Nov-10	<0.020	<0.020	<0.0020	<0.0060	0.0073	<0.0020	<0.050	<0.0050
<b>TW-44</b>	24-Aug-09	<0.020	0.043	<0.0020	<0.0060	<0.0050	<0.0020	<0.050	<0.0050
<b>TW-45</b>	17-Nov-10	0.070	<0.020	<0.0020	<0.0060	<0.0050	<0.0020	<0.050	<0.0050
<b>TW-47</b>	17-Nov-10	<0.10	<0.010	<0.030	<0.025	<0.0020	<0.25	<0.025	
<b>TW-47</b>	22-Nov-11	<0.020	0.13	<0.0020	<0.0060	<0.0050	<0.0020	<0.050	<0.0050
<b>TW-49</b>	17-Nov-10	<0.10	<0.010	<0.030	<0.025	<0.0020	<0.25	<0.025	

TABLE 3  
SUMMARY OF GROUNDWATER RCRA 8 METALS ANALYTICAL RESULTS  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Sample Date</i>	<i>Arsenic</i>	<i>Barium</i>	<i>Cadmium</i>	<i>Chromium</i>	<i>Lead</i>	<i>Mercury</i>	<i>Selenium</i>	<i>Silver</i>
		<i>mg/L</i>	<i>mg/L</i>	<i>mg/L</i>	<i>mg/L</i>	<i>mg/L</i>	<i>mg/L</i>	<i>mg/L</i>	<i>mg/L</i>
<i>Analytical Method</i>	<i>6010B</i>	<i>6010B</i>	<i>6010B</i>	<i>6010B</i>	<i>6010B</i>	<i>7470</i>	<i>6010B</i>	<i>6010B</i>	<i>6010B</i>
<i>NM WQCC Standard</i>	<i>0.10</i>	<i>1.0</i>	<i>0.01</i>	<i>0.05</i>	<i>0.05</i>	<i>0.002</i>	<i>0.05</i>	<i>0.005</i>	<i>0.005</i>
<b>TW-50</b>	17-Nov-11	<0020	0.10	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
<b>MW-5</b>	17-Nov-10	<0.020	<0.020	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
<b>MW-20</b>	17-Nov-10	<0.020	0.02	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
<b>MW-21</b>	17-Nov-10	0.040	<0.020	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050

*Notes:* < Analyte not detected above listed method limit  
*mg/L* Milligrams per liter (ppm)

TABLE 4

SUMMARY OF GROUNDWATER DISSOLVED CATIONS, ANIONS, SPECIFIC CONDUCTANCE, HARDNESS,  
AND TOTAL DISSOLVED SOLIDS ANALYTICAL RESULTS  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Sample Date	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Sodium mg/L	Bromide mg/L	Chloride mg/L	Fluoride mg/L	Sulfate mg/L	Specific Conductance $\mu\text{mhos}/\text{cm}$	Hardness as $(\text{CaCO}_3)$ mg/L	TDS mg/L
Analytical Method	6010B	6010B	6010B	NE	NE	300.0	300.0	1.6	300.0	120.1	6010B	SM 2540C
NM WQCC Standard	NE	NE	NE	NE	NE	250	250	600	600	NE	NE	1,000
TW-1	19-Aug-09	500	37	2.8	300	0.12	18	0.82	1,700	2,900	1,400	2,530
TW-2	19-Aug-09	470	46	3.7	660	0.27	24	1.0	2,600	4,100	1,400	4,020
TW-3	19-Aug-09	500	45	2.7	710	0.28	26	0.80	2,600	4,200	1,400	4,170
TW-4	19-Aug-09	470	54	4.2	1,600	0.79	120	0.78	4,100	6,500	1,400	6,530
TW-5	19-Aug-09	510	36	3.1	400	0.23	20	0.86	2,000	3,300	1,400	3,180
TW-6	19-Aug-09	480	47	3.4	720	0.28	28	1.1	2,700	4,200	1,400	4,020
TW-7	19-Aug-09	480	46	2.3	750	0.28	24	0.78	2,700	4,200	1,400	3,930
TW-7	18-May-11	NA	NA	NA	NA	NA	28	NA	2,800	NA	NA	4,330
TW-7	17-Nov-11	490	53	2.3	770	<0.50	40	0.51	2,800	4,300	1,400	4,230
TW-8	20-Aug-09	450	57	3.6	910	1.3	190	0.67	2,600	4,700	1,400	4,490
TW-8	18-May-11	NA	NA	NA	NA	NA	160	NA	2,400	NA	NA	4,140
TW-9	20-Aug-09	250	21	2.4	410	1.2	170	0.87	530	2,600	710	2,070
TW-10	20-Aug-09	420	36	3.6	640	1.1	160	0.72	940	3,700	1,200	3,250
TW-11	20-Aug-09	470	53	3.6	1,500	0.46	70	0.85	4,000	6,100	1,400	6,290
TW-12	20-Aug-09	470	56	2.5	500	0.28	27	0.85	2,100	3,500	1,400	3,490

TABLE 4  
SUMMARY OF GROUNDWATER DISSOLVED CATIONS, ANIONS, SPECIFIC CONDUCTANCE, HARDNESS,  
AND TOTAL DISSOLVED SOLIDS ANALYTICAL RESULTS  
Thriftyway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Sample Date	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Sodium mg/L	Bromide mg/L	Chloride mg/L	Fluoride mg/L	Sulfate mg/L	Specific Conductance $\mu\text{mhos/cm}$	Hardness as ( $\text{CaCO}_3$ ) mg/L	TDS mg/L
<b>Analytical Method</b>	<b>6010B</b>	<b>6010B</b>	<b>6010B</b>	<b>6010B</b>	<b>300.0</b>	<b>300.0</b>	<b>300.0</b>	<b>300.0</b>	<b>300.0</b>	<b>120.1</b>	<b>6010B</b>	<b>SM 2540C</b>
<b>NM WQCC Standard</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>250</b>	<b>1.6</b>	<b>600</b>	<b>600</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	
TW-15	20-Aug-09	460	47	2.6	1,200	0.99	140	0.74	3,100	5,300	1,300	5,240

TABLE 4

SUMMARY OF GROUNDWATER DISSOLVED CATIONS, ANIONS, SPECIFIC CONDUCTANCE, HARDNESS,  
AND TOTAL DISSOLVED SOLIDS ANALYTICAL RESULTS  
Thriftyway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Sample Date	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Sodium mg/L	Bromide mg/L	Chloride mg/L	Fluoride mg/L	Sulfate mg/L	Specific Conductance $\mu\text{mhos}/\text{cm}$	Hardness as ( $\text{CaCO}_3$ ) mg/L	TDS mg/L
<b>Analytical Method</b>	<b>6010B</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b><math>\mu\text{mhos}/\text{cm}</math></b>	<b>mg/L</b>	<b>mg/L</b>
<b>NM WQCC Standard</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>
<b>TW-16</b>	20-Aug-09	360	32	8.5	1,100	1.1	150	0.75	2,600	4,800	1,000	4,240
<b>TW-17</b>	21-Aug-09	350	43	4.2	1,200	1.2	170	0.80	3,100	4,700	1,100	4,640
<b>TW-18</b>	21-Aug-09	500	54	3.6	830	0.43	52	0.77	2,800	4,300	1,500	4,440
<b>TW-18</b>	16-Nov-10	490	52	4.6	910	0.28	54	1	3,700	5,000	1,400	4,790
<b>TW-18</b>	17-Nov-11	480	49	4.1	1,100	0.26	66	0.73	4,700	5,400	1,400	5,360
<b>TW-23</b>	21-Aug-09	470	49	3.5	1,400	1.1	150	1.1	3,600	5,500	1,400	5,440
<b>TW-30</b>	21-Aug-09	700	57	5.9	1,100	3.7	860	0.56	2,000	5,000	2,000	4,550
<b>TW-30</b>	16-Nov-10	550	60	8.8	1,200	1.9	1,400	0.54	2,100	6,500	1,600	5,630
<b>TW-30</b>	17-Nov-11	670	61	9.3	1,500	3.1	1,400	<1.0	1,900	7,300	1,900	6,310
<b>TW-31</b>	21-Aug-09	460	68	4.9	1,300	3.9	1,700	0.43	1,200	5,800	1,400	4,790
<b>TW-31</b>	16-Nov-10	520	66	6.9	940	0.65	750	0.67	2,000	5,500	1,600	4,680
<b>TW-34</b>	24-Aug-09	450	76	4.7	1,200	0.36	59	1.0	3,500	5,100	1,400	5,460
<b>TW-34</b>	22-Nov-11	480	79	4.8	1,100	<2.0	59	<2.0	4,100	5,500	1,500	5,420
<b>TW-35</b>	24-Aug-09	440	88	8.3	1,600	0.40	65	0.74	4,400	6,100	1,500	6,700
<b>TW-35</b>	17-Nov-10	480	84	8.6	1,600	0.26	70	0.81	4,700	6,600	1,600	6,770
<b>TW-35</b>	22-Nov-11	460	90	8.2	1,700	0.72	81	0.74	4,600	6,700	1,500	7,180
<b>TW-37</b>	21-Aug-09	380	46	3.7	870	3.5	330	0.59	1,700	4,200	1,100	3,740
<b>TW-37</b>	16-Nov-10	340	45	3.5	760	0.49	310	0.51	1,500	4,200	1,000	3,380
<b>TW-37</b>	18-May-11	NA	NA	NA	NA	NA	260	NA	1,700	NA	NA	3,680

TABLE 4

SUMMARY OF GROUNDWATER DISSOLVED CATIONS, ANIONS, SPECIFIC CONDUCTANCE, HARDNESS,  
AND TOTAL DISSOLVED SOLIDS ANALYTICAL RESULTS  
Thriftyway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Sample Date	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Sodium mg/L	Bromide mg/L	Chloride mg/L	Fluoride mg/L	Sulfate mg/L	Specific Conductance μmhos/cm	Hardness as (CaCO <sub>3</sub> )	TDS mg/L
Analytical Method	6010B	6010B	6010B	NE	NE	300.0	300.0	300.0	300.0	120.1	6010B	SM 2540C
NM WQCC Standard	NE	NE	NE	NE	NE	250	1.6	600	NE	NE	NE	1,000
TW-38	16-Nov-10	490	45	3.5	700	0.38	210	0.77	1,900	4,400	1,400	3,930
TW-38	18-May-11	NA	NA	NA	NA	NA	190	NA	2,200	NA	NA	4,010
TW-39	21-Aug-09	600	54	7.1	1,100	2.3	1,300	0.44	990	5,200	1,700	4,460
TW-39	16-Nov-10	370	43	4.9	660	0.47	540	0.42	1,000	4,100	1,100	3,070
TW-39	18-May-11	NA	NA	NA	NA	NA	550	NA	1,600	NA	NA	3,980
TW-41	24-Aug-19	330	57	6.5	1,000	1.7	970	<0.50	500	4,600	1,100	3,510
TW-41	16-Nov-10	300	58	5.8	910	1.0	1,100	0.23	610	5,200	980	3,670
TW-41	18-May-11	NA	NA	NA	NA	NA	910	NA	980	NA	NA	3,940
TW-41	22-Nov-11	230	50	4.8	860	0.5	640	0.5	510	4,300	890	3,300
TW-42	24-Aug-09	250	75	6.3	1,200	3.8	690	0.43	1,400	5,000	940	4,260
TW-42	16-Nov-10	370	110	6.8	1,200	0.86	840	0.47	2,300	5,900	1,400	5,040
TW-43	24-Aug-09	570	55	5.0	930	0.6	140	0.74	2,500	4,500	1,600	4,610
TW-43	16-Nov-10	540	53	4.8	820	0.44	150	0.98	2,800	4,800	1,600	4,450
TW-43	18-May-11	NA	NA	NA	NA	NA	95	NA	2,700	NA	NA	4,720
TW-44	24-Aug-09	610	56	8.1	1,100	3.7	81	0.38	2,800	5,100	1,800	5,520
TW-45	17-Nov-10	550	53	3.9	860	0.47	320	0.78	2,600	5,000	1,600	4,530
TW-45	18-May-11	NA	NA	NA	NA	NA	280	NA	2,600	NA	NA	4,700
TW-46	18-May-11	NA	NA	NA	NA	NA	400	NA	1,400	NA	NA	3,640

TABLE 4

SUMMARY OF GROUNDWATER DISSOLVED CATIONS, ANIONS, SPECIFIC CONDUCTANCE, HARDNESS,  
AND TOTAL DISSOLVED SOLIDS ANALYTICAL RESULTS  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Sample Date	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Sodium mg/L	Bromide mg/L	Chloride mg/L	Fluoride mg/L	Sulfate mg/L	Specific Conductance $\mu\text{mhos/cm}$	Hardness as ( $\text{CaCO}_3$ ) mg/L	TDS mg/L
Analytical Method	6010B	6010B	6010B	6010B	300.0	300.0	300.0	300.0	300.0	120.1	6010B	SM 2540C
NM WQCC Standard	NE	NE	NE	NE	250	1.6	600	NE	NE	1,000	NE	1,000
TW-47	17-Nov-10	490	120	8.6	2,300	0.93	1,200	0.57	5,300	8,800	1,700	8,800
TW-47	22-Nov-11	510	120	8.2	2,700	1.2	1,800	<1.0	5,800	19,000	2,000	10,700
TW-49	17-Nov-10	630	92	14.0	1,700	2.1	3,400	0.51	7,000	8,000	1,900	7,470
TW-50	18-May-11	NA	NA	NA	NA	1100	NA	970	NA	NA	4,150	
TW-50	17-Nov-11	480	55	5.7	900	0.64	990	<0.50	1,100	5,300	1,400	4,160
MW-5	17-Nov-10	150	29	6.1	1,200	0.77	310	<2.0	3,000	5,400	500	4,630

**TABLE 4**  
**SUMMARY OF GROUNDWATER DISSOLVED CATIONS, ANIONS, SPECIFIC CONDUCTANCE, HARDNESS,  
AND TOTAL DISSOLVED SOLIDS ANALYTICAL RESULTS**  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Sample Date	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Sodium mg/L	Bromide mg/L	Chloride mg/L	Fluoride mg/L	Sulfate mg/L	Specific Conductance μmhos/cm	Hardness as (CaCO <sub>3</sub> )	TDS mg/L
<b>Analytical Method</b>	<b>6010B</b>	<b>6010B</b>	<b>6010B</b>	<b>6010B</b>	<b>300.0</b>	<b>300.0</b>	<b>300.0</b>	<b>300.0</b>	<b>300.0</b>	<b>120.1</b>	<b>6010B</b>	<b>SM 2540C</b>
<b>NM WQCC Standard</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>250</b>	<b>1.6</b>	<b>600</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>		
<b>MW-20</b>	17-Nov-10	410	47	4.1	840	0.72	430	<0.50	2,000	4,700	1,200	<b>3,950</b>
<b>MW-20</b>	18-May-11	NA	NA	NA	NA	380	NA	1,900	NA	NA	NA	<b>4,260</b>
<b>MW-21</b>	17-Nov-10	460	64	7.4	1,400	0.87	820	0.64	3,500	6,700	1,400	<b>6,270</b>
<b>MW-21</b>	18-May-11	NA	NA	NA	NA	750	NA	2,700	NA	NA	NA	<b>5,500</b>

**Notes:**

< NE Not established

mg/L Milligrams per liter (ppm)  
μmhos/cm Micromhos per centimeter

Analyte not detected above listed method limit

TABLE 5  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 MPE WELLS  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date</i>	<i>T.O.C. (ft amsl)</i>	<i>Depth to Product (ft)</i>	<i>Depth to Water (ft)</i>	<i>NAPL Thickness (ft)</i>
<b><i>Phase 1 Wells</i></b>					
<b>MPE-1</b>	03-Mar-10	TBD		23.63	
<b>MPE-1</b>	10-May-10	TBD		23.46	
<b>MPE-1</b>	17-Aug-10	TBD		23.65	
<b>MPE-1</b>	11-Nov-10	TBD		23.82	
<b>MPE-1</b>	25-Feb-11	TBD		23.63	
<b>MPE-1</b>	20-May-11	TBD		23.63	
<b>MPE-1</b>	25-Aug-11	TBD		24.01	
<b>MPE-1</b>	10-Nov-11	TBD		24.04	
<b>MPE-2</b>	03-Mar-10	TBD	21.51	21.54	0.03
<b>MPE-2</b>	18-May-10	TBD		21.29	
<b>MPE-2</b>	17-Aug-10	TBD	21.61	21.62	0.01
<b>MPE-2</b>	11-Nov-10	TBD	21.69	21.78	0.09
<b>MPE-2</b>	25-Feb-11	TBD		21.61	
<b>MPE-2</b>	20-May-11	TBD		21.46	
<b>MPE-2</b>	25-Aug-11	TBD		21.91	
<b>MPE-2</b>	10-Nov-11	TBD	21.94	22.03	0.09
<b>MPE-3</b>	03-Mar-10	TBD		20.79	
<b>MPE-3</b>	10-May-10	TBD		20.63	
<b>MPE-3</b>	17-Aug-10	TBD		20.83	
<b>MPE-3</b>	11-Nov-10	TBD		21.01	
<b>MPE-3</b>	25-Feb-11	TBD		20.89	
<b>MPE-3</b>	20-May-11	TBD		20.81	
<b>MPE-3</b>	25-Aug-11	TBD		21.22	
<b>MPE-3</b>	10-Nov-11	TBD		21.23	
<b>MPE-4</b>	03-Mar-10	TBD		19.95	
<b>MPE-4</b>	10-May-10	TBD		19.80	
<b>MPE-4</b>	17-Aug-10	TBD		20.01	
<b>MPE-4</b>	11-Nov-10	TBD		20.20	
<b>MPE-4</b>	25-Feb-11	TBD		20.07	
<b>MPE-4</b>	20-May-11	TBD		19.97	
<b>MPE-4</b>	25-Aug-11	TBD		20.47	
<b>MPE-4</b>	10-Nov-11	TBD		20.43	
<b>MPE-5</b>	03-Mar-10	TBD	19.30	19.41	0.11
<b>MPE-5</b>	18-May-10	TBD		19.00	
<b>MPE-5</b>	17-Aug-10	TBD	19.32	19.50	0.18

**TABLE 5**  
**SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 MPE WELLS**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

<b>Well ID</b>	<b>Date</b>	<b>T.O.C. (ft amsl)</b>	<b>Depth to Product (ft)</b>	<b>Depth to Water (ft)</b>	<b>NAPL Thickness (ft)</b>
<b>MPE-5</b>	11-Nov-10	TBD	19.54	19.69	0.15
<b>MPE-5</b>	25-Feb-11	TBD	19.42	19.45	0.03
<b>MPE-5</b>	20-May-11	TBD	19.33	19.34	0.01
<b>MPE-5</b>	25-Aug-11	TBD	19.72	19.92	0.20
<b>MPE-5</b>	10-Nov-11	TBD	19.74	19.92	0.18
<b>MPE-6</b>	03-Mar-10	TBD		19.66	
<b>MPE-6</b>	10-May-10	TBD		NM	
<b>MPE-6</b>	17-Aug-10	TBD		19.70	
<b>MPE-6</b>	11-Nov-10	TBD		19.91	
<b>MPE-6</b>	01-Mar-11	TBD		19.69	
<b>MPE-6</b>	20-May-11	TBD		19.64	
<b>MPE-6</b>	25-Aug-11	TBD		20.07	
<b>MPE-6</b>	10-Nov-11	TBD	20.09	20.10	0.01
<b>MPE-7</b>	03-Mar-10	TBD		20.46	
<b>MPE-7</b>	10-May-10	TBD		NM	
<b>MPE-7</b>	17-Aug-10	TBD		20.49	
<b>MPE-7</b>	11-Nov-10	TBD		20.68	
<b>MPE-7</b>	01-Mar-11	TBD		20.54	
<b>MPE-7</b>	20-May-11	TBD		20.49	
<b>MPE-7</b>	25-Aug-11	TBD		20.88	
<b>MPE-7</b>	10-Nov-11	TBD		20.89	
<b>MPE-8</b>	03-Mar-10	TBD		21.74	
<b>MPE-8</b>	10-May-10	TBD		21.60	
<b>MPE-8</b>	17-Aug-10	TBD		21.81	
<b>MPE-8</b>	11-Nov-10	TBD		21.98	
<b>MPE-8</b>	01-Mar-11	TBD		21.95	
<b>MPE-8</b>	20-May-11	TBD		21.78	
<b>MPE-8</b>	25-Aug-11	TBD		22.32	
<b>MPE-8</b>	10-Nov-11	TBD		22.19	
<b>MPE-9</b>	03-Mar-10	TBD		23.44	
<b>MPE-9</b>	10-May-10	TBD		23.29	
<b>MPE-9</b>	17-Aug-10	TBD		23.51	
<b>MPE-9</b>	11-Nov-10	TBD		23.66	
<b>MPE-9</b>	01-Mar-11	TBD		23.49	
<b>MPE-9</b>	20-May-11	TBD		23.43	
<b>MPE-9</b>	25-Aug-11	TBD		23.87	

TABLE 5  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 MPE WELLS  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<b>Well ID</b>	<b>Date</b>	<b>T.O.C. (ft amsl)</b>	<b>Depth to Product (ft)</b>	<b>Depth to Water (ft)</b>	<b>NAPL Thickness (ft)</b>
<b>MPE-9</b>	10-Nov-11	TBD		23.97	
<b>MPE-10</b>	03-Mar-10	TBD		23.28	
<b>MPE-10</b>	10-May-10	TBD		23.10	
<b>MPE-10</b>	17-Aug-10	TBD		23.34	
<b>MPE-10</b>	11-Nov-10	TBD		23.46	
<b>MPE-10</b>	01-Mar-11	TBD		23.38	
<b>MPE-10</b>	20-May-11	TBD		23.31	
<b>MPE-10</b>	25-Aug-11	TBD		23.71	
<b>MPE-10</b>	10-Nov-11	TBD		23.67	
<b>MPE-11</b>	03-Mar-10	TBD		21.83	
<b>MPE-11</b>	10-May-10	TBD		21.68	
<b>MPE-11</b>	17-Aug-10	TBD	NM-Roots in Well		
<b>MPE-11</b>	11-Nov-10	TBD	NM-Roots in Well		
<b>MPE-11</b>	01-Mar-11	TBD	NM-Roots in Well		
<b>MPE-11</b>	20-May-11	TBD	NM-Roots in Well		
<b>MPE-11</b>	25-Aug-11	TBD		21.65	
<b>MPE-11</b>	10-Nov-11	TBD		21.66	
<b>MPE-12</b>	03-Mar-10	TBD		22.34	
<b>MPE-12</b>	10-May-10	TBD		22.20	
<b>MPE-12</b>	17-Aug-10	TBD		22.45	
<b>MPE-12</b>	11-Nov-10	TBD	NM-Roots in Well		
<b>MPE-12</b>	01-Mar-11	TBD	NM-Roots in Well		
<b>MPE-12</b>	20-May-11	TBD	NM-Roots in Well		
<b>MPE-12</b>	25-Aug-11	TBD		22.79	
<b>MPE-12</b>	10-Nov-11	TBD		22.83	
<b>MPE-13</b>	03-Mar-10	TBD		22.70	
<b>MPE-13</b>	10-May-10	TBD		22.57	
<b>MPE-13</b>	17-Aug-10	TBD	22.78	22.82	0.04
<b>MPE-13</b>	11-Nov-10	TBD	22.90	22.96	0.06
<b>MPE-13</b>	01-Mar-11	TBD		22.82	
<b>MPE-13</b>	20-May-11	TBD		22.73	
<b>MPE-13</b>	25-Aug-11	TBD	23.12	23.24	0.12
<b>MPE-13</b>	10-Nov-11	TBD	23.11	23.18	0.07
<b>MPE-14</b>	03-Mar-10	TBD		21.80	
<b>MPE-14</b>	10-May-10	TBD		21.65	

**TABLE 5**  
**SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 MPE WELLS**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

<b>Well ID</b>	<b>Date</b>	<b>T.O.C. (ft amsl)</b>	<b>Depth to Product (ft)</b>	<b>Depth to Water (ft)</b>	<b>NAPL Thickness (ft)</b>
<b>MPE-14</b>	17-Aug-10	TBD	21.84	21.85	0.01
<b>MPE-14</b>	11-Nov-10	TBD		22.00	
<b>MPE-14</b>	01-Mar-11	TBD		21.86	
<b>MPE-14</b>	20-May-11	TBD		21.90	
<b>MPE-14</b>	25-Aug-11	TBD		22.23	
<b>MPE-14</b>	10-Nov-11	TBD	22.20	22.34	0.14
<b>MPE-16</b>	03-Mar-10	TBD		19.92	
<b>MPE-16</b>	10-May-10	TBD		19.78	
<b>MPE-16</b>	17-Aug-10	TBD		19.96	
<b>MPE-16</b>	11-Nov-10	TBD		20.14	
<b>MPE-16</b>	01-Mar-11	TBD		20.21	
<b>MPE-16</b>	20-May-11	TBD		19.97	
<b>MPE-16</b>	25-Aug-11	TBD		20.34	
<b>MPE-16</b>	10-Nov-11	TBD		20.35	
<b>MPE-17</b>	03-Mar-10	TBD		20.11	
<b>MPE-17</b>	10-May-10	TBD		19.98	
<b>MPE-17</b>	17-Aug-10	TBD		20.04	
<b>MPE-17</b>	11-Nov-10	TBD		20.34	
<b>MPE-17</b>	01-Mar-11	TBD		20.21	
<b>MPE-17</b>	20-May-11	TBD		20.16	
<b>MPE-17</b>	25-Aug-11	TBD		20.49	
<b>MPE-17</b>	10-Nov-11	TBD		20.54	
<b>MPE-18</b>	03-Mar-10	TBD		19.23	
<b>MPE-18</b>	10-May-10	TBD		NM	
<b>MPE-18</b>	17-Aug-10	TBD	19.27	19.28	0.01
<b>MPE-18</b>	11-Nov-10	TBD		19.34	
<b>MPE-18</b>	01-Mar-11	TBD		19.46	
<b>MPE-18</b>	20-May-11	TBD		19.35	
<b>MPE-18</b>	25-Aug-11	TBD		19.46	
<b>MPE-18</b>	10-Nov-11	TBD		19.67	
<b>MPE-19</b>	03-Mar-10	TBD		19.02	
<b>MPE-19</b>	10-May-10	TBD		18.86	
<b>MPE-19</b>	17-Aug-10	TBD		19.06	
<b>MPE-19</b>	11-Nov-10	TBD		19.25	
<b>MPE-19</b>	01-Mar-11	TBD		19.05	
<b>MPE-19</b>	20-May-11	TBD		19.02	

TABLE 5  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 MPE WELLS  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<b>Well ID</b>	<b>Date</b>	<b>T.O.C. (ft amsl)</b>	<b>Depth to Product (ft)</b>	<b>Depth to Water (ft)</b>	<b>NAPL Thickness (ft)</b>
<b>MPE-19</b>	25-Aug-11	TBD		19.42	
<b>MPE-19</b>	10-Nov-11	TBD		19.47	
<b>Phase 2 Wells</b>					
<b>MPE-20</b>	03-Mar-10	TBD		18.72	
<b>MPE-20</b>	10-May-10	TBD		18.58	
<b>MPE-20</b>	17-Aug-10	TBD		18.75	
<b>MPE-20</b>	11-Nov-10	TBD		18.96	
<b>MPE-20</b>	01-Mar-11	TBD		18.87	
<b>MPE-20</b>	20-May-11	TBD		18.79	
<b>MPE-20</b>	25-Aug-11	TBD		19.14	
<b>MPE-20</b>	10-Nov-11	TBD		19.17	
<b>MPE-21</b>	03-Mar-10	TBD	19.88	19.99	0.11
<b>MPE-21</b>	18-May-10	TBD		19.50	
<b>MPE-21</b>	09-Jun-10	TBD		19.75	
<b>MPE-21</b>	17-Aug-10	TBD	19.90	19.91	0.01
<b>MPE-21</b>	11-Nov-10	TBD	20.12	20.21	0.09
<b>MPE-21</b>	01-Mar-11	TBD		19.99	
<b>MPE-21</b>	20-May-11	TBD		19.93	
<b>MPE-21</b>	25-Aug-11	TBD	20.32	20.37	0.05
<b>MPE-21</b>	10-Nov-11	TBD		20.41	
<b>MPE-22</b>	03-Mar-10	TBD	20.73	20.81	0.08
<b>MPE-22</b>	18-May-10	TBD		NM	
<b>MPE-22</b>	09-Jun-10	TBD	20.4	20.90	0.50
<b>MPE-22</b>	16-Jun-10	TBD		20.53	
<b>MPE-22</b>	17-Aug-10	TBD	20.71	20.88	0.17
<b>MPE-22</b>	11-Nov-10	TBD	20.94	20.95	0.01
<b>MPE-22</b>	01-Mar-11	TBD		20.84	
<b>MPE-22</b>	20-May-11	TBD		20.73	
<b>MPE-22</b>	25-Aug-11	TBD	21.11	21.15	0.04
<b>MPE-22</b>	10-Nov-11	TBD		21.28	
<b>MPE-23</b>	03-Mar-10	TBD		21.10	
<b>MPE-23</b>	10-May-10	TBD		20.97	
<b>MPE-23</b>	17-Aug-10	TBD		21.14	
<b>MPE-23</b>	11-Nov-10	TBD		21.33	
<b>MPE-23</b>	01-Mar-11	TBD		21.29	
<b>MPE-23</b>	20-May-11	TBD		20.80	

**TABLE 5**  
**SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 MPE WELLS**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

<b>Well ID</b>	<b>Date</b>	<b>T.O.C. (ft amsl)</b>	<b>Depth to Product (ft)</b>	<b>Depth to Water (ft)</b>	<b>NAPL Thickness (ft)</b>
<b>MPE-23</b>	25-Aug-11	TBD		20.33	
<b>MPE-23</b>	10-Nov-11	TBD		20.25	
<b>MPE-24</b>	03-Mar-10	TBD		22.69	
<b>MPE-24</b>	10-May-10	TBD		22.53	
<b>MPE-24</b>	17-Aug-10	TBD		22.70	
<b>MPE-24</b>	11-Nov-10	TBD		22.88	
<b>MPE-24</b>	01-Mar-11	TBD		22.78	
<b>MPE-24</b>	20-May-11	TBD		22.64	
<b>MPE-24</b>	25-Aug-11	TBD		23.09	
<b>MPE-24</b>	10-Nov-11	TBD		23.12	
<b>MPE-25</b>	03-Mar-10	TBD		23.02	
<b>MPE-25</b>	10-May-10	TBD		22.87	
<b>MPE-25</b>	17-Aug-10	TBD		23.12	
<b>MPE-25</b>	11-Nov-10	TBD		23.23	
<b>MPE-25</b>	01-Mar-11	TBD		23.08	
<b>MPE-25</b>	20-May-11	TBD		22.99	
<b>MPE-25</b>	25-Aug-11	TBD		23.55	
<b>MPE-25</b>	10-Nov-11	TBD		23.54	
<b>MPE-26</b>	03-Mar-10	TBD	22.75	23.41	0.66
<b>MPE-26</b>	18-May-10	TBD	22.58	23.38	0.80
<b>MPE-26</b>	28-May-10	TBD	22.55	23.42	0.87
<b>MPE-26</b>	09-Jun-10	TBD	22.56	23.73	1.17
<b>MPE-26</b>	17-Aug-10	TBD	22.94	23.34	0.40
<b>MPE-26</b>	11-Nov-10	TBD	23.04	23.59	0.55
<b>MPE-26</b>	03-Mar-11	TBD	22.96	23.38	0.42
<b>MPE-26</b>	20-May-11	TBD	22.82	22.86	0.04
<b>MPE-26</b>	25-Aug-11	TBD	23.29	23.99	0.70
<b>MPE-26</b>	10-Nov-11	TBD	23.17	24.14	0.97
<b>MPE-27</b>	03-Mar-10	TBD		21.92	
<b>MPE-27</b>	10-May-10	TBD		21.76	
<b>MPE-27</b>	17-Aug-10	TBD		22.03	
<b>MPE-27</b>	11-Nov-10	TBD		22.06	
<b>MPE-27</b>	03-Mar-11	TBD	NM-Roots in Well		
<b>MPE-27</b>	20-May-11	TBD	NM-Roots in Well		
<b>MPE-27</b>	25-Aug-11	TBD		21.42	
<b>MPE-27</b>	10-Nov-11	TBD		21.33	

TABLE 5  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 MPE WELLS  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<b>Well ID</b>	<b>Date</b>	<b>T.O.C. (ft amsl)</b>	<b>Depth to Product (ft)</b>	<b>Depth to Water (ft)</b>	<b>NAPL Thickness (ft)</b>
<b>MPE-28</b>	03-Mar-10	TBD		21.54	
<b>MPE-28</b>	10-May-10	TBD		21.39	
<b>MPE-28</b>	17-Aug-10	TBD		21.70	
<b>MPE-28</b>	11-Nov-10	TBD		NM-Roots in Well	
<b>MPE-28</b>	03-Mar-11	TBD		NM-Roots in Well	
<b>MPE-28</b>	20-May-11	TBD		NM-Roots in Well	
<b>MPE-28</b>	25-Aug-11	TBD		22.19	
<b>MPE-28</b>	10-Nov-11	TBD		21.93	
<b>MPE-29</b>	03-Mar-10	TBD		20.54	
<b>MPE-29</b>	10-May-10	TBD		20.39	
<b>MPE-29</b>	17-Aug-10	TBD		20.73	
<b>MPE-29</b>	11-Nov-10	TBD		21.72	
<b>MPE-29</b>	03-Mar-11	TBD		21.45	
<b>MPE-29</b>	19-May-11	TBD		20.49	
<b>MPE-29</b>	25-Aug-11	TBD		21.03	
<b>MPE-29</b>	10-Nov-11	TBD		20.93	
<b>MPE-30</b>	03-Mar-10	TBD		21.19	
<b>MPE-30</b>	10-May-10	TBD		20.03	
<b>MPE-30</b>	17-Aug-10	TBD		21.33	
<b>MPE-30</b>	12-Nov-10	TBD		21.36	
<b>MPE-30</b>	03-Mar-11	TBD		20.99	
<b>MPE-30</b>	19-May-11	TBD		21.18	
<b>MPE-30</b>	25-Aug-11	TBD		21.75	
<b>MPE-30</b>	10-Nov-11	TBD		21.68	
<b>MPE-31</b>	03-Mar-10	TBD		22.46	
<b>MPE-31</b>	10-May-10	TBD		22.30	
<b>MPE-31</b>	17-Aug-10	TBD		22.57	
<b>MPE-31</b>	12-Nov-10	TBD		22.64	
<b>MPE-31</b>	03-Mar-11	TBD		22.45	
<b>MPE-31</b>	19-May-11	TBD		22.45	
<b>MPE-31</b>	25-Aug-11	TBD		22.95	
<b>MPE-31</b>	10-Nov-11	TBD		22.87	
<b>MPE-33</b>	03-Mar-10	TBD		22.34	
<b>MPE-33</b>	10-May-10	TBD		22.19	
<b>MPE-33</b>	17-Aug-10	TBD		22.39	

TABLE 5  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1, 2, and 3 MPE WELLS  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<b>Well ID</b>	<b>Date</b>	<b>T.O.C. (ft amsl)</b>	<b>Depth to Product (ft)</b>	<b>Depth to Water (ft)</b>	<b>NAPL Thickness (ft)</b>
<b>MPE-33</b>	12-Nov-10	TBD		22.54	
<b>MPE-33</b>	03-Mar-11	TBD		22.61	
<b>MPE-33</b>	19-May-11	TBD		22.34	
<b>MPE-33</b>	25-Aug-11	TBD		22.78	
<b>MPE-33</b>	10-Nov-11	TBD		22.78	
<b>MPE-34</b>	03-Mar-10	TBD		22.16	
<b>MPE-34</b>	10-May-10	TBD		22.01	
<b>MPE-34</b>	17-Aug-10	TBD		22.20	
<b>MPE-34</b>	12-Nov-10	TBD		22.37	
<b>MPE-34</b>	03-Mar-11	TBD		22.41	
<b>MPE-34</b>	19-May-11	TBD		22.19	
<b>MPE-34</b>	25-Aug-11	TBD		22.60	
<b>MPE-34</b>	10-Nov-11	TBD		22.67	
<b>MPE-35</b>	24-Feb-10	TBD	20.71	20.95	0.24
<b>MPE-35</b>	03-Mar-10	TBD	20.64	20.98	0.34
<b>MPE-35</b>	18-May-10	TBD	20.34	20.67	0.33
<b>MPE-35</b>	09-Jun-10	TBD	20.26	20.79	0.53
<b>MPE-35</b>	16-Jun-10	TBD		20.46	
<b>MPE-35</b>	17-Aug-10	TBD	NM-Attached to RSI Unit		
<b>MPE-35</b>	12-Nov-10	TBD	20.86	21.27	0.41
<b>MPE-35</b>	03-Mar-11	TBD	20.87	21.25	0.38
<b>MPE-35</b>	19-May-11	TBD		20.74	
<b>MPE-35</b>	25-Aug-11	TBD	21.05	21.59	0.54
<b>MPE-35</b>	10-Nov-11	TBD	21.07	21.70	0.63
<b>MPE-36</b>	03-Mar-10	TBD		19.91	
<b>MPE-36</b>	10-May-10	TBD		NM	
<b>MPE-36</b>	16-Jun-10	TBD		19.72	
<b>MPE-36</b>	17-Aug-10	TBD		19.94	
<b>MPE-36</b>	12-Nov-10	TBD		20.11	
<b>MPE-36</b>	03-Mar-11	TBD		19.92	
<b>MPE-36</b>	19-May-11	TBD		19.98	
<b>MPE-36</b>	25-Aug-11	TBD		20.27	
<b>MPE-36</b>	10-Nov-11	TBD	20.26	20.66	0.40
<b>MPE-37</b>	03-Mar-10	TBD	20.11	20.67	0.56
<b>MPE-37</b>	18-May-10	TBD		19.98	
<b>MPE-37</b>	16-Jun-10	TBD		20.07	

TABLE 5  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 MPE WELLS  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<b>Well ID</b>	<b>Date</b>	<b>T.O.C. (ft amsl)</b>	<b>Depth to Product (ft)</b>	<b>Depth to Water (ft)</b>	<b>NAPL Thickness (ft)</b>
<b>MPE-37</b>	17-Aug-10	TBD		20.31	
<b>MPE-37</b>	12-Nov-10	TBD		20.51	
<b>MPE-37</b>	03-Mar-11	TBD		20.33	
<b>MPE-37</b>	19-May-11	TBD		20.37	
<b>MPE-37</b>	25-Aug-11	TBD		20.33	
<b>MPE-37</b>	10-Nov-11	TBD	20.68	20.7	0.02
<b>MPE-38</b>	03-Mar-10	TBD	19.80	19.83	0.03
<b>MPE-38</b>	18-May-10	TBD	19.49	20.40	0.91
<b>MPE-38</b>	09-Jun-10	TBD	19.51	20.31	0.80
<b>MPE-38</b>	16-Jun-10	TBD	19.61	20.30	0.69
<b>MPE-38</b>	17-Aug-10	TBD	NM-Attached to RSI Unit		
<b>MPE-38</b>	12-Nov-10	TBD	19.99	20.59	0.60
<b>MPE-38</b>	03-Mar-11	TBD	20.06	20.63	0.57
<b>MPE-38</b>	19-May-11	TBD		19.83	
<b>MPE-38</b>	25-Aug-11	TBD	20.18	20.26	0.08
<b>MPE-38</b>	10-Nov-11	TBD	20.20	20.28	0.08
<b>Phase 3 Wells</b>					
<b>MPE-39</b>	18-Jun-10	TBD		17.29	
<b>MPE-39</b>	17-Aug-10	TBD		17.44	
<b>MPE-39</b>	12-Nov-10	TBD		17.64	
<b>MPE-39</b>	03-Mar-11	TBD		17.51	
<b>MPE-39</b>	19-May-11	TBD		17.49	
<b>MPE-39</b>	25-Aug-11	TBD		17.78	
<b>MPE-39</b>	10-Nov-11	TBD		17.83	
<b>MPE-40</b>	18-Jun-10	TBD		17.46	
<b>MPE-40</b>	17-Aug-10	TBD		17.63	
<b>MPE-40</b>	12-Nov-10	TBD		17.83	
<b>MPE-40</b>	03-Mar-11	TBD		17.72	
<b>MPE-40</b>	19-May-11	TBD		17.64	
<b>MPE-40</b>	25-Aug-11	TBD		17.98	
<b>MPE-40</b>	15-Nov-11	TBD		18.06	
<b>MPE-41</b>	18-Jun-10	TBD		18.14	
<b>MPE-41</b>	17-Aug-10	TBD	NM-Attached to RSI Unit		
<b>MPE-41</b>	12-Nov-10	TBD		18.51	
<b>MPE-41</b>	03-Mar-11	TBD		18.57	
<b>MPE-41</b>	19-May-11	TBD		18.37	

TABLE 5  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1, 2, and 3 MPE WELLS  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date</i>	<i>T.O.C. (ft amsl)</i>	<i>Depth to Product (ft)</i>	<i>Depth to Water (ft)</i>	<i>NAPL Thickness (ft)</i>
MPE-41	25-Aug-11	TBD		18.66	
MPE-41	15-Nov-11	TBD		18.74	
MPE-42	18-Jun-10	TBD		18.90	
MPE-42	17-Aug-10	TBD	NM-Attached to RSI Unit		
MPE-42	12-Nov-10	TBD		19.25	
MPE-42	03-Mar-11	TBD		19.30	
MPE-42	19-May-11	TBD		19.11	
MPE-42	25-Aug-11	TBD		19.48	
MPE-42	15-Nov-11	TBD		19.46	
MPE-43	18-Jun-10	TBD		19.75	
MPE-43	17-Aug-10	TBD	NM-Attached to RSI Unit		
MPE-43	12-Nov-10	TBD		20.10	
MPE-43	03-Mar-11	TBD	NM-Attached to RSI Unit		
MPE-43	19-May-11	TBD		19.95	
MPE-43	25-Aug-11	TBD		20.25	
MPE-43	15-Nov-11	TBD		20.27	
MPE-44	18-Jun-10	TBD		19.95	
MPE-44	17-Aug-10	TBD	NM-Attached to RSI Unit		
MPE-44	12-Nov-10	TBD		20.29	
MPE-44	03-Mar-11	TBD	NM-Attached to RSI Unit		
MPE-44	19-May-11	TBD	20.09	20.10	0.01
MPE-44	25-Aug-11	TBD	20.66	20.70	0.04
MPE-44	15-Nov-11	TBD	20.37	21.49	1.12
MPE-45	18-Jun-10	TBD		20.05	sheen
MPE-45	17-Aug-10	TBD	NM-Attached to RSI Unit		
MPE-45	12-Nov-10	TBD		20.38	
MPE-45	03-Mar-11	TBD	NM-Attached to RSI Unit		
MPE-45	19-May-11	TBD		20.22	
MPE-45	25-Aug-11	TBD	20.63	20.97	0.34
MPE-45	15-Nov-11	TBD	20.66	21.23	0.57
MPE-46	18-Jun-10	TBD		21.16	
MPE-46	17-Aug-10	TBD	NM-Attached to RSI Unit		
MPE-46	12-Nov-10	TBD		21.46	
MPE-46	03-Mar-11	TBD	NM-Attached to RSI Unit		
MPE-46	19-May-11	TBD		21.28	

TABLE 5  
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 MPE WELLS  
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<b>Well ID</b>	<b>Date</b>	<b>T.O.C. (ft amsl)</b>	<b>Depth to Product (ft)</b>	<b>Depth to Water (ft)</b>	<b>NAPL Thickness (ft)</b>
<b>MPE-46</b>	25-Aug-11	TBD		21.72	
<b>MPE-46</b>	15-Nov-11	TBD		21.53	
<b>MPE-47</b>	18-Jun-10	TBD		20.68	
<b>MPE-47</b>	17-Aug-10	TBD		20.92	
<b>MPE-47</b>	12-Nov-10	TBD	20.87	21.28	0.41
<b>MPE-47</b>	03-Mar-11	TBD	20.80	21.29	0.49
<b>MPE-47</b>	19-May-11	TBD	20.73	20.75	0.02
<b>MPE-47</b>	25-Aug-11	TBD	21.13	22.25	1.12
<b>MPE-47</b>	15-Nov-11	TBD	21.00	21.82	0.82
<b>MPE-48</b>	18-Jun-10	TBD		19.94	
<b>MPE-48</b>	17-Aug-10	TBD		20.22	
<b>MPE-48</b>	12-Nov-10	TBD		20.11	
<b>MPE-48</b>	03-Mar-11	TBD		20.16	
<b>MPE-48</b>	19-May-11	TBD		19.91	
<b>MPE-48</b>	25-Aug-11	TBD		20.55	
<b>MPE-48</b>	15-Nov-11	TBD		20.24	
<b>MPE-49</b>	18-Jun-10	TBD		19.13	
<b>MPE-49</b>	17-Aug-10	TBD		19.44	
<b>MPE-49</b>	12-Nov-10	TBD		19.32	
<b>MPE-49</b>	03-Mar-11	TBD		19.35	
<b>MPE-49</b>	25-May-11	TBD		19.08	
<b>MPE-49</b>	25-Aug-11	TBD		19.80	
<b>MPE-49</b>	15-Nov-11	TBD		19.59	
<b>MPE-50</b>	18-Jun-10	TBD		20.24	
<b>MPE-50</b>	17-Aug-10	TBD	NM-Attached to RSI Unit		
<b>MPE-50</b>	12-Nov-10	TBD		20.49	
<b>MPE-50</b>	03-Mar-11	TBD	NM-Attached to RSI Unit		
<b>MPE-50</b>	25-May-11	TBD		20.39	
<b>MPE-50</b>	25-Aug-11	TBD		20.90	
<b>MPE-50</b>	15-Nov-11	TBD	20.65	21.02	0.37
<b>MPE-51</b>	18-Jun-10	TBD		20.70	
<b>MPE-51</b>	17-Aug-10	TBD		20.68	
<b>MPE-51</b>	12-Nov-10	TBD		20.99	
<b>MPE-51</b>	03-Mar-11	TBD		21.04	
<b>MPE-51</b>	25-May-11	TBD		20.80	

**TABLE 5**  
**SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 MPE WELLS**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

<b>Well ID</b>	<b>Date</b>	<b>T.O.C. (ft amsl)</b>	<b>Depth to Product (ft)</b>	<b>Depth to Water (ft)</b>	<b>NAPL Thickness (ft)</b>
<b>MPE-51</b>	25-Aug-11	TBD		21.27	
<b>MPE-51</b>	15-Nov-11	TBD		21.21	
<b>MPE-52</b>	18-Jun-10	TBD		20.49	
<b>MPE-52</b>	17-Aug-10	TBD		20.64	
<b>MPE-52</b>	12-Nov-10	TBD		20.84	
<b>MPE-52</b>	03-Mar-11	TBD		20.70	
<b>MPE-52</b>	25-May-11	TBD		20.69	
<b>MPE-52</b>	25-Aug-11	TBD	20.97	21.23	0.26
<b>MPE-52</b>	15-Nov-11	TBD	20.92	21.34	0.42
<b>MPE-53</b>	18-Jun-10	TBD		19.23	
<b>MPE-53</b>	17-Aug-10	TBD		19.38	
<b>MPE-53</b>	12-Nov-10	TBD		19.55	
<b>MPE-53</b>	03-Mar-11	TBD		19.42	
<b>MPE-53</b>	25-May-11	TBD	19.29	19.74	0.45
<b>MPE-53</b>	25-Aug-11	TBD	19.76	20.74	0.98
<b>MPE-53</b>	15-Nov-11	TBD	19.65	20.75	1.10
<b>MPE-54</b>	18-Jun-10	TBD		18.85	
<b>MPE-54</b>	17-Aug-10	TBD		19.02	
<b>MPE-54</b>	12-Nov-10	TBD		19.19	
<b>MPE-54</b>	03-Mar-11	TBD		19.15	
<b>MPE-54</b>	25-May-11	TBD		19.23	
<b>MPE-54</b>	25-Aug-11	TBD	19.38	19.88	0.50
<b>MPE-54</b>	15-Nov-11	TBD	19.47	20.03	0.56
<b>MPE-55</b>	18-Jun-10	TBD		18.36	
<b>MPE-55</b>	17-Aug-10	TBD		18.51	
<b>MPE-55</b>	12-Nov-10	TBD		18.70	
<b>MPE-55</b>	03-Mar-11	TBD		18.61	
<b>MPE-55</b>	25-May-11	TBD		18.52	
<b>MPE-55</b>	25-Aug-11	TBD		18.86	
<b>MPE-55</b>	15-Nov-11	TBD		18.91	
<b>MPE-56</b>	18-Jun-10	TBD		13.80	
<b>MPE-56</b>	17-Aug-10	TBD		13.94	
<b>MPE-56</b>	12-Nov-10	TBD		14.14	
<b>MPE-56</b>	03-Mar-11	TBD		14.21	
<b>MPE-56</b>	19-May-11	TBD		14.01	

**TABLE 5**  
**SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 MPE WELLS**  
**Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico**

<b>Well ID</b>	<b>Date</b>	<b>T.O.C. (ft amsl)</b>	<b>Depth to Product (ft)</b>	<b>Depth to Water (ft)</b>	<b>NAPL Thickness (ft)</b>
<b>MPE-56</b>	25-Aug-11	TBD		14.28	
<b>MPE-56</b>	15-Nov-11	TBD		14.30	
<b>MPE-57</b>	18-Jun-10	TBD		--	
<b>MPE-57</b>	17-Aug-10	TBD		14.63	
<b>MPE-57</b>	12-Nov-10	TBD		14.75	
<b>MPE-57</b>	03-Mar-11	TBD		14.67	
<b>MPE-57</b>	19-May-11	TBD		14.68	
<b>MPE-57</b>	25-Aug-11	TBD		15.09	
<b>MPE-57</b>	15-Nov-11	TBD		15.00	
<b>MPE-58</b>	18-Jun-10	TBD		--	
<b>MPE-58</b>	17-Aug-10	TBD		14.86	
<b>MPE-58</b>	12-Nov-10	TBD		14.99	
<b>MPE-58</b>	03-Mar-11	TBD		15.06	
<b>MPE-58</b>	19-May-11	TBD		14.96	
<b>MPE-58</b>	25-Aug-11	TBD		15.27	
<b>MPE-58</b>	15-Nov-11	TBD		15.32	

**FIGURE 1**

GENERAL SITE PLAN  
THRIFTWAY REFINERY  
626 ROAD 5500  
BLOOMFIELD, NEW MEXICO



Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
N. Willis	February 2, 2009
REVISIONS BY:	DATE REVISED:
C. Lameman	December 5, 2011
CHECKED BY:	DATE CHECKED:
D. Watson	December 6, 2011
APPROVED BY:	DATE APPROVED:
E. McNally	February 10, 2012

LEGEND  
MONITOR WELL LOCATIONS



**FIGURE 2**

**GROUNDWATER ELEVATION  
CONTOURS**

**NOVEMBER 2011**

THRIFTWAY REFINERY  
626 ROAD 5500  
BLOOMFIELD, NEW MEXICO



Animas Environmental Services, LLC

**DRAWN BY:**

N. Willis  
February 2, 2009

**REVISIONS BY:**

C. Lameman  
December 5, 2011

**CHECKED BY:**

D. Watson  
December 6, 2011

**APPROVED BY:**  
E. McInally

**DATE APPROVED:**  
February 10, 2012

**LEGEND**

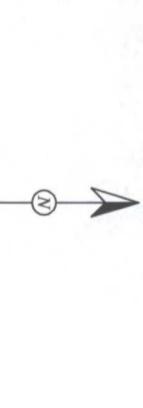
MONITOR WELL LOCATIONS  
5440.26 GROUNDWATER ELEVATION IN FEET  
(AMSL)

5434 — GROUNDWATER ELEVATION  
CONTOUR IN FEET (AMSL)

NOTE: GROUNDWATER MEASUREMENTS  
WERE MADE ON NOVEMBER 15 - 22, 2011.  
LOCATIONS OF TW-45 THROUGH TW-50 ARE  
APPROXIMATE.

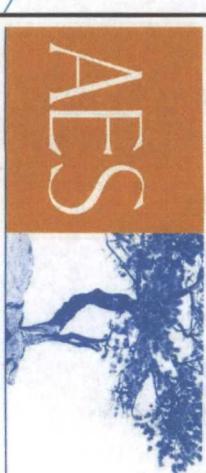
GROUNDWATER ELEVATION  
REFINERY AND MW-5  
LINE

ARROYO



**FIGURE 3**

**FREE PRODUCT THICKNESS  
CONTOURS**  
NOVEMBER 2011  
THRIFTWAY REFINERY  
626 ROAD 5500  
BLOOMFIELD, NEW MEXICO



**FIGURE 4**

**DISSOLVED BENZENE  
CONCENTRATION CONTOURS  
NOVEMBER 2011**

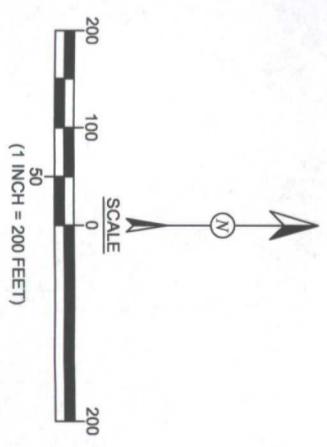
THRIFTWAY REFINERY  
626 ROAD 5500  
BLOOMFIELD, NEW MEXICO



NOTE: ALL SAMPLES WERE COLLECTED ON NOVEMBER 17 AND 22, 2011. ALL SAMPLES ANALYZED PER EPA METHOD 8260B. ALL ANALYTICAL RESULTS REPORTED AS  $\mu\text{g/L}$  (PPB). LOCATIONS OF TW-45 THROUGH TW-50 ARE APPROXIMATE.

**LEGEND**

- MONITOR WELL LOCATIONS
- DISSOLVED BENZENE CONCENTRATIONS
- DISSOLVED BENZENE CONCENTRATION CONTOURS



**FIGURE 5**

DISSOLVED MTBE  
CONCENTRATION CONTOURS  
NOVEMBER 2011

THRIFTWAY REFINERY  
626 ROAD 5500  
BLOOMFIELD, NEW MEXICO



Animas Environmental Services, LLC

DRAWN BY: N. Willis	DATE DRAWN: February 2, 2009
REVISIONS BY: C. Lameman	DATE REVISED: February 17, 2012
CHECKED BY: E. McNally	DATE CHECKED: February 17, 2012

APPROVED BY:  
E. McNally  
DATE APPROVED:  
February 17, 2012

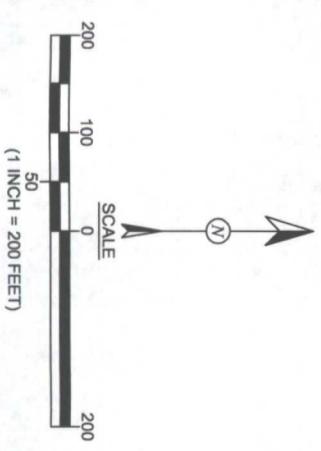
**LEGEND**

● MONITOR WELL LOCATIONS

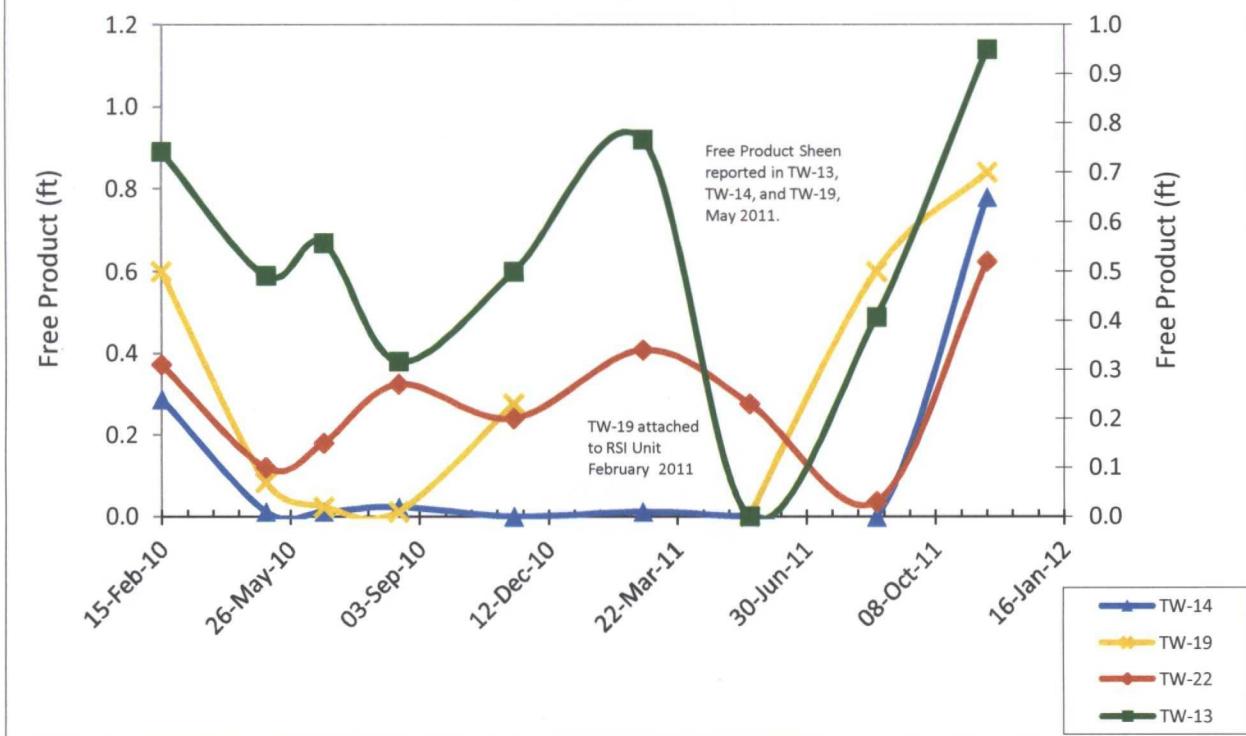
140 DISSOLVED MTBE CONCENTRATIONS

— 10 DISSOLVED MTBE CONCENTRATION CONTOURS

NOTE: ALL SAMPLED WERE COLLECTED ON NOVEMBER 17 AND 22, 2011. ALL SAMPLES ANALYZED PER EPA METHOD 8260B. ALL ANALYTICAL RESULTS REPORTED AS µg/L (PPB). LOCATIONS OF TW-45 THROUGH TW-50 ARE APPROXIMATE.



Graph 1. Selected Wells with Free Product Over Time,  
Former Thriftway Refinery #810, Bloomfield, NM





## COVER LETTER

Thursday, December 15, 2011

Ross Kennemer  
Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401

TEL: (505) 564-2281  
FAX (505) 324-2022

RE: Former Thirftway Refinery #810

Order No.: 1111806

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory, Inc. received 7 sample(s) on 11/18/2011 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued December 07, 2011

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901  
AZ license # AZ0682

**Hall Environmental Analysis Laboratory, Inc.**

Date: 15-Dec-11

**CLIENT:** Animas Environmental Services  
**Project:** Former Thirstway Refinery #810  
**Lab Order:** 1111806

**CASE NARRATIVE**

## Analytical notes regarding eC:

The water sample temperatures rose above 6 degrees C for 2 days, while at the laboratory, due to a power outage.

# Hall Environmental Analysis Laboratory, Inc.

Date: 15-Dec-11  
Analytical Report

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b> TW-7			
<b>Lab Order:</b>	1111806	<b>Collection Date:</b> 11/17/2011 9:38:00 AM			
<b>Project:</b>	Former Thirftway Refinery #810	<b>Date Received:</b> 11/18/2011			
<b>Lab ID:</b>	1111806-01	<b>Matrix:</b> AQUEOUS			

<b>Analyses</b>	<b>Result</b>	<b>PQL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>	
<b>EPA METHOD 8015B: DIESEL RANGE</b>							
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/22/2011 12:57:42 AM	Analyst: JB
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/22/2011 12:57:42 AM	
Surr: DNOP	97.6	81.1-147		%REC	1	11/22/2011 12:57:42 AM	
<b>EPA METHOD 8015B: GASOLINE RANGE</b>							
Gasoline Range Organics (GRO)	1.4	0.050		mg/L	1	11/21/2011 7:10:15 PM	Analyst: RAA
Surr: BFB	144	65.4-141	S	%REC	1	11/21/2011 7:10:15 PM	
<b>EPA METHOD 300.0: ANIONS</b>							
Fluoride	0.51	0.10		mg/L	1	11/29/2011 12:39:11 AM	Analyst: BRM
Chloride	40	10		mg/L	20	11/19/2011 3:34:42 AM	
Bromide	ND	0.50		mg/L	5	11/29/2011 12:50:25 AM	
Sulfate	2800	50		mg/L	100	11/22/2011 12:47:04 AM	
<b>SM2340B: HARDNESS</b>							
Hardness (As CaCO <sub>3</sub> )	1400	1.0		mg/L	1	11/23/2011	Analyst: ELS
<b>EPA METHOD 7470: MERCURY</b>							
Mercury	ND	0.00020		mg/L	1	11/21/2011 2:01:47 PM	Analyst: JLF
<b>EPA METHOD 6010B: DISSOLVED METALS</b>							
Calcium	490	10		mg/L	10	11/23/2011 1:55:15 PM	Analyst: ELS
Magnesium	53	1.0		mg/L	1	11/23/2011 12:33:35 PM	
Potassium	2.3	1.0		mg/L	1	11/23/2011 12:33:35 PM	
Sodium	770	10		mg/L	10	11/23/2011 1:55:15 PM	
<b>EPA 6010B: TOTAL RECOVERABLE METALS</b>							
Arsenic	ND	0.020		mg/L	1	11/22/2011 7:06:49 AM	Analyst: ELS
Barium	0.21	0.020		mg/L	1	11/23/2011 12:23:20 PM	
Cadmium	ND	0.0020		mg/L	1	11/23/2011 12:23:20 PM	
Chromium	0.0064	0.0060		mg/L	1	11/23/2011 12:23:20 PM	
Lead	ND	0.0050		mg/L	1	11/22/2011 7:06:49 AM	
Selenium	ND	0.050		mg/L	1	11/22/2011 7:06:49 AM	
Silver	ND	0.0050		mg/L	1	11/23/2011 12:23:20 PM	
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							
Benzene	1.5	1.0		µg/L	1	11/23/2011 12:27:37 AM	Analyst: NSB
Toluene	19	1.0		µg/L	1	11/23/2011 12:27:37 AM	
Ethylbenzene	100	5.0		µg/L	5	11/23/2011 9:07:46 PM	
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/23/2011 12:27:37 AM	

**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: 15-Dec-11**  
**Analytical Report**

**CLIENT:** Animas Environmental Services  
**Lab Order:** 1111806  
**Project:** Former Thirftway Refinery #810  
**Lab ID:** 1111806-01

**Client Sample ID:** TW-7  
**Collection Date:** 11/17/2011 9:38:00 AM  
**Date Received:** 11/18/2011  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Analyst
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							
Naphthalene	25	2.0		µg/L	1	11/23/2011 12:27:37 AM	
1-Methylnaphthalene	5.6	4.0		µg/L	1	11/23/2011 12:27:37 AM	
2-Methylnaphthalene	9.4	4.0		µg/L	1	11/23/2011 12:27:37 AM	
Xylenes, Total	45	2.0		µg/L	1	11/23/2011 12:27:37 AM	
Surr: 1,2-Dichloroethane-d4	99.5	70-130	%REC		1	11/23/2011 12:27:37 AM	
Surr: 4-Bromofluorobenzene	101	73-131	%REC		1	11/23/2011 12:27:37 AM	
Surr: Dibromofluoromethane	92.6	70-130	%REC		1	11/23/2011 12:27:37 AM	
Surr: Toluene-d8	92.9	70-130	%REC		1	11/23/2011 12:27:37 AM	
<b>EPA 120.1: SPECIFIC CONDUCTANCE</b>							
Specific Conductance	4300	0.010		µmhos/cm	1	11/29/2011 2:43:00 PM	
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							
Total Dissolved Solids	4230	40.0		mg/L	1	11/29/2011 12:53:00 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: 15-Dec-11

Analytical Report

<b>CLIENT:</b>	Animas Environmental Services		<b>Client Sample ID:</b> TW-18			
<b>Lab Order:</b>	1111806		<b>Collection Date:</b> 11/17/2011 10:13:00 AM			
<b>Project:</b>	Former Thirftway Refinery #810		<b>Date Received:</b> 11/18/2011			
<b>Lab ID:</b>	1111806-02		<b>Matrix:</b> AQUEOUS			
Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: JB
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/22/2011 1:31:36 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/22/2011 1:31:36 AM
Surr: DNOP	101	81.1-147		%REC	1	11/22/2011 1:31:36 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	0.12	0.050		mg/L	1	11/21/2011 9:05:35 PM
Surr: BFB	102	65.4-141		%REC	1	11/21/2011 9:05:35 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: BRM
Fluoride	0.73	0.50		mg/L	5	12/1/2011 5:00:57 AM
Chloride	66	2.5		mg/L	5	12/1/2011 5:00:57 AM
Bromide	0.26	0.10		mg/L	1	11/29/2011 1:24:06 AM
Sulfate	4700	50		mg/L	100	12/1/2011 4:49:44 AM
<b>SM2340B: HARDNESS</b>						Analyst: ELS
Hardness (As CaCO <sub>3</sub> )	1400	1.0		mg/L	1	11/23/2011
<b>EPA METHOD 7470: MERCURY</b>						Analyst: JLF
Mercury	ND	0.00020		mg/L	1	11/21/2011 2:03:32 PM
<b>EPA METHOD 6010B: DISSOLVED METALS</b>						Analyst: ELS
Calcium	480	20		mg/L	20	11/23/2011 1:57:18 PM
Magnesium	49	1.0		mg/L	1	11/23/2011 12:41:50 PM
Potassium	4.1	1.0		mg/L	1	11/23/2011 12:41:50 PM
Sodium	1100	20		mg/L	20	11/23/2011 1:57:18 PM
<b>EPA 6010B: TOTAL RECOVERABLE METALS</b>						Analyst: ELS
Arsenic	ND	0.020		mg/L	1	11/22/2011 7:09:02 AM
Barium	0.14	0.020		mg/L	1	11/23/2011 12:27:08 PM
Cadmium	ND	0.0020		mg/L	1	11/23/2011 12:27:08 PM
Chromium	0.0088	0.0060		mg/L	1	11/23/2011 12:27:08 PM
Lead	0.0058	0.0050		mg/L	1	11/22/2011 7:09:02 AM
Selenium	ND	0.050		mg/L	1	11/22/2011 7:09:02 AM
Silver	ND	0.0050		mg/L	1	11/23/2011 12:27:08 PM
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						Analyst: NSB
Benzene	1.9	1.0		µg/L	1	11/23/2011 12:55:37 AM
Toluene	ND	1.0		µg/L	1	11/23/2011 12:55:37 AM
Ethylbenzene	13	1.0		µg/L	1	11/23/2011 12:55:37 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/23/2011 12:55:37 AM

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: 15-Dec-11  
Analytical Report

**CLIENT:** Animas Environmental Services  
**Lab Order:** 1111806  
**Project:** Former Thirftway Refinery #810  
**Lab ID:** 1111806-02

**Client Sample ID:** TW-18  
**Collection Date:** 11/17/2011 10:13:00 AM  
**Date Received:** 11/18/2011  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	
<b>EPA METHOD 8280: VOLATILES SHORT LIST</b>							
Naphthalene	ND	2.0		µg/L	1	11/23/2011 12:55:37 AM	Analyst: NSB
1-Methylnaphthalene	ND	4.0		µg/L	1	11/23/2011 12:55:37 AM	
2-Methylnaphthalene	ND	4.0		µg/L	1	11/23/2011 12:55:37 AM	
Xylenes, Total	ND	2.0		µg/L	1	11/23/2011 12:55:37 AM	
Surr: 1,2-Dichloroethane-d4	96.9	70-130	%REC		1	11/23/2011 12:55:37 AM	
Surr: 4-Bromofluorobenzene	99.4	73-131	%REC		1	11/23/2011 12:55:37 AM	
Surr: Dibromofluoromethane	96.2	70-130	%REC		1	11/23/2011 12:55:37 AM	
Surr: Toluene-d8	96.2	70-130	%REC		1	11/23/2011 12:55:37 AM	
<b>EPA 120.1: SPECIFIC CONDUCTANCE</b>							
Specific Conductance	5400	0.010		µmhos/cm	1	11/29/2011 2:47:00 PM	Analyst: IC
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							
Total Dissolved Solids	5360	40.0		mg/L	1	11/29/2011 12:53:00 PM	Analyst: KS

## 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: 15-Dec-11

Analytical Report

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b>	TW-30
<b>Lab Order:</b>	1111806	<b>Collection Date:</b>	11/17/2011 11:02:00 AM
<b>Project:</b>	Former Thirftway Refinery #810	<b>Date Received:</b>	11/18/2011
<b>Lab ID:</b>	1111806-03	<b>Matrix:</b>	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/22/2011 2:04:56 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/22/2011 2:04:56 AM
Surr: DNOP	102	81.1-147		%REC	1	11/22/2011 2:04:56 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						
Gasoline Range Organics (GRO)	0.16	0.050		mg/L	1	11/22/2011 12:27:17 AM
Surr: BFB	102	65.4-141		%REC	1	11/22/2011 12:27:17 AM
<b>EPA METHOD 300.0: ANIONS</b>						
Fluoride	ND	1.0		mg/L	10	12/1/2011 4:38:30 AM
Chloride	1400	50		mg/L	100	11/22/2011 1:09:32 AM
Bromide	3.1	1.0		mg/L	10	12/1/2011 4:38:30 AM
Sulfate	1900	50		mg/L	100	11/22/2011 1:09:32 AM
<b>SM2340B: HARDNESS</b>						
Hardness (As CaCO <sub>3</sub> )	1900	1.0		mg/L	1	11/23/2011
<b>EPA METHOD 7470: MERCURY</b>						
Mercury	ND	0.00020		mg/L	1	11/21/2011 2:08:49 PM
<b>EPA METHOD 6010B: DISSOLVED METALS</b>						
Calcium	670	20		mg/L	20	11/23/2011 1:59:21 PM
Magnesium	61	1.0		mg/L	1	11/23/2011 12:46:53 PM
Potassium	9.3	1.0		mg/L	1	11/23/2011 12:46:53 PM
Sodium	1500	20		mg/L	20	11/23/2011 1:59:21 PM
<b>EPA 6010B: TOTAL RECOVERABLE METALS</b>						
Arsenic	0.040	0.020		mg/L	1	11/22/2011 7:11:30 AM
Barium	0.41	0.020		mg/L	1	11/23/2011 12:29:30 PM
Cadmium	ND	0.0020		mg/L	1	11/23/2011 12:29:30 PM
Chromium	0.011	0.0060		mg/L	1	11/23/2011 12:29:30 PM
Lead	ND	0.0050		mg/L	1	11/22/2011 7:11:30 AM
Selenium	ND	0.050		mg/L	1	11/22/2011 7:11:30 AM
Silver	ND	0.0050		mg/L	1	11/23/2011 12:29:30 PM
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						
Benzene	4.9	1.0		µg/L	1	11/23/2011 9:35:38 PM
Toluene	ND	1.0		µg/L	1	11/23/2011 9:35:38 PM
Ethylbenzene	ND	1.0		µg/L	1	11/23/2011 9:35:38 PM
Methyl tert-butyl ether (MTBE)	7.9	1.0		µg/L	1	11/23/2011 9:35:38 PM

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level  
 E Estimated value  
 J Analyte detected below quantitation limits  
 NC Non-Chlorinated  
 PQL Practical Quantitation Limit

B Analytic 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: 15-Dec-11  
Analytical Report

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b>	TW-30
<b>Lab Order:</b>	1111806	<b>Collection Date:</b>	11/17/2011 11:02:00 AM
<b>Project:</b>	Former Thirstway Refinery #810	<b>Date Received:</b>	11/18/2011
<b>Lab ID:</b>	1111806-03	<b>Matrix:</b>	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Analyst
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							
Naphthalene	ND	2.0		µg/L	1	11/23/2011 9:35:38 PM	
1-Methylnaphthalene	ND	4.0		µg/L	1	11/23/2011 9:35:38 PM	
2-Methylnaphthalene	ND	4.0		µg/L	1	11/23/2011 9:35:38 PM	
Xylenes, Total	ND	2.0		µg/L	1	11/23/2011 9:35:38 PM	
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	11/23/2011 9:35:38 PM	
Surr: 4-Bromofluorobenzene	104	73-131		%REC	1	11/23/2011 9:35:38 PM	
Surr: Dibromofluoromethane	102	70-130		%REC	1	11/23/2011 9:35:38 PM	
Surr: Toluene-d8	99.8	70-130		%REC	1	11/23/2011 9:35:38 PM	
<b>EPA 120.1: SPECIFIC CONDUCTANCE</b>							
Specific Conductance	7300	0.010		µmhos/cm	1	11/29/2011 2:52:00 PM	Analyst: IC
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							
Total Dissolved Solids	6310	100		mg/L	1	11/29/2011 12:53:00 PM	Analyst: KS

## 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: 15-Dec-11

Analytical Report

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b>	TW-50
<b>Lab Order:</b>	1111806	<b>Collection Date:</b>	11/17/2011 12:15:00 PM
<b>Project:</b>	Former Thirstway Refinery #810	<b>Date Received:</b>	11/18/2011
<b>Lab ID:</b>	1111806-04	<b>Matrix:</b>	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/22/2011 2:38:17 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/22/2011 2:38:17 AM
Surr: DNOP	104	81.1-147		%REC	1	11/22/2011 2:38:17 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						
Gasoline Range Organics (GRO)	0.84	0.25		mg/L	5	11/22/2011 12:56:05 AM
Surr: BFB	105	65.4-141		%REC	5	11/22/2011 12:56:05 AM
<b>EPA METHOD 300.0: ANIONS</b>						
Fluoride	ND	0.50		mg/L	5	12/1/2011 4:27:16 AM
Chloride	990	50		mg/L	100	11/22/2011 1:32:00 AM
Bromide	0.64	0.50		mg/L	5	12/1/2011 4:27:16 AM
Sulfate	1100	50		mg/L	100	11/22/2011 1:32:00 AM
<b>SM2340B: HARDNESS</b>						
Hardness (As CaCO <sub>3</sub> )	1400	1.0		mg/L	1	11/23/2011
<b>EPA METHOD 7470: MERCURY</b>						
Mercury	ND	0.00020		mg/L	1	11/21/2011 2:10:35 PM
<b>EPA METHOD 6010B: DISSOLVED METALS</b>						
Calcium	480	10		mg/L	10	11/23/2011 2:01:29 PM
Magnesium	55	1.0		mg/L	1	11/23/2011 12:49:01 PM
Potassium	5.7	1.0		mg/L	1	11/23/2011 12:49:01 PM
Sodium	900	10		mg/L	10	11/23/2011 2:01:29 PM
<b>EPA 6010B: TOTAL RECOVERABLE METALS</b>						
Arsenic	ND	0.020		mg/L	1	11/22/2011 7:15:09 AM
Barium	0.10	0.020		mg/L	1	11/23/2011 12:31:42 PM
Cadmium	ND	0.0020		mg/L	1	11/23/2011 12:31:42 PM
Chromium	ND	0.0060		mg/L	1	11/23/2011 12:31:42 PM
Lead	ND	0.0050		mg/L	1	11/22/2011 7:15:09 AM
Selenium	ND	0.050		mg/L	1	11/22/2011 7:15:09 AM
Silver	ND	0.0050		mg/L	1	11/23/2011 12:31:42 PM
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						
Benzene	ND	1.0		µg/L	1	11/23/2011 10:03:43 PM
Toluene	ND	1.0		µg/L	1	11/23/2011 10:03:43 PM
Ethylbenzene	14	1.0		µg/L	1	11/23/2011 10:03:43 PM
Methyl tert-butyl ether (MTBE)	18	1.0		µg/L	1	11/23/2011 10:03:43 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: 15-Dec-11  
Analytical Report

**CLIENT:** Animas Environmental Services  
**Lab Order:** 1111806  
**Project:** Former Thirftway Refinery #810  
**Lab ID:** 1111806-04

**Client Sample ID:** TW-50  
**Collection Date:** 11/17/2011 12:15:00 PM  
**Date Received:** 11/18/2011  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						
Naphthalene	ND	2.0		µg/L	1	11/23/2011 10:03:43 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	11/23/2011 10:03:43 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	11/23/2011 10:03:43 PM
Xylenes, Total	10	2.0		µg/L	1	11/23/2011 10:03:43 PM
Surr: 1,2-Dichloroethane-d4	99.7	70-130	%REC		1	11/23/2011 10:03:43 PM
Surr: 4-Bromofluorobenzene	104	73-131	%REC		1	11/23/2011 10:03:43 PM
Surr: Dibromofluoromethane	96.4	70-130	%REC		1	11/23/2011 10:03:43 PM
Surr: Toluene-d8	97.1	70-130	%REC		1	11/23/2011 10:03:43 PM
<b>EPA 120.1: SPECIFIC CONDUCTANCE</b>						
Specific Conductance	5300	0.010		µmhos/cm	1	11/29/2011 2:56:00 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						
Total Dissolved Solids	4160	40.0		mg/L	1	11/29/2011 12:53:00 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: 15-Dec-11  
Analytical Report

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b> TW-11			
<b>Lab Order:</b>	1111806	<b>Collection Date:</b> 11/17/2011 9:38:00 AM			
<b>Project:</b>	Former Thirftway Refinery #810	<b>Date Received:</b> 11/18/2011			
<b>Lab ID:</b>	1111806-05	<b>Matrix:</b> AQUEOUS			

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/22/2011 3:11:55 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/22/2011 3:11:55 AM
Surr: DNOP	99.4	81.1-147		%REC	1	11/22/2011 3:11:55 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/22/2011 1:53:40 AM
Surr: BFB	98.8	65.4-141		%REC	1	11/22/2011 1:53:40 AM
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						
Benzene	ND	1.0		µg/L	1	11/23/2011 10:31:42 PM
Toluene	ND	1.0		µg/L	1	11/23/2011 10:31:42 PM
Ethylbenzene	ND	1.0		µg/L	1	11/23/2011 10:31:42 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/23/2011 10:31:42 PM
Naphthalene	ND	2.0		µg/L	1	11/23/2011 10:31:42 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	11/23/2011 10:31:42 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	11/23/2011 10:31:42 PM
Xylenes, Total	ND	2.0		µg/L	1	11/23/2011 10:31:42 PM
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%REC	1	11/23/2011 10:31:42 PM
Surr: 4-Bromofluorobenzene	103	73-131		%REC	1	11/23/2011 10:31:42 PM
Surr: Dibromofluoromethane	93.8	70-130		%REC	1	11/23/2011 10:31:42 PM
Surr: Toluene-d8	97.7	70-130		%REC	1	11/23/2011 10:31:42 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: 15-Dec-11  
Analytical Report

<b>CLIENT:</b>	Animas Environmental Services		<b>Client Sample ID:</b> TW-31			
<b>Lab Order:</b>	1111806		<b>Collection Date:</b> 11/17/2011 11:40:00 AM			
<b>Project:</b>	Former Thirftway Refinery #810		<b>Date Received:</b> 11/18/2011			
<b>Lab ID:</b>	1111806-06		<b>Matrix:</b> AQUEOUS			
Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: JB
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	11/22/2011 3:46:05 AM	
Motor Oil Range Organics (MRO)	ND	5.0	mg/L	1	11/22/2011 3:46:05 AM	
Surr: DNOP	100	81.1-147	%REC	1	11/22/2011 3:46:05 AM	
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	11/22/2011 2:22:27 AM	
Surr: BFB	97.8	65.4-141	%REC	1	11/22/2011 2:22:27 AM	
<b>EPA METHOD 8280: VOLATILES SHORT LIST</b>						Analyst: NSB
Benzene	ND	1.0	µg/L	1	11/23/2011 10:59:47 PM	
Toluene	ND	1.0	µg/L	1	11/23/2011 10:59:47 PM	
Ethylbenzene	ND	1.0	µg/L	1	11/23/2011 10:59:47 PM	
Methyl tert-butyl ether (MTBE)	1.7	1.0	µg/L	1	11/23/2011 10:59:47 PM	
Naphthalene	ND	2.0	µg/L	1	11/23/2011 10:59:47 PM	
1-Methylnaphthalene	ND	4.0	µg/L	1	11/23/2011 10:59:47 PM	
2-Methylnaphthalene	ND	4.0	µg/L	1	11/23/2011 10:59:47 PM	
Xylenes, Total	ND	2.0	µg/L	1	11/23/2011 10:59:47 PM	
Surr: 1,2-Dichloroethane-d4	92.2	70-130	%REC	1	11/23/2011 10:59:47 PM	
Surr: 4-Bromofluorobenzene	108	73-131	%REC	1	11/23/2011 10:59:47 PM	
Surr: Dibromofluoromethane	93.5	70-130	%REC	1	11/23/2011 10:59:47 PM	
Surr: Toluene-d8	98.3	70-130	%REC	1	11/23/2011 10:59:47 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: 15-Dec-11  
Analytical Report

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b>	TW-39
<b>Lab Order:</b>	1111806	<b>Collection Date:</b>	11/17/2011 1:42:00 PM
<b>Project:</b>	Former Thirftway Refinery #810	<b>Date Received:</b>	11/18/2011
<b>Lab ID:</b>	1111806-07	<b>Matrix:</b>	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/22/2011 4:20:14 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/22/2011 4:20:14 AM
Surr: DNOP	102	81.1-147		%REC	1	11/22/2011 4:20:14 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						
Gasoline Range Organics (GRO)	1.4	0.25		mg/L	5	11/22/2011 2:51:17 AM
Surr: BFB	128	65.4-141		%REC	5	11/22/2011 2:51:17 AM
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						
Benzene	9.0	5.0		µg/L	5	11/23/2011 11:27:50 PM
Toluene	ND	5.0		µg/L	5	11/23/2011 11:27:50 PM
Ethylbenzene	82	5.0		µg/L	5	11/23/2011 11:27:50 PM
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	11/23/2011 11:27:50 PM
Naphthalene	ND	10		µg/L	5	11/23/2011 11:27:50 PM
1-Methylnaphthalene	ND	20		µg/L	5	11/23/2011 11:27:50 PM
2-Methylnaphthalene	ND	20		µg/L	5	11/23/2011 11:27:50 PM
Xylenes, Total	ND	10		µg/L	5	11/23/2011 11:27:50 PM
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%REC	5	11/23/2011 11:27:50 PM
Surr: 4-Bromofluorobenzene	104	73-131		%REC	5	11/23/2011 11:27:50 PM
Surr: Dibromofluoromethane	96.6	70-130		%REC	5	11/23/2011 11:27:50 PM
Surr: Toluene-d8	97.8	70-130		%REC	5	11/23/2011 11:27:50 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

**QA/QC SUMMARY REPORT**

**Client:** Animas Environmental Services  
**Project:** Former Thirftway Refinery #810      **Work Order:** 1111806

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: EPA Method 300.0: Anions</b>											
Sample ID: 1111806-01CMSD		MSD					Batch ID: R49283		Analysis Date:	11/29/2011 1:12:53 AM	
Fluoride	1.079	mg/L	0.10	0.5	0.5593	104	71.7	114	3.50	20	
Bromide	3.036	mg/L	0.10	2.5	0.171	115	82	112	9.57	20	S
Sample ID: MB		MBLK					Batch ID: R49195		Analysis Date:	11/18/2011 12:25:01 PM	
Chloride	ND	mg/L	0.50								
Bromide	ND	mg/L	0.10								
Sulfate	ND	mg/L	0.50								
Sample ID: MB		MBLK					Batch ID: R49195		Analysis Date:	11/18/2011 10:31:25 PM	
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.50								
Bromide	ND	mg/L	0.10								
Sulfate	ND	mg/L	0.50								
Sample ID: MB		MBLK					Batch ID: R49230		Analysis Date:	11/21/2011 1:33:18 PM	
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.50								
Bromide	ND	mg/L	0.10								
Sulfate	ND	mg/L	0.50								
Sample ID: MB		MBLK					Batch ID: R49283		Analysis Date:	11/28/2011 4:58:49 PM	
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.50								
Bromide	ND	mg/L	0.10								
Sulfate	ND	mg/L	0.50								
Sample ID: MB		MBLK					Batch ID: R49374		Analysis Date:	11/30/2011 10:51:05 AM	
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.50								
Bromide	ND	mg/L	0.10								
Sulfate	ND	mg/L	0.50								
Sample ID: MB		MBLK					Batch ID: R49374		Analysis Date:	11/30/2011 8:13:07 PM	
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.50								
Bromide	ND	mg/L	0.10								
Sulfate	ND	mg/L	0.50								
Sample ID: LCS		LCS					Batch ID: R49195		Analysis Date:	11/18/2011 12:36:14 PM	
Chloride	4.839	mg/L	0.50	5	0	96.8	90	110			
Bromide	2.290	mg/L	0.10	2.5	0	91.6	90	110			
Sulfate	9.836	mg/L	0.50	10	0	98.4	90	110			
Sample ID: LCS		LCS					Batch ID: R49195		Analysis Date:	11/18/2011 10:42:39 PM	
Fluoride	0.4991	mg/L	0.10	0.5	0	99.8	90	110			
Chloride	4.847	mg/L	0.50	5	0	96.9	90	110			
Bromide	2.295	mg/L	0.10	2.5	0	91.8	90	110			
Sulfate	9.807	mg/L	0.50	10	0	98.1	90	110			
Sample ID: LCS		LCS					Batch ID: R49230		Analysis Date:	11/21/2011 1:44:32 PM	
Fluoride	0.4634	mg/L	0.10	0.5	0	92.7	90	110			

**Qualifiers:**

E Estimated value  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
NC Non-Chlorinated  
R RPD outside accepted recovery limits

# QA/QC SUMMARY REPORT

**Client:** Animas Environmental Services  
**Project:** Former Thirftway Refinery #810

**Work Order:** 1111806

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: EPA Method 300.0: Anions</b>											
Sample ID: LCS		LCS					Batch ID: R49230		Analysis Date:	11/21/2011 1:44:32 PM	
Chloride	4.729	mg/L	0.50	5	0	94.6	90	110			
Bromide	2.237	mg/L	0.10	2.5	0	89.5	90	110			S
Sulfate	9.638	mg/L	0.50	10	0	96.4	90	110			
Sample ID: LCS		LCS					Batch ID: R49283		Analysis Date:	11/28/2011 5:10:03 PM	
Fluoride	0.4619	mg/L	0.10	0.5	0	92.4	90	110			
Chloride	4.767	mg/L	0.50	5	0	95.3	90	110			
Bromide	2.343	mg/L	0.10	2.5	0	93.7	90	110			
Sulfate	9.680	mg/L	0.50	10	0	96.8	90	110			
Sample ID: LCS		LCS					Batch ID: R49374		Analysis Date:	11/30/2011 11:02:19 AM	
Fluoride	0.4961	mg/L	0.10	0.5	0	99.2	90	110			
Chloride	4.893	mg/L	0.50	5	0.12	95.5	90	110			
Bromide	2.311	mg/L	0.10	2.5	0	92.4	90	110			
Sulfate	9.835	mg/L	0.50	10	0	98.3	90	110			
Sample ID: LCS		LCS					Batch ID: R49374		Analysis Date:	11/30/2011 8:24:21 PM	
Fluoride	0.5122	mg/L	0.10	0.5	0	102	90	110			
Chloride	4.835	mg/L	0.50	5	0	96.7	90	110			
Bromide	2.384	mg/L	0.10	2.5	0	95.4	90	110			
Sulfate	9.652	mg/L	0.50	10	0	96.5	90	110			
Sample ID: 1111806-01CMS		MS					Batch ID: R49283		Analysis Date:	11/29/2011 1:01:39 AM	
Fluoride	1.042	mg/L	0.10	0.5	0.5593	96.5	71.7	114			
Bromide	2.759	mg/L	0.10	2.5	0.171	104	82	112			
<b>Method: EPA Method 8015B: Diesel Range</b>											
Sample ID: MB-29454		MBLK					Batch ID: 29454		Analysis Date:	11/21/2011 6:09:26 PM	
Diesel Range Organics (DRO)	ND	mg/L	1.0								
Motor Oil Range Organics (MRO)	ND	mg/L	5.0								
Sample ID: LCS-29454		LCS					Batch ID: 29454		Analysis Date:	11/21/2011 6:43:18 PM	
Diesel Range Organics (DRO)	5.053	mg/L	1.0	5	0	101	74	157			
Sample ID: LCSD-29454		LCSD					Batch ID: 29454		Analysis Date:	11/21/2011 7:17:42 PM	
Diesel Range Organics (DRO)	5.284	mg/L	1.0	5	0	105	74	157	4.10		23
<b>Method: EPA Method 8015B: Gasoline Range</b>											
Sample ID: 1111806-01A MSD		MSD					Batch ID: R49225		Analysis Date:	11/21/2011 8:07:54 PM	
Gasoline Range Organics (GRO)	1.912	mg/L	0.050	0.5	1.416	99.2	66.1	127	4.04		15.5
Sample ID: 5ML-RB		MBLK					Batch ID: R49225		Analysis Date:	11/21/2011 1:04:36 PM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: 2.5UG GRO LCS		LCS					Batch ID: R49225		Analysis Date:	11/21/2011 12:35:47 PM	
Gasoline Range Organics (GRO)	0.5136	mg/L	0.050	0.5	0	103	92.1	117			
Sample ID: 1111806-01A MS		MS					Batch ID: R49225		Analysis Date:	11/21/2011 7:39:04 PM	
Gasoline Range Organics (GRO)	1.991	mg/L	0.050	0.5	1.416	115	66.1	127			

**Qualifiers:**

E Estimated value  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
NC Non-Chlorinated  
R RPD outside accepted recovery limits

## QA/QC SUMMARY REPORT

**Client:** Animas Environmental Services  
**Project:** Former Thirftway Refinery #810      **Work Order:** 1111806

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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**Method:** EPA Method 8260: Volatiles Short List

Sample ID: 5ml rb	MBLK						Batch ID: R49238	Analysis Date: 11/22/2011 10:50:44 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							
Naphthalene	ND	µg/L	2.0							
1-Methylnaphthalene	ND	µg/L	4.0							
2-Methylnaphthalene	ND	µg/L	4.0							
Xylenes, Total	ND	µg/L	2.0							
Sample ID: 5ml rb	MBLK						Batch ID: R49258	Analysis Date: 11/23/2011 9:26:43 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							
Naphthalene	ND	µg/L	2.0							
1-Methylnaphthalene	ND	µg/L	4.0							
2-Methylnaphthalene	ND	µg/L	4.0							
Xylenes, Total	ND	µg/L	2.0							
Sample ID: 100ng lcs-c	LCS						Batch ID: R49238	Analysis Date: 11/22/2011 3:59:35 PM		
Benzene	18.60	µg/L	1.0	20	0	93.0	81.1	130		
Toluene	21.55	µg/L	1.0	20	0	108	82.3	122		
Sample ID: 100ng lcs-c	LCS						Batch ID: R49258	Analysis Date: 11/23/2011 3:32:40 PM		
Benzene	19.42	µg/L	1.0	20	0	97.1	81.1	130		
Toluene	20.82	µg/L	1.0	20	0	104	82.3	122		

**Method:** EPA Method 7470: Mercury

Sample ID: MB-29452	MBLK						Batch ID: 29452	Analysis Date: 11/21/2011 1:47:31 PM		
Mercury	ND	mg/L	0.00020							
Sample ID: LCS-29452	LCS						Batch ID: 29452	Analysis Date: 11/21/2011 1:49:18 PM		
Mercury	0.005155	mg/L	0.00020	0.005	0	103	80	120		
Sample ID: LCSD-29452	LCSD						Batch ID: 29452	Analysis Date: 11/21/2011 1:51:04 PM		
Mercury	0.005076	mg/L	0.00020	0.005	0	102	80	120	1.55	0

**Qualifiers:**

E Estimated value  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
NC Non-Chlorinated  
R RPD outside accepted recovery limits

## QA/QC SUMMARY REPORT

**Client:** Animas Environmental Services  
**Project:** Former Thirstway Refinery #810      **Work Order:** 1111806

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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**Method: EPA Method 6010B: Dissolved Metals**

Sample ID: MB		MBLK					Batch ID: R49253	Analysis Date: 11/23/2011 11:44:07 AM		
Calcium	ND	mg/L	1.0							
Magnesium	ND	mg/L	1.0							
Potassium	ND	mg/L	1.0							
Sodium	ND	mg/L	1.0							
Sample ID: LCS		LCS					Batch ID: R49253	Analysis Date: 11/23/2011 11:46:03 AM		
Calcium	53.78	mg/L	1.0	50	0.0899	107	80	120		
Magnesium	53.58	mg/L	1.0	50	0.0937	107	80	120		
Potassium	51.65	mg/L	1.0	50	0	103	80	120		
Sodium	52.35	mg/L	1.0	50	0	105	80	120		
Sample ID: LCSRR		LCSD					Batch ID: R49253	Analysis Date: 11/23/2011 11:48:10 AM		
Calcium	52.79	mg/L	1.0	50	0.0899	105	80	120	1.86	20
Magnesium	52.27	mg/L	1.0	50	0.0937	104	80	120	2.50	20
Potassium	50.41	mg/L	1.0	50	0	101	80	120	2.42	20
Sodium	50.95	mg/L	1.0	50	0	102	80	120	2.71	20

**Method: EPA 6010B: Total Recoverable Metals**

Sample ID: MB-29446		MBLK					Batch ID: 29446	Analysis Date: 11/22/2011 6:44:39 AM		
Arsenic	ND	mg/L	0.020							
Barium	ND	mg/L	0.020							
Cadmium	ND	mg/L	0.0020							
Chromium	ND	mg/L	0.0060							
Lead	ND	mg/L	0.0050							
Selenium	ND	mg/L	0.050							
Silver	ND	mg/L	0.0050							
Sample ID: LCS-29446		LCS					Batch ID: 29446	Analysis Date: 11/22/2011 6:46:31 AM		
Arsenic	0.5078	mg/L	0.020	0.5	0	102	80	120		
Barium	0.4885	mg/L	0.020	0.5	0	97.7	80	120		
Cadmium	0.4824	mg/L	0.0020	0.5	0	98.5	80	120		
Chromium	0.4925	mg/L	0.0060	0.5	0	98.5	80	120		
Lead	0.4807	mg/L	0.0050	0.5	0	96.1	80	120		
Selenium	0.4737	mg/L	0.050	0.5	0	94.7	80	120		
Silver	0.09744	mg/L	0.0050	0.1	0	97.4	80	120		

**Method: SM2540C MOD: Total Dissolved Solids**

Sample ID: MB-29499		MBLK					Batch ID: 29499	Analysis Date: 11/29/2011 12:53:00 PM		
Total Dissolved Solids	ND	mg/L	20.0							
Sample ID: LCS-29499		LCS					Batch ID: 29499	Analysis Date: 11/29/2011 12:53:00 PM		
Total Dissolved Solids	1033	mg/L	20.0	1000	0	103	80	120		

**Qualifiers:**

E Estimated value  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
NC Non-Chlorinated  
R RPD outside accepted recovery limits





## COVER LETTER

Wednesday, December 14, 2011

Ross Kennemer  
Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401

TEL: (505) 564-2281  
FAX (505) 324-2022

RE: Former Thirftway Refinery #810

Order No.: 1111901

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory, Inc. received 10 sample(s) on 11/23/2011 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](http://www.hallenvironmental.com) or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901

AZ license # AZ0682

**CLIENT:** Animas Environmental Services  
**Project:** Former Thirstway Refinery #810  
**Lab Order:** 1111901

**CASE NARRATIVE**

Analytical notes regarding eC, TDS and SO4:

The water sample temperatures rose above 6 degrees C for 2 days, while at the laboratory, due to a power outage.

# Hall Environmental Analysis Laboratory, Inc.

Date: 14-Dec-11  
Analytical Report

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b>	TW-43
<b>Lab Order:</b>	1111901	<b>Collection Date:</b>	11/22/2011 8:55:00 AM
<b>Project:</b>	Former Thirftway Refinery #810	<b>Date Received:</b>	11/23/2011
<b>Lab ID:</b>	1111901-01	<b>Matrix:</b>	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/28/2011 2:16:03 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/28/2011 2:16:03 PM
Surr: DNOP	104	81.1-147		%REC	1	11/28/2011 2:16:03 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						
Gasoline Range Organics (GRO)	0.41	0.050		mg/L	1	11/30/2011 7:52:32 PM
Surr: BFB	93.3	65.4-141		%REC	1	11/30/2011 7:52:32 PM
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						
Benzene	ND	1.0		µg/L	1	11/28/2011 12:06:16 PM
Toluene	1.1	1.0		µg/L	1	11/28/2011 12:06:16 PM
Ethylbenzene	ND	1.0		µg/L	1	11/28/2011 12:06:16 PM
Methyl tert-butyl ether (MTBE)	460	10		µg/L	10	11/28/2011 11:38:27 AM
Naphthalene	ND	2.0		µg/L	1	11/28/2011 12:06:16 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	11/28/2011 12:06:16 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	11/28/2011 12:06:16 PM
Xylenes, Total	ND	2.0		µg/L	1	11/28/2011 12:06:16 PM
Surr: 1,2-Dichloroethane-d4	75.7	70-130		%REC	1	11/28/2011 12:06:16 PM
Surr: 4-Bromofluorobenzene	83.2	73-131		%REC	1	11/28/2011 12:06:16 PM
Surr: Dibromofluoromethane	84.5	70-130		%REC	1	11/28/2011 12:06:16 PM
Surr: Toluene-d8	89.1	70-130		%REC	1	11/28/2011 12:06:16 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: 14-Dec-11  
Analytical Report

**CLIENT:** Animas Environmental Services  
**Lab Order:** 1111901  
**Project:** Former Thirftway Refinery #810  
**Lab ID:** 1111901-02

**Client Sample ID:** TW-42  
**Collection Date:** 11/22/2011 9:20:00 AM  
**Date Received:** 11/23/2011  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/28/2011 2:49:55 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/28/2011 2:49:55 PM
Surr: DNOP	109	81.1-147		%REC	1	11/28/2011 2:49:55 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						
Gasoline Range Organics (GRO)	0.17	0.050		mg/L	1	11/30/2011 8:22:51 PM
Surr: BFB	104	65.4-141		%REC	1	11/30/2011 8:22:51 PM
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						
Benzene	ND	1.0		µg/L	1	11/28/2011 1:01:53 PM
Toluene	ND	1.0		µg/L	1	11/28/2011 1:01:53 PM
Ethylbenzene	ND	1.0		µg/L	1	11/28/2011 1:01:53 PM
Methyl tert-butyl ether (MTBE)	53	1.0		µg/L	1	11/28/2011 1:01:53 PM
Naphthalene	ND	2.0		µg/L	1	11/28/2011 1:01:53 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	11/28/2011 1:01:53 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	11/28/2011 1:01:53 PM
Xylenes, Total	ND	2.0		µg/L	1	11/28/2011 1:01:53 PM
Surr: 1,2-Dichloroethane-d4	78.7	70-130		%REC	1	11/28/2011 1:01:53 PM
Surr: 4-Bromofluorobenzene	88.6	73-131		%REC	1	11/28/2011 1:01:53 PM
Surr: Dibromofluoromethane	92.7	70-130		%REC	1	11/28/2011 1:01:53 PM
Surr: Toluene-d8	88.1	70-130		%REC	1	11/28/2011 1:01:53 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: 14-Dec-11  
Analytical Report

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b>	TW-41
<b>Lab Order:</b>	1111901	<b>Collection Date:</b>	11/22/2011 9:55:00 AM
<b>Project:</b>	Former Thirftway Refinery #810	<b>Date Received:</b>	11/23/2011
<b>Lab ID:</b>	1111901-03	<b>Matrix:</b>	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						
Diesel Range Organics (DRO)	2.3	1.0		mg/L	1	11/28/2011 3:24:03 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/28/2011 3:24:03 PM
Surr: DNOP	112	81.1-147		%REC	1	11/28/2011 3:24:03 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						
Gasoline Range Organics (GRO)	10	0.25		mg/L	5	11/30/2011 11:24:23 PM
Surr: BFB	107	65.4-141		%REC	5	11/30/2011 11:24:23 PM
<b>EPA METHOD 300.0: ANIONS</b>						
Fluoride	ND	0.50		mg/L	5	12/2/2011 2:03:56 AM
Chloride	640	50		mg/L	100	12/2/2011 2:15:09 AM
Bromide	0.52	0.50		mg/L	5	12/2/2011 2:03:56 AM
Sulfate	510	50		mg/L	100	12/2/2011 2:15:09 AM
<b>SM2340B: HARDNESS</b>						
Hardness (As CaCO <sub>3</sub> )	890	1.0		mg/L	1	12/13/2011
<b>EPA METHOD 7470: MERCURY</b>						
Mercury	ND	0.00020		mg/L	1	11/30/2011 2:50:47 PM
<b>EPA METHOD 6010B: DISSOLVED METALS</b>						
Calcium	230	10		mg/L	10	11/28/2011 9:53:05 AM
Magnesium	50	1.0		mg/L	1	11/28/2011 9:20:39 AM
Potassium	4.8	1.0		mg/L	1	11/28/2011 9:20:39 AM
Sodium	860	10		mg/L	10	11/29/2011 9:28:58 AM
<b>EPA 6010B: TOTAL RECOVERABLE METALS</b>						
Arsenic	0.029	0.020		mg/L	1	11/28/2011 9:29:53 AM
Barium	0.75	0.020		mg/L	1	11/28/2011 9:29:53 AM
Cadmium	ND	0.0020		mg/L	1	11/28/2011 9:29:53 AM
Chromium	ND	0.0060		mg/L	1	11/28/2011 9:29:53 AM
Lead	ND	0.0050		mg/L	1	11/28/2011 9:29:53 AM
Selenium	ND	0.050		mg/L	1	11/28/2011 9:29:53 AM
Silver	ND	0.0050		mg/L	1	11/28/2011 9:29:53 AM
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						
Benzene	110	10		µg/L	10	11/28/2011 2:53:02 PM
Toluene	ND	10		µg/L	10	11/28/2011 2:53:02 PM
Ethylbenzene	470	10		µg/L	10	11/28/2011 2:53:02 PM
Methyl tert-butyl ether (MTBE)	13	10		µg/L	10	11/28/2011 2:53:02 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: 14-Dec-11  
*Analytical Report*

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b>	TW-41
<b>Lab Order:</b>	1111901	<b>Collection Date:</b>	11/22/2011 9:55:00 AM
<b>Project:</b>	Former Thirtway Refinery #810	<b>Date Received:</b>	11/23/2011
<b>Lab ID:</b>	1111901-03	<b>Matrix:</b>	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Analyst:
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							
Naphthalene	68	20		µg/L	10	11/28/2011 2:53:02 PM	
1-Methylnaphthalene	ND	40		µg/L	10	11/28/2011 2:53:02 PM	
2-Methylnaphthalene	ND	40		µg/L	10	11/28/2011 2:53:02 PM	
Xylenes, Total	1800	20		µg/L	10	11/28/2011 2:53:02 PM	
Surr: 1,2-Dichloroethane-d4	78.5	70-130		%REC	10	11/28/2011 2:53:02 PM	
Surr: 4-Bromofluorobenzene	82.7	73-131		%REC	10	11/28/2011 2:53:02 PM	
Surr: Dibromofluoromethane	88.8	70-130		%REC	10	11/28/2011 2:53:02 PM	
Surr: Toluene-d8	85.1	70-130		%REC	10	11/28/2011 2:53:02 PM	
<b>EPA 120.1: SPECIFIC CONDUCTANCE</b>							
Specific Conductance	4300	0.010		µmhos/cm	1	11/29/2011 3:12:00 PM	
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							
Total Dissolved Solids	3300	100		mg/L	1	11/30/2011 1:26:00 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: 14-Dec-11  
Analytical Report

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b>	TW-37
<b>Lab Order:</b>	1111901	<b>Collection Date:</b>	11/22/2011 10:20:00 AM
<b>Project:</b>	Former Thirftway Refinery #810	<b>Date Received:</b>	11/23/2011
<b>Lab ID:</b>	1111901-04	<b>Matrix:</b>	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						
Diesel Range Organics (DRO)	2.0	1.0		mg/L	1	11/28/2011 4:32:49 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/28/2011 4:32:49 PM
Surr: DNOP	110	81.1-147		%REC	1	11/28/2011 4:32:49 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						
Gasoline Range Organics (GRO)	1.7	0.25		mg/L	5	12/1/2011 12:24:43 AM
Surr: BFB	80.8	65.4-141		%REC	5	12/1/2011 12:24:43 AM
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						
Benzene	210	10		µg/L	10	11/28/2011 3:48:44 PM
Toluene	ND	1.0		µg/L	1	11/28/2011 4:18:08 PM
Ethylbenzene	ND	1.0		µg/L	1	11/28/2011 4:18:08 PM
Methyl tert-butyl ether (MTBE)	110	1.0		µg/L	1	11/28/2011 4:18:08 PM
Naphthalene	ND	2.0		µg/L	1	11/28/2011 4:18:08 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	11/28/2011 4:18:08 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	11/28/2011 4:18:08 PM
Xylenes, Total	4.5	2.0		µg/L	1	11/28/2011 4:18:08 PM
Surr: 1,2-Dichloroethane-d4	80.2	70-130		%REC	1	11/28/2011 4:18:08 PM
Surr: 4-Bromofluorobenzene	83.6	73-131		%REC	1	11/28/2011 4:18:08 PM
Surr: Dibromofluoromethane	102	70-130		%REC	1	11/28/2011 4:18:08 PM
Surr: Toluene-d8	83.8	70-130		%REC	1	11/28/2011 4:18:08 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: 14-Dec-11  
Analytical Report

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b>	TW-35
<b>Lab Order:</b>	1111901	<b>Collection Date:</b>	11/22/2011 11:30:00 AM
<b>Project:</b>	Former Thirftway Refinery #810	<b>Date Received:</b>	11/23/2011
<b>Lab ID:</b>	1111901-05	<b>Matrix:</b>	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/28/2011 5:07:28 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/28/2011 5:07:28 PM
Surr: DNOP	114	81.1-147		%REC	1	11/28/2011 5:07:28 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	12/1/2011 1:25:14 AM
Surr: BFB	85.9	65.4-141		%REC	1	12/1/2011 1:25:14 AM
<b>EPA METHOD 300.0: ANIONS</b>						
Fluoride	0.74	0.50		mg/L	5	12/2/2011 2:26:23 AM
Chloride	81	2.5		mg/L	5	12/2/2011 2:26:23 AM
Bromide	0.72	0.50		mg/L	5	12/2/2011 2:26:23 AM
Sulfate	4600	100		mg/L	200	12/2/2011 2:37:38 AM
<b>SM2340B: HARDNESS</b>						
Hardness (As CaCO <sub>3</sub> )	1500	1.0		mg/L	1	12/13/2011
<b>EPA METHOD 7470: MERCURY</b>						
Mercury	ND	0.00020		mg/L	1	11/30/2011 2:31:25 PM
<b>EPA METHOD 6010B: DISSOLVED METALS</b>						
Calcium	460	10		mg/L	10	11/28/2011 9:55:04 AM
Magnesium	90	1.0		mg/L	1	11/28/2011 9:23:13 AM
Potassium	8.2	1.0		mg/L	1	11/28/2011 9:23:13 AM
Sodium	1700	50		mg/L	50	11/29/2011 9:36:05 AM
<b>EPA 6010B: TOTAL RECOVERABLE METALS</b>						
Arsenic	0.036	0.020		mg/L	1	11/28/2011 9:32:17 AM
Barium	0.028	0.020		mg/L	1	11/28/2011 9:32:17 AM
Cadmium	ND	0.0020		mg/L	1	11/28/2011 9:32:17 AM
Chromium	ND	0.0060		mg/L	1	11/28/2011 9:32:17 AM
Lead	ND	0.0050		mg/L	1	11/28/2011 9:32:17 AM
Selenium	ND	0.050		mg/L	1	11/28/2011 9:32:17 AM
Silver	ND	0.0050		mg/L	1	11/28/2011 9:32:17 AM
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						
Benzene	ND	1.0		µg/L	1	11/28/2011 5:13:42 PM
Toluene	ND	1.0		µg/L	1	11/28/2011 5:13:42 PM
Ethylbenzene	ND	1.0		µg/L	1	11/28/2011 5:13:42 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/28/2011 5:13:42 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: 14-Dec-11  
*Analytical Report*

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b>	TW-35
<b>Lab Order:</b>	1111901	<b>Collection Date:</b>	11/22/2011 11:30:00 AM
<b>Project:</b>	Former Thirftway Refinery #810	<b>Date Received:</b>	11/23/2011
<b>Lab ID:</b>	1111901-05	<b>Matrix:</b>	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Analyst: MMS
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							
Naphthalene	ND	2.0		µg/L	1	11/28/2011 5:13:42 PM	
1-Methylnaphthalene	ND	4.0		µg/L	1	11/28/2011 5:13:42 PM	
2-Methylnaphthalene	ND	4.0		µg/L	1	11/28/2011 5:13:42 PM	
Xylenes, Total	ND	2.0		µg/L	1	11/28/2011 5:13:42 PM	
Surr: 1,2-Dichloroethane-d4	75.0	70-130		%REC	1	11/28/2011 5:13:42 PM	
Surr: 4-Bromofluorobenzene	90.8	73-131		%REC	1	11/28/2011 5:13:42 PM	
Surr: Dibromofluoromethane	87.1	70-130		%REC	1	11/28/2011 5:13:42 PM	
Surr: Toluene-d8	88.9	70-130		%REC	1	11/28/2011 5:13:42 PM	
<b>EPA 120.1: SPECIFIC CONDUCTANCE</b>							
Specific Conductance	6700	0.010		µmhos/cm	1	11/29/2011 3:16:00 PM	
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							
Total Dissolved Solids	7180	100		mg/L	1	11/30/2011 1:26:00 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: 14-Dec-11  
Analytical Report

**CLIENT:** Animas Environmental Services  
**Lab Order:** 1111901  
**Project:** Former Thirftway Refinery #810  
**Lab ID:** 1111901-06

**Client Sample ID:** TW-34

**Collection Date:** 11/22/2011 12:12:00 PM  
**Date Received:** 11/23/2011  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/28/2011 5:42:08 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/28/2011 5:42:08 PM
Sur: DNOP	110	81.1-147		%REC	1	11/28/2011 5:42:08 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	12/1/2011 1:55:38 AM
Sur: BFB	91.1	65.4-141		%REC	1	12/1/2011 1:55:38 AM
<b>EPA METHOD 300.0: ANIONS</b>						
Fluoride	ND	2.0		mg/L	20	12/5/2011 4:50:00 PM
Chloride	59	10		mg/L	20	12/8/2011 6:43:13 PM
Bromide	ND	2.0		mg/L	20	12/5/2011 4:50:00 PM
Sulfate	4100	100		mg/L	200	12/8/2011 6:54:26 PM
<b>SM2340B: HARDNESS</b>						
Hardness (As CaCO <sub>3</sub> )	1500	1.0		mg/L	1	12/13/2011
<b>EPA METHOD 7470: MERCURY</b>						
Mercury	0.00025	0.00020		mg/L	1	11/30/2011 2:33:10 PM
<b>EPA METHOD 6010B: DISSOLVED METALS</b>						
Calcium	480	20		mg/L	20	11/28/2011 9:59:01 AM
Magnesium	79	1.0		mg/L	1	11/28/2011 9:25:14 AM
Potassium	4.8	1.0		mg/L	1	11/28/2011 9:25:14 AM
Sodium	1100	20		mg/L	20	11/29/2011 9:40:50 AM
<b>EPA 6010B: TOTAL RECOVERABLE METALS</b>						
Arsenic	ND	0.020		mg/L	1	11/28/2011 9:39:06 AM
Barium	0.33	0.020		mg/L	1	11/28/2011 9:39:06 AM
Cadmium	ND	0.0020		mg/L	1	11/28/2011 9:39:06 AM
Chromium	0.032	0.0060		mg/L	1	11/28/2011 9:39:06 AM
Lead	ND	0.0050		mg/L	1	11/28/2011 9:39:06 AM
Selenium	ND	0.050		mg/L	1	11/28/2011 9:39:06 AM
Silver	ND	0.0050		mg/L	1	11/28/2011 9:39:06 AM
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						
Benzene	ND	1.0		µg/L	1	11/28/2011 10:47:00 PM
Toluene	ND	1.0		µg/L	1	11/28/2011 10:47:00 PM
Ethylbenzene	ND	1.0		µg/L	1	11/28/2011 10:47:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/28/2011 10:47:00 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: 14-Dec-11  
Analytical Report

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b>	TW-34
<b>Lab Order:</b>	1111901	<b>Collection Date:</b>	11/22/2011 12:12:00 PM
<b>Project:</b>	Former Thirstway Refinery #810	<b>Date Received:</b>	11/23/2011
<b>Lab ID:</b>	1111901-06	<b>Matrix:</b>	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Analyst:
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							
Toluene	ND	1.0		µg/L	1	11/28/2011 10:47:00 PM	
Ethylbenzene	ND	1.0		µg/L	1	11/28/2011 10:47:00 PM	
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/28/2011 10:47:00 PM	
Naphthalene	ND	2.0		µg/L	1	11/28/2011 10:47:00 PM	
1-Methylnaphthalene	ND	4.0		µg/L	1	11/28/2011 10:47:00 PM	
2-Methylnaphthalene	ND	4.0		µg/L	1	11/28/2011 10:47:00 PM	
Xylenes, Total	ND	2.0		µg/L	1	11/28/2011 10:47:00 PM	
Surr: 1,2-Dichloroethane-d4	78.0	70-130		%REC	1	11/28/2011 10:47:00 PM	
Surr: 4-Bromofluorobenzene	85.4	73-131		%REC	1	11/28/2011 10:47:00 PM	
Surr: Dibromofluoromethane	91.1	70-130		%REC	1	11/28/2011 10:47:00 PM	
Surr: Toluene-d8	88.9	70-130		%REC	1	11/28/2011 10:47:00 PM	
<b>EPA 120.1: SPECIFIC CONDUCTANCE</b>							
Specific Conductance	5500	0.010		µmhos/cm	1	11/29/2011 3:20:00 PM	
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							
Total Dissolved Solids	5420	100		mg/L	1	11/30/2011 1:26:00 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: 14-Dec-11  
Analytical Report

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b>	MW-21
<b>Lab Order:</b>	1111901	<b>Collection Date:</b>	11/22/2011 1:07:00 PM
<b>Project:</b>	Former Thirftway Refinery #810	<b>Date Received:</b>	11/23/2011
<b>Lab ID:</b>	1111901-07	<b>Matrix:</b>	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Analyst
<b>EPA METHOD 8015B: DIESEL RANGE</b>							
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/28/2011 6:16:46 PM	
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/28/2011 6:16:46 PM	
Surr: DNOP	112	81.1-147		%REC	1	11/28/2011 6:16:46 PM	
<b>EPA METHOD 8015B: GASOLINE RANGE</b>							
Gasoline Range Organics (GRO)	0.11	0.050		mg/L	1	12/1/2011 2:25:39 AM	
Surr: BFB	87.8	65.4-141		%REC	1	12/1/2011 2:25:39 AM	
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							
Benzene	ND	1.0		µg/L	1	11/29/2011 12:24:37 PM	
Toluene	ND	1.0		µg/L	1	11/29/2011 12:24:37 PM	
Ethylbenzene	ND	1.0		µg/L	1	11/29/2011 12:24:37 PM	
Methyl tert-butyl ether (MTBE)	74	1.0		µg/L	1	11/29/2011 12:24:37 PM	
Naphthalene	ND	2.0		µg/L	1	11/29/2011 12:24:37 PM	
1-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2011 12:24:37 PM	
2-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2011 12:24:37 PM	
Xylenes, Total	ND	2.0		µg/L	1	11/29/2011 12:24:37 PM	
Surr: 1,2-Dichloroethane-d4	76.4	70-130		%REC	1	11/29/2011 12:24:37 PM	
Surr: 4-Bromofluorobenzene	91.6	73-131		%REC	1	11/29/2011 12:24:37 PM	
Surr: Dibromofluoromethane	91.2	70-130		%REC	1	11/29/2011 12:24:37 PM	
Surr: Toluene-d8	91.6	70-130		%REC	1	11/29/2011 12:24:37 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: 14-Dec-11  
Analytical Report

<b>CLIENT:</b>	Animas Environmental Services		<b>Client Sample ID:</b> TW-47			
<b>Lab Order:</b>	1111901		<b>Collection Date:</b> 11/22/2011 1:40:00 PM			
<b>Project:</b>	Former Thirftway Refinery #810		<b>Date Received:</b> 11/23/2011			
<b>Lab ID:</b>	1111901-08		<b>Matrix:</b> AQUEOUS			
Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: JB
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	11/28/2011 6:51:24 PM	
Motor Oil Range Organics (MRO)	ND	5.0	mg/L	1	11/28/2011 6:51:24 PM	
Surr: DNOP	113	81.1-147	%REC	1	11/28/2011 6:51:24 PM	
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	12/1/2011 2:55:52 AM	
Surr: BFB	86.0	65.4-141	%REC	1	12/1/2011 2:55:52 AM	
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: BRM
Fluoride	ND	1.0	mg/L	10	12/2/2011 1:41:28 AM	
Chloride	1800	100	mg/L	200	12/2/2011 1:52:42 AM	
Bromide	1.2	1.0	mg/L	10	12/2/2011 1:41:28 AM	
Sulfate	5800	100	mg/L	200	12/2/2011 1:52:42 AM	
<b>SM2340B: HARDNESS</b>						Analyst: ELS
Hardness (As CaCO <sub>3</sub> )	2000	1.0	mg/L	1	12/13/2011	
<b>EPA METHOD 7470: MERCURY</b>						Analyst: JLF
Mercury	ND	0.00020	mg/L	1	11/30/2011 2:34:56 PM	
<b>EPA METHOD 6010B: DISSOLVED METALS</b>						Analyst: ELS
Calcium	510	10	mg/L	10	11/28/2011 10:01:05 AM	
Magnesium	120	10	mg/L	10	11/28/2011 10:01:05 AM	
Potassium	8.2	1.0	mg/L	1	11/28/2011 9:27:46 AM	
Sodium	2700	50	mg/L	50	11/29/2011 9:42:56 AM	
<b>EPA 6010B: TOTAL RECOVERABLE METALS</b>						Analyst: ELS
Arsenic	ND	0.020	mg/L	1	11/28/2011 9:41:29 AM	
Barium	0.13	0.020	mg/L	1	11/28/2011 9:41:29 AM	
Cadmium	ND	0.0020	mg/L	1	11/28/2011 9:41:29 AM	
Chromium	ND	0.0060	mg/L	1	11/28/2011 9:41:29 AM	
Lead	ND	0.0050	mg/L	1	11/28/2011 9:41:29 AM	
Selenium	ND	0.050	mg/L	1	11/28/2011 9:41:29 AM	
Silver	ND	0.0050	mg/L	1	11/28/2011 9:41:29 AM	
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						Analyst: MMS
Benzene	ND	1.0	µg/L	1	11/29/2011 1:47:53 PM	
Toluene	ND	1.0	µg/L	1	11/29/2011 1:47:53 PM	
Ethylbenzene	ND	1.0	µg/L	1	11/29/2011 1:47:53 PM	
Methyl tert-butyl ether (MTBE)	1.5	1.0	µg/L	1	11/29/2011 1:47:53 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: 14-Dec-11  
*Analytical Report***CLIENT:** Animas Environmental Services  
**Lab Order:** 1111901  
**Project:** Former Thirstway Refinery #810  
**Lab ID:** 1111901-08**Client Sample ID:** TW-47**Collection Date:** 11/22/2011 1:40:00 PM**Date Received:** 11/23/2011**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Analyst:
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							
Naphthalene	ND	2.0		µg/L	1	11/29/2011 1:47:53 PM	
1-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2011 1:47:53 PM	
2-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2011 1:47:53 PM	
Xylenes, Total	ND	2.0		µg/L	1	11/29/2011 1:47:53 PM	
Surr: 1,2-Dichloroethane-d4	83.1	70-130		%REC	1	11/29/2011 1:47:53 PM	
Surr: 4-Bromofluorobenzene	90.6	73-131		%REC	1	11/29/2011 1:47:53 PM	
Surr: Dibromofluoromethane	90.2	70-130		%REC	1	11/29/2011 1:47:53 PM	
Surr: Toluene-d8	88.9	70-130		%REC	1	11/29/2011 1:47:53 PM	
<b>EPA 120.1: SPECIFIC CONDUCTANCE</b>							
Specific Conductance	19000	0.50		µmhos/cm	50	11/29/2011 6:55:00 PM	
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							
Total Dissolved Solids	10700	100		mg/L	1	11/30/2011 1:26:00 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: 14-Dec-11  
Analytical Report

**CLIENT:** Animas Environmental Services  
**Lab Order:** 1111901  
**Project:** Former Thirstway Refinery #810  
**Lab ID:** 1111901-09

**Client Sample ID:** TW-46  
**Collection Date:** 11/22/2011 2:00:00 PM  
**Date Received:** 11/23/2011  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/28/2011 7:25:48 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/28/2011 7:25:48 PM
Surr: DNOP	113	81.1-147		%REC	1	11/28/2011 7:25:48 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						
Gasoline Range Organics (GRO)	0.054	0.050		mg/L	1	12/1/2011 3:26:03 AM
Surr: BFB	86.9	65.4-141		%REC	1	12/1/2011 3:26:03 AM
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						
Benzene	ND	1.0		µg/L	1	11/29/2011 2:15:39 PM
Toluene	ND	1.0		µg/L	1	11/29/2011 2:15:39 PM
Ethylbenzene	ND	1.0		µg/L	1	11/29/2011 2:15:39 PM
Methyl tert-butyl ether (MTBE)	35	1.0		µg/L	1	11/29/2011 2:15:39 PM
Naphthalene	ND	2.0		µg/L	1	11/29/2011 2:15:39 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2011 2:15:39 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2011 2:15:39 PM
Xylenes, Total	ND	2.0		µg/L	1	11/29/2011 2:15:39 PM
Surr: 1,2-Dichloroethane-d4	76.5	70-130		%REC	1	11/29/2011 2:15:39 PM
Surr: 4-Bromofluorobenzene	85.4	73-131		%REC	1	11/29/2011 2:15:39 PM
Surr: Dibromofluoromethane	83.7	70-130		%REC	1	11/29/2011 2:15:39 PM
Surr: Toluene-d8	91.2	70-130		%REC	1	11/29/2011 2:15:39 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: 14-Dec-11  
Analytical Report

**CLIENT:** Animas Environmental Services  
**Lab Order:** 1111901  
**Project:** Former Thirftway Refinery #810  
**Lab ID:** 1111901-10

**Client Sample ID:** MW-20  
**Collection Date:** 11/22/2011 2:17:00 PM  
**Date Received:** 11/23/2011  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/28/2011 7:59:55 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/28/2011 7:59:55 PM
Sur: DNOP	113	81.1-147		%REC	1	11/28/2011 7:59:55 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						
Gasoline Range Organics (GRO)	0.97	0.050		mg/L	1	12/1/2011 3:56:16 AM
Sur: BFB	135	65.4-141		%REC	1	12/1/2011 3:56:16 AM
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>						
Benzene	ND	1.0		µg/L	1	11/29/2011 2:43:33 PM
Toluene	ND	1.0		µg/L	1	11/29/2011 2:43:33 PM
Ethylbenzene	ND	1.0		µg/L	1	11/29/2011 2:43:33 PM
Methyl tert-butyl ether (MTBE)	170	1.0		µg/L	1	11/29/2011 2:43:33 PM
Naphthalene	ND	2.0		µg/L	1	11/29/2011 2:43:33 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2011 2:43:33 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2011 2:43:33 PM
Xylenes, Total	ND	2.0		µg/L	1	11/29/2011 2:43:33 PM
Sur: 1,2-Dichloroethane-d4	82.4	70-130		%REC	1	11/29/2011 2:43:33 PM
Sur: 4-Bromofluorobenzene	78.4	73-131		%REC	1	11/29/2011 2:43:33 PM
Sur: Dibromofluoromethane	108	70-130		%REC	1	11/29/2011 2:43:33 PM
Sur: Toluene-d8	92.6	70-130		%REC	1	11/29/2011 2:43:33 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

# QA/QC SUMMARY REPORT

**Client:** Animas Environmental Services  
**Project:** Former Thirftway Refinery #810      **Work Order:** 1111901

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: EPA Method 300.0: Anions</b>											
<b>Sample ID:</b> MB		MBLK									
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.50								
Bromide	ND	mg/L	0.10								
Sulfate	ND	mg/L	0.50								
<b>Sample ID:</b> MB		MBLK									
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.50								
Bromide	ND	mg/L	0.10								
Sulfate	ND	mg/L	0.50								
<b>Sample ID:</b> MB		MBLK									
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.50								
Bromide	ND	mg/L	0.10								
Sulfate	ND	mg/L	0.50								
<b>Sample ID:</b> MB		MBLK									
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.50								
Bromide	ND	mg/L	0.10								
Sulfate	ND	mg/L	0.50								
<b>Sample ID:</b> MB		MBLK									
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.50								
Bromide	ND	mg/L	0.10								
Sulfate	ND	mg/L	0.50								
<b>Sample ID:</b> LCS		LCS									
Fluoride	0.5048	mg/L	0.10	0.5	0	101	90	110			
Chloride	4.914	mg/L	0.50	5	0.113	96.0	90	110			
Bromide	2.256	mg/L	0.10	2.5	0	90.2	90	110			
Sulfate	9.939	mg/L	0.50	10	0	99.4	90	110			
<b>Sample ID:</b> LCS		LCS									
Fluoride	0.5012	mg/L	0.10	0.5	0	100	90	110			
Chloride	4.731	mg/L	0.50	5	0	94.6	90	110			
Sulfate	9.513	mg/L	0.50	10	0	95.1	90	110			
<b>Sample ID:</b> LCS		LCS									
Fluoride	0.5204	mg/L	0.10	0.5	0	104	90	110			
Chloride	5.030	mg/L	0.50	5	0	101	90	110			
Bromide	2.382	mg/L	0.10	2.5	0	95.3	90	110			

**Qualifiers:**

E Estimated value  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
NC Non-Chlorinated  
R RPD outside accepted recovery limits

# QA/QC SUMMARY REPORT

**Client:** Animas Environmental Services  
**Project:** Former Thirftway Refinery #810      **Work Order:** 1111901

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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**Method: EPA Method 300.0: Anions**

<b>Sample ID:</b> LCS	LCS						Batch ID:	R49383	Analysis Date:	12/1/2011 6:45:55 PM
Sulfate	10.07	mg/L	0.50	10	0	101	90	110		
<b>Sample ID:</b> LCS-b	LCS						Batch ID:	R49421	Analysis Date:	12/5/2011 3:47:54 PM
Fluoride	0.4867	mg/L	0.10	0.5	0	97.3	90	110		
Chloride	4.659	mg/L	0.50	5	0	93.2	90	110		
Bromide	2.419	mg/L	0.10	2.5	0	96.8	90	110		
Sulfate	9.382	mg/L	0.50	10	0	93.8	90	110		
<b>Sample ID:</b> LCS	LCS						Batch ID:	R49502	Analysis Date:	12/8/2011 1:28:45 PM
Fluoride	0.5026	mg/L	0.10	0.5	0	101	90	110		
Chloride	4.862	mg/L	0.50	5	0	97.2	90	110		
Bromide	2.334	mg/L	0.10	2.5	0	93.4	90	110		
Sulfate	9.753	mg/L	0.50	10	0	97.5	90	110		
<b>Sample ID:</b> LCS	LCS						Batch ID:	R49502	Analysis Date:	12/9/2011 1:38:44 AM
Fluoride	0.5290	mg/L	0.10	0.5	0	106	90	110		
Chloride	4.802	mg/L	0.50	5	0	96.0	90	110		
Bromide	2.328	mg/L	0.10	2.5	0	93.1	90	110		
Sulfate	9.690	mg/L	0.50	10	0	96.9	90	110		

**Method: EPA Method 8015B: Diesel Range**

<b>Sample ID:</b> MB-29514	MBLK						Batch ID:	29514	Analysis Date:	11/28/2011 10:49:32 AM
Diesel Range Organics (DRO)	ND	mg/L	1.0							
Motor Oil Range Organics (MRO)	ND	mg/L	5.0							
<b>Sample ID:</b> LCS-29514	LCS						Batch ID:	29514	Analysis Date:	11/28/2011 11:23:52 AM
Diesel Range Organics (DRO)	5.330	mg/L	1.0	5	0	107	74	157		
<b>Sample ID:</b> LCSD-29514	LCSD						Batch ID:	29514	Analysis Date:	11/28/2011 11:58:32 AM
Diesel Range Organics (DRO)	5.697	mg/L	1.0	5	0	114	74	157	6.66	23

**Method: EPA Method 8015B: Gasoline Range**

<b>Sample ID:</b> 5ML-RB	MBLK						Batch ID:	R49350	Analysis Date:	11/30/2011 12:49:57 PM
Gasoline Range Organics (GRO)	ND	mg/L	0.050							
<b>Sample ID:</b> 2.5UG GRO LCS	LCS						Batch ID:	R49350	Analysis Date:	11/30/2011 11:49:42 AM
Gasoline Range Organics (GRO)	0.5116	mg/L	0.050	0.5	0	102	92.1	117		
<b>Sample ID:</b> 2.5UG GRO LCSD	LCSD						Batch ID:	R49350	Analysis Date:	11/30/2011 9:23:27 PM
Gasoline Range Organics (GRO)	0.5246	mg/L	0.050	0.5	0	105	92.1	117	2.51	16.1

**Qualifiers:**

E Estimated value  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
NC Non-Chlorinated  
R RPD outside accepted recovery limits

**QA/QC SUMMARY REPORT**

**Client:** Animas Environmental Services  
**Project:** Former Thirftway Refinery #810      **Work Order:** 1111901

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: EPA Method 8260: Volatiles Short List</b>											
Sample ID: 1111901-02a msd		MSD					Batch ID: R49287		Analysis Date:	11/28/2011 1:57:27 PM	
Benzene	18.29	µg/L	1.0	20	0	91.5	69.2	127	16.9	18.7	
Toluene	17.76	µg/L	1.0	20	0.388	86.9	68.2	130	3.56	16.9	
Sample ID: 1111901-07a msd		MSD					Batch ID: R49331		Analysis Date:	11/29/2011 1:20:09 PM	
Benzene	20.56	µg/L	1.0	20	0	103	69.2	127	4.23	18.7	
Toluene	18.05	µg/L	1.0	20	0.358	88.5	68.2	130	6.24	16.9	
Sample ID: 5ml rb		MBLK					Batch ID: R49287		Analysis Date:	11/28/2011 9:31:41 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								
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	4.0								
2-Methylnaphthalene	ND	µg/L	4.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 5ml rb		MBLK					Batch ID: R49331		Analysis Date:	11/29/2011 10:33:13 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								
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	4.0								
2-Methylnaphthalene	ND	µg/L	4.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100ng lcs		LCS					Batch ID: R49287		Analysis Date:	11/28/2011 10:27:28 AM	
Benzene	21.79	µg/L	1.0	20	0	109	81.1	130			
Toluene	20.49	µg/L	1.0	20	0	102	82.3	122			
Sample ID: 100ng lcs		LCS					Batch ID: R49331		Analysis Date:	11/29/2011 11:28:57 AM	
Benzene	22.20	µg/L	1.0	20	0	111	81.1	130			
Toluene	18.61	µg/L	1.0	20	0	93.0	82.3	122			
Sample ID: 1111901-02a ms		MS					Batch ID: R49287		Analysis Date:	11/28/2011 1:29:41 PM	
Benzene	21.67	µg/L	1.0	20	0	108	69.2	127			
Toluene	18.41	µg/L	1.0	20	0.388	90.1	68.2	130			
Sample ID: 1111901-07a ms		MS					Batch ID: R49331		Analysis Date:	11/29/2011 12:52:23 PM	
Benzene	19.71	µg/L	1.0	20	0	98.6	69.2	127			
Toluene	19.21	µg/L	1.0	20	0.358	94.3	68.2	130			

<b>Method: EPA Method 7470: Mercury</b>											
Sample ID: MB-29547		MBLK					Batch ID: 29547		Analysis Date:	11/30/2011 2:22:18 PM	
Mercury	ND	mg/L	0.00020								
Sample ID: LCS-29547		LCS					Batch ID: 29547		Analysis Date:	11/30/2011 2:24:16 PM	
Mercury	0.005222	mg/L	0.00020	0.005	0	104	80	120			

**Qualifiers:**

E Estimated value  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
NC Non-Chlorinated  
R RPD outside accepted recovery limits

# QA/QC SUMMARY REPORT

**Client:** Animas Environmental Services  
**Project:** Former Thirftway Refinery #810

**Work Order:** 1111901

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: EPA Method 6010B: Dissolved Metals</b>											
<b>Sample ID:</b> MB		MBLK									
Calcium	ND	mg/L	1.0								
Magnesium	ND	mg/L	1.0								
Potassium	ND	mg/L	1.0								
Sodium	ND	mg/L	1.0								
<b>Sample ID:</b> MB		MBLK									
Calcium	ND	mg/L	1.0								
Magnesium	ND	mg/L	1.0								
Potassium	ND	mg/L	1.0								
Sodium	ND	mg/L	1.0								
<b>Sample ID:</b> MB		MBLK									
Aluminum	ND	mg/L	0.020								
Arsenic	ND	mg/L	0.020								
Barium	ND	mg/L	0.020								
Beryllium	ND	mg/L	0.0030								
Cadmium	ND	mg/L	0.0020								
Calcium	ND	mg/L	1.0								
Chromium	ND	mg/L	0.0060								
Copper	ND	mg/L	0.0060								
Iron	ND	mg/L	0.020								
Lead	ND	mg/L	0.0050								
Magnesium	ND	mg/L	1.0								
Manganese	ND	mg/L	0.0020								
Molybdenum	ND	mg/L	0.0080								
Nickel	ND	mg/L	0.010								
Potassium	ND	mg/L	1.0								
Selenium	ND	mg/L	0.050								
Silver	ND	mg/L	0.0050								
Sodium	ND	mg/L	1.0								
Strontium	ND	mg/L	0.0060								
Thallium	ND	mg/L	0.050								
Tin	ND	mg/L	0.020								
Titanium	ND	mg/L	0.0050								
Uranium	ND	mg/L	0.10								
Vanadium	ND	mg/L	0.050								
Zinc	ND	mg/L	0.020								
<b>Sample ID:</b> LCS		LCS									
Calcium	53.26	mg/L	1.0	50	0	107	80	120			
Magnesium	53.22	mg/L	1.0	50	0	106	80	120			
Potassium	51.25	mg/L	1.0	50	0	102	80	120			
Sodium	52.25	mg/L	1.0	50	0	105	80	120			
<b>Sample ID:</b> LCS		LCS									
Calcium	52.57	mg/L	1.0	50	0.0484	105	80	120			
Magnesium	52.77	mg/L	1.0	50	0.0484	105	80	120			

**Qualifiers:**

E Estimated value  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
NC Non-Chlorinated  
R RPD outside accepted recovery limits

**QA/QC SUMMARY REPORT**

**Client:** Animas Environmental Services  
**Project:** Former Thirtway Refinery #810

**Work Order:** 1111901

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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**Method:** EPA Method 6010B: Dissolved Metals

Sample ID: LCS	LCS					Batch ID:	R49290	Analysis Date:	11/29/2011 9:24:48 AM	
Potassium	51.15	mg/L	1.0	50	0	102	80	120		
Sodium	51.89	mg/L	1.0	50	0	104	80	120		
Sample ID: LCS	LCS					Batch ID:	R49559	Analysis Date:	12/13/2011 7:46:13 AM	
Aluminum	0.5832	mg/L	0.020	0.5	0.0054	116	80	120		
Arsenic	0.5489	mg/L	0.020	0.5	0	110	80	120		
Barium	0.5213	mg/L	0.020	0.5	0.0005	104	80	120		
Beryllium	0.5389	mg/L	0.0030	0.5	0.0002	108	80	120		
Cadmium	0.5351	mg/L	0.0020	0.5	0	107	80	120		
Calcium	54.09	mg/L	1.0	50	0.0541	108	80	120		
Chromium	0.5203	mg/L	0.0060	0.5	0	104	80	120		
Copper	0.5259	mg/L	0.0060	0.5	0	105	80	120		
Iron	0.5240	mg/L	0.020	0.5	0.0054	104	80	120		
Lead	0.5265	mg/L	0.0050	0.5	0	105	80	120		
Magnesium	54.55	mg/L	1.0	50	0.0543	109	80	120		
Manganese	0.5081	mg/L	0.0020	0.5	0.0001	102	80	120		
Molybdenum	0.5448	mg/L	0.0080	0.5	0	109	80	120		
Nickel	0.4989	mg/L	0.010	0.5	0	99.8	80	120		
Potassium	53.06	mg/L	1.0	50	0.1625	106	80	120		
Selenium	0.5326	mg/L	0.050	0.5	0	107	80	120		
Silver	0.1031	mg/L	0.0050	0.1	0	103	80	120		
Sodium	53.39	mg/L	1.0	50	0.0929	107	80	120		
Strontium	0.1010	mg/L	0.0060	0.1	0	101	80	120		
Thallium	0.5260	mg/L	0.050	0.5	0	105	80	120		
Tin	0.5373	mg/L	0.020	0.5	0	107	80	120		
Titanium	0.5395	mg/L	0.0050	0.5	0.0002	108	80	120		
Uranium	0.5019	mg/L	0.10	0.5	0	100	80	120		
Vanadium	0.5424	mg/L	0.050	0.5	0.0009	108	80	120		
Zinc	0.5220	mg/L	0.020	0.5	0	104	80	120		

**Qualifiers:**

E Estimated value  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
NC Non-Chlorinated  
R RPD outside accepted recovery limits

Page 5

# QA/QC SUMMARY REPORT

**Client:** Animas Environmental Services  
**Project:** Former Thirstway Refinery #810

**Work Order:** 1111901

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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**Method:** EPA 6010B: Total Recoverable Metals

<b>Sample ID:</b> 1111901-05EMSD		<b>MSD</b>					<b>Batch ID:</b>	<b>29508</b>	<b>Analysis Date:</b>	11/28/2011 9:36:44 AM
Arsenic	0.5977	mg/L	0.020	0.5	0.0362	112	75	125	0.0338	20
Barium	0.5383	mg/L	0.020	0.5	0.0277	102	75	125	0.844	20
Cadmium	0.5183	mg/L	0.0020	0.5	0	104	75	125	1.34	20
Chromium	0.4955	mg/L	0.0060	0.5	0	99.1	75	125	1.08	20
Lead	0.4939	mg/L	0.0050	0.5	0	98.8	75	125	0.732	20
Selenium	0.4988	mg/L	0.050	0.5	0	99.8	75	125	0.211	20
Silver	0.1042	mg/L	0.0050	0.1	0	104	75	125	2.09	20
<b>Sample ID:</b> MB-29508		<b>MBLK</b>					<b>Batch ID:</b>	<b>29508</b>	<b>Analysis Date:</b>	11/28/2011 8:47:28 AM
Arsenic	ND	mg/L	0.020							
Barium	ND	mg/L	0.020							
Cadmium	ND	mg/L	0.0020							
Chromium	ND	mg/L	0.0060							
Lead	ND	mg/L	0.0050							
Selenium	ND	mg/L	0.050							
Silver	ND	mg/L	0.0050							
<b>Sample ID:</b> LCS-29508		<b>LCS</b>					<b>Batch ID:</b>	<b>29508</b>	<b>Analysis Date:</b>	11/28/2011 8:49:26 AM
Arsenic	0.5218	mg/L	0.020	0.5	0	104	80	120		
Barium	0.5035	mg/L	0.020	0.5	0	101	80	120		
Cadmium	0.5015	mg/L	0.0020	0.5	0	100	80	120		
Chromium	0.5030	mg/L	0.0060	0.5	0	101	80	120		
Lead	0.4995	mg/L	0.0050	0.5	0	99.9	80	120		
Selenium	0.5135	mg/L	0.050	0.5	0	103	80	120		
Silver	0.09993	mg/L	0.0050	0.1	0	99.9	80	120		
<b>Sample ID:</b> 1111901-05EMS		<b>MS</b>					<b>Batch ID:</b>	<b>29508</b>	<b>Analysis Date:</b>	11/28/2011 9:34:20 AM
Arsenic	0.5975	mg/L	0.020	0.5	0.0362	112	75	125		
Barium	0.5429	mg/L	0.020	0.5	0.0277	103	75	125		
Cadmium	0.5253	mg/L	0.0020	0.5	0	105	75	125		
Chromium	0.5009	mg/L	0.0060	0.5	0	100	75	125		
Lead	0.4976	mg/L	0.0050	0.5	0	99.5	75	125		
Selenium	0.4999	mg/L	0.050	0.5	0	100	75	125		
Silver	0.1064	mg/L	0.0050	0.1	0	106	75	125		

**Method:** SM2540C MOD: Total Dissolved Solids

<b>Sample ID:</b> 1111901-08GMSD		<b>MSD</b>					<b>Batch ID:</b>	<b>29528</b>	<b>Analysis Date:</b>	11/30/2011 1:26:00 PM
Total Dissolved Solids	15970	mg/L	100	5000	10710	105	80	120	0.157	5
<b>Sample ID:</b> MB-29528		<b>MBLK</b>					<b>Batch ID:</b>	<b>29528</b>	<b>Analysis Date:</b>	11/30/2011 1:26:00 PM
Total Dissolved Solids	ND	mg/L	20.0							
<b>Sample ID:</b> LCS-29528		<b>LCS</b>					<b>Batch ID:</b>	<b>29528</b>	<b>Analysis Date:</b>	11/30/2011 1:26:00 PM
Total Dissolved Solids	1035	mg/L	20.0	1000	16	102	80	120		
<b>Sample ID:</b> 1111901-08GMS		<b>MS</b>					<b>Batch ID:</b>	<b>29528</b>	<b>Analysis Date:</b>	11/30/2011 1:26:00 PM
Total Dissolved Solids	15950	mg/L	100	5000	10710	105	80	120		

**Qualifiers:**

E Estimated value  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
NC Non-Chlorinated  
R RPD outside accepted recovery limits

# Hall Environmental Analysis Laboratory, Inc.

## Sample Receipt Checklist

Client Name ANIMAS ENVIRONMENTAL

Date Received:

11/23/2011

Work Order Number 1111801

Received by: AMG

Checklist completed by:

*[Signature]*

11/23/11

*dam*

Initials

Matrix:

Carrier name: Courier

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Not Shipped <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Water - VOA vials have zero headspace?	No VOA vials submitted <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Number of preserved bottles checked for pH: <i>[Signature]</i>
Water - Preservation labels on bottle and cap match?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Container/Temp Blank temperature?	1.6°	<6° C Acceptable		
COMMENTS:	If given sufficient time to cool.			

Client contacted \_\_\_\_\_

Date contacted: \_\_\_\_\_

Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_

Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

## Chain-of-Custody Record

Turn-Around Time:						
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush					
Project Name:						
Mailing Address: 624 E Comanche	Former Thriftway Refinery #8100					
Farmington, NM 87401						
Phone #: 505-564-2281	AES 050204					
email or Fax#: 505-324-2022	Project Manager:					
<input checked="" type="checkbox"/> QA/QC Package:	<input type="checkbox"/> Standard	<input type="checkbox"/> Level 4 (Full Validation)	Ross Kennemer			
Accreditation:	<input type="checkbox"/> NELAP	<input type="checkbox"/> Other	Sampler: Chad Dawson			
<input type="checkbox"/> EDD (Type)						
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	
11-22-11	08555	H <sub>2</sub> O	TW-43	5-40 mL 1-liter Amber	3-HCf from -1	X X X X X X X X
0920			TW-42	6-40 mL 1-liter Amber	NEA 2 HCf from -2	X X X X X X X X
09555			TW-41	6-40 mL 1-liter Amber	NEA 2 HCf from -3	X X X X X X X X
1020			TW-37	6-40 mL 1-liter Amber	NEA 2 HCf from -4	X X X X X X X X
1130			TW-35	6-40 mL 1-liter Amber	NEA 2 HCf from -5	X X X X X X X X
1212			TW-34	6-40 mL 1-liter Amber	NEA 2 HCf from -6	X X X X X X X X
1307			MW-21	6-40 mL 1-liter Amber	NEA 2 HCf from -7	X X X X X X X X
1340			TW-47	6-40 mL 1-liter Amber	NEA 2 HCf from -8	X X X X X X X X
1400			TW-46	6-40 mL 1-liter Amber	NEA 2 HCf from -9	X X X X X X X X
1417			MW-20	6-40 mL 1-liter Amber	NEA 2 HCf from -10	X X X X X X X X
Date: 11-22-11	Time: 1450	Relinquished by: <u>Chad D</u>	Received by: <u>Chad D</u>	Date: 11-22-11	Time: 1450	Remarks: Run TPH 8015 prior to analyzing for 8260 and 8270.
Date: 11-22-11	Time: Relinquished by: <u>Chad D</u>	Received by: <u>Chad D</u>	Date: 11-22-11	Time: Relinquished by: <u>Chad D</u>	Received by: <u>Chad D</u>	Run the full VOC spectrum only in the event the reported TPH-GRO is greater than 80 mg/L, if GRO is less than 80 mg/L run BTEX/total naphthalenes and MTBE. SVOCs per EPA Method 8270D will be run if TPH-DRO value is greater than 200 mg/L Direct Bill to BioTech. Per Andy 8015 GRO-DRO \$60, discounted price for TDS. <u>Chad D</u>

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 noted on the analytical report.

## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109  
Tel. 505-345-3975 Fax 505-345-4107

### Analysis Requests

Air Bubbles (Y or N)

Specific Conductance EPA 120.1

TDS 2540C

**DEPTH TO GROUNDWATER  
MEASUREMENT FORM**

**Animas Environmental Services**

624 E. Comanche, Farmington NM 87401  
Tel. (505) 564-2281 Fax (505) 324-2022

**Project:** Groundwater Monitoring

**Project No.:** AES 050204

**Site:** Thriftway #810 Refinery

**Date:** 11-15-11 / 11-16-11

**Location:** Bloomfield, New Mexico

**Time:** 0900 - 1630 / 1000 - 1430

**Tech:** Chad Dawson

**Form:** 1 of 4

Well I.D.	Time	Depth to NAPL (ft.)	Depth to Water (ft.)	NAPL Thickness (ft.)	Notes / Observations
TW-1	0943		31.11		11-15-11
TW-2	0946		29.33		
TW-3	0951		28.67		
TW-4	0956		19.50		**
TW-5	1021		25.93		
TW-6	1024		25.11		
TW-7	1029		22.59		
TW-8	1000		20.03		
TW-9	1003		12.54		
TW-10	1009		12.73		
TW-11	1151		18.44		
TW-12	1144		22.24		
TW-13	1208	20.90	22.04	1.14	
TW-14	1148	17.34	17.99	0.65	
TW-15	1201		13.42		
TW-16	1015		11.67		11-15-11
TW-17	1204		10.29		
TW-18	1157		16.640		
TW-19	1237	17.90	18.100		
TW-20	1230	17.64	19.600	1.96	
TW-21					Damaged
TW-22	1250	15.10	15.62	0.52	
TW-23	1209		9.05		
TW-24	1300	11.26	11.37	0.11	
TW-25	1255	14.50	15.12	0.82	
TW-26	1428	15.98	16.94	1.54	
TW-28 <sup>29</sup>	1303	9.46	10.16	0.70	
TW-28 <sup>29</sup>	1422	15.40	16.94	1.54	
TW-30	1311		6.25		
TW-31	1313		7.19		
TW-32	1335	9.58	11.01	1.43	
TW-33	1417	13.13	13.42	0.29	
TW-34	1223		20.14		11-15-11

Wells measured with KECK water level or KECK interface tape, decontaminated between each well measurement.

## **DEPTH TO GROUNDWATER MEASUREMENT FORM**

Project: Groundwater Monitoring

**Site:** Thriftway #810 Refinery

**Location:** Bloomfield, New Mexico

Tech: Chad Dawson

## **Animas Environmental Services**

624 E. Comanche, Farmington NM 87401

Tel. (505) 564-2281 Fax (505) 324-2022

Project No.: AES 050204

Date:

Time:

Form: 2 of 4

Wells measured with KECK water level or KECK interface tape, decontaminated between each well measurement.

**DEPTH TO GROUNDWATER  
MEASUREMENT FORM**

Project: Groundwater Monitoring

Site: Thriftway #810 Refinery

Location: Bloomfield, New Mexico

Tech: Chad Dawson

**Animas Environmental Services**

624 E. Comanche, Farmington NM 87401

Tel. (505) 564-2281 Fax (505) 324-2022

Project No.: AES 050204

Date: 11-10-11 & 11-15-11

Time: 1030 - 1530 & 0900 - 1600

Form: 3 of 4

Well I.D.	Time	Depth to NAPL (ft.)	Depth to Water (ft.)	NAPL Thickness (ft.)	Notes / Observations
MPE-1			24.04		
MPE-2		21.94	22.03	0.09	
MPE-3			21.23		
MPE-4			20.43		
MPE-5		19.74	19.92	0.18	
MPE-6		20.09	20.10	0.01	
MPE-7			20.89		
MPE-8			22.19		
MPE-9			23.97		
MPE-10			23.67		
MPE-11			21.66		
MPE-12			22.83		
MPE-13		23.11	23.18	0.07	
MPE-14		22.70	22.34	0.14	
MPE-16			20.35		
MPE-17			20.54		
MPE-18			19.67		
MPE-19			19.47		
MPE-20			19.17		
MPE-21			20.41		
MPE-22			21.28		
MPE-23			20.25		
MPE-24			23.12		
MPE-25			23.54		
MPE-26		23.17	24.14	0.97	
MPE-27			21.53		
MPE-28			21.95		
MPE-29			20.73		
MPE-30			21.68		
MPE-31			22.87		
MPE-33			22.78		
MPE-34			22.67		
MPE-35		21.07	21.70	0.63	
MPE-36		20.26	20.66	0.40	

Wells measured with KECK water level or KECK interface tape, decontaminated between each well measurement.



revised: 08/10/09

















MONITORING WELL SAMPLING RECORD				Animas Environmental Services			
Monitor Well No: <u>TW-39</u>				624 E. Comanche, Farmington NM 87401 Tel. (505) 564-2281 Fax (505) 324-2022			
Site: Thriftway #810 Refinery Location: Bloomfield, New Mexico Project: Groundwater Monitoring and Sampling Sampling Technician: <u>CD</u> Purge / No Purge: Purge Well Diameter (in): 2 Initial D.T.W. (ft): <u>7.98</u> Time: <u>1310 11-16-11</u> (taken at initial gauging of all wells) Confirm D.T.W. (ft): <u>7.99</u> Time: <u>1325</u> (taken prior to purging well) Final D.T.W. (ft): Time: (taken after sample collection) If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:				Project No.: AES 050204 Date: <u>11-17-11</u> Arrival Time: <u>1320</u> Air Temp: <u>58</u> T.O.C. Elev. (ft): <u>5438.43</u> Total Well Depth (ft):			
Water Quality Parameters - Recorded During Well Purgung							
Time	Temp (deg C)	Conductivity ( $\mu\text{S}$ ) ( $\text{mS}$ )	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1338	14.26	4.189	0.63	7.18	-21.5	1.00	
1342	—					SC	—
Analytical Parameters (include analysis method and number and type of sample containers)							
BTEX/ MTBE/ Naph. per EPA Method 8260 (3-40 mL Vials; 3 w/ HCl preserve) GRO and DRO per EPA Method 8015 (3-40 mL Vials; 3 w/ HCl preserve, 1 w/o preserve) SVOCs per EPA Method 8270 (1 L Amber; w/o preserve)							
Disposal of Purged Water: _____							
Collected Samples Stored on Ice in Cooler: _____							
Chain of Custody Record Complete: _____							
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM							
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer							
Notes/Comments: _____ _____ _____							
revised: 08/10/09							

~~revised: 03/40/09~~









MONITORING WELL SAMPLING RECORD				Animas Environmental Services			
Monitor Well No: <u>TW-49</u>				624 E. Comanche, Farmington NM 87401 Tel. (505) 564-2281 Fax (505) 324-2022			
Site: Thriftway #810 Refinery				Project No.: AES 050204			
Location: Bloomfield, New Mexico				Date: <u>11-22-11</u>			
Project: Groundwater Monitoring and Sampling				Arrival Time: <u>1314</u>			
Sampling Technician: <u>CD</u>				Air Temp: <u>53°</u>			
Purge / No Purge: Purge				T.O.C. Elev. (ft): _____			
Well Diameter (in): <u>2</u>				Total Well Depth (ft): _____			
Initial D.T.W. (ft): <u>6.14</u>				Time: <u>0910</u> <u>11-15-11</u> (taken at initial gauging of all wells)			
Confirm D.T.W. (ft): <u>6.15</u>				Time: <u>1320</u> (taken prior to purging well)			
Final D.T.W. (ft): _____				Time: _____ (taken after sample collection)			
If NAPL Present: D.T.P.: _____				D.T.W.: _____ Thickness: _____ Time: _____			
<b>Water Quality Parameters - Recorded During Well Purgng</b>							
Time	Temp (deg C)	Conductivity ( $\mu\text{S}$ ) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
<p><u>No Sample</u></p> <p><u>Roots in well</u></p> <p><u>get them out</u></p> <p><u>Cooler</u> <u>no</u> <u>better</u></p> <p><u>small</u> <u>30</u></p>							
<p><u> </u></p> <p><u> </u></p> <p><u> </u></p> <p><u> </u></p> <p><u> </u></p>							
<b>Analytical Parameters (include analysis method and number and type of sample containers)</b>							
BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)							
GRO and DRO per EPA Methods 8015 (3-40 mL Vials 2 w/ HCl preserve, 1 w/o preserve)							
RCRA 8 Metals per EPA Methods 6010/7470 (500 mL w/ HNO <sub>3</sub> preserve)							
Dissolved Metals per EPA Methods 6010 (125 mL w/ HNO <sub>3</sub> preserve)							
Bromide/Chloride/Fluoride/Sulfate per EPA Method 300.0, TDS per 2540C, Hardness per 6010, Specific Cond. per 120.1 (1-500 mL plastic w/o preserve), SVOCs per EPA Methods 8270 (1 L Amber w/o preserve)							
<b>Disposal of Purged Water:</b> _____							
<b>Collected Samples Stored on Ice in Cooler:</b> _____							
<b>Chain of Custody Record Complete:</b> _____							
<b>Analytical Laboratory:</b> Hall Environmental Analysis Laboratory, Albuquerque, NM							
<b>Equipment Used During Sampling:</b> Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer							
<b>Notes/Comments:</b> _____							

revised: 08/10/09



MONITORING WELL SAMPLING RECORD		Animas Environmental Services					
Monitor Well No: MW-21		624 E. Comanche, Farmington NM 87401 Tel. (505) 564-2281 Fax (505) 324-2022					
Site: Thriftway #810 Refinery		Project No.: AES 050204					
Location: Bloomfield, New Mexico		Date: 11-22-04					
Project: Groundwater Monitoring and Sampling		Arrival Time: 11:40					
Sampling Technician: CO		Air Temp: 50°					
Purge / No Purge: Purge		T.O.C. Elev. (ft): 5428.62					
Well Diameter (in): 2"		Total Well Depth (ft):					
Initial D.T.W. (ft): 3.64		Time: 0916 11-15-04 (taken at initial gauging of all wells)					
Confirm D.T.W. (ft): 3.65		Time: 1246 (taken prior to purging well)					
Final D.T.W. (ft):		Time: (taken after sample collection)					
If NAPL Present: D.T.P.:		D.T.W.: Thickness: Time:					
Water Quality Parameters - Recorded During Well Purging							
Time	Temp (deg C)	Conductivity ( $\mu\text{S}$ ) ( $\text{mS}$ )	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1300	13.16	6.972	1.09	7.16	-20.1	1.00	
1307						SC	
Analytical Parameters (include analysis method and number and type of sample containers)							
BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3 - 40 mL Vials w/ HCl preserve) GRO and DRO per EPA Method 8015 (3 - 40 mL Vials; 2 w/ HCl preserve, 1 w/o preserve) SVOCs per EPA Method 8270 (1 L Amber; w/o preserve)							
Disposal of Purged Water: _____							
Collected Samples Stored on Ice in Cooler: _____							
Chain of Custody Record Complete: _____							
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM							
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer							
Notes/Comments: _____ _____ _____							
revised: 08/10/09							

<b>MONITORING WELL SAMPLING RECORD</b>		Animas Environmental Services					
Monitor Well No: <u>MW-22</u>		624 E. Comanche, Farmington NM 87401 Tel. (505) 564-2281 Fax (505) 324-2022					
Site: Thriftway #810 Refinery		Project No.: AES 050204					
Location: Bloomfield, New Mexico		Date: <u>11-22-01</u>					
Project: Groundwater Monitoring and Sampling		Arrival Time: <u>1230</u>					
Sampling Technician: <u>CD</u>		Air Temp: <u>80°</u>					
Purge / No Purge: <u>Purge</u>		T.O.C. Elev. (ft): _____					
Well Diameter (in): _____		Total Well Depth (ft): _____ (taken at initial gauging of all wells)					
Initial D.T.W. (ft): _____		Time: _____					
Confirm D.T.W. (ft): _____		Time: _____ (taken prior to purging well)					
Final D.T.W. (ft): _____		Time: _____ (taken after sample collection)					
If NAPL Present: D.T.P.: _____		D.T.W.: _____ Thickness: _____ Time: _____					
<b>Water Quality Parameters - Recorded During Well Purging</b>							
Time	Temp (deg C)	Conductivity ( $\mu\text{S}$ ) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
<p><i>No Sample taken</i></p> <p><i>Well out</i></p>							
<p><i>C</i></p>							
<b>Analytical Parameters (include analysis method and number and type of sample containers)</b>							
BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3 - 40 mL Vials w/ HCl preserve) GRO and DRO per EPA Method 8015 (3 - 40 mL Vials; 2 w/ HCl preserve, 1 w/o preserve) SVOCs per EPA Method 8270 (1 L Amber; w/o preserve)							
<b>Disposal of Purged Water:</b> _____							
<b>Collected Samples Stored on Ice in Cooler:</b> _____							
<b>Chain of Custody Record Complete:</b> _____							
<b>Analytical Laboratory:</b> Hall Environmental Analysis Laboratory, Albuquerque, NM							
<b>Equipment Used During Sampling:</b> Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer							
<b>Notes/Comments:</b>							
<p><i>revised: 08/10/09</i></p>							

MONITORING WELL SAMPLING RECORD		Animas Environmental Services					
Monitor Well No: _____		624 E. Comanche, Farmington NM 87401 Tel. (505) 564-2281 Fax (505) 324-2022					
Site: Thriftway #810 Refinery Location: Bloomfield, New Mexico Project: Groundwater Monitoring and Sampling Sampling Technician: _____ Purge / No Purge: Purge Well Diameter (in): 2 Initial D.T.W. (ft): _____ Time: _____ Confirm D.T.W. (ft): _____ Time: _____ Final D.T.W. (ft): _____ Time: _____ If NAPL Present: D.T.P.: _____ D.T.W.: _____ Thickness: _____ Time: _____		Project No.: AES 050204 Date: _____ Arrival Time: _____ Air Temp: _____ T.O.C. Elev. (ft): _____ Total Well Depth (ft): _____ (taken at initial gauging of all wells) (taken prior to purging well) (taken after sample collection)					
Water Quality Parameters - Recorded During Well Purging							
Time	Temp (deg C)	Conductivity ( $\mu$ S) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
Analytical Parameters (include analysis method and number and type of sample containers)							
Disposal of Purged Water: _____							
Collected Samples Stored on Ice in Cooler: _____							
Chain of Custody Record Complete: _____							
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM							
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer							
Notes/Comments: _____							
_____							
_____							
_____							
<i>revised: 08/10/09</i>							





