

AP - 116

**STAGE 1 & 2
REPORTS**

**DATE:
4th Q - 2012**

AP-116



Animas Environmental Services, LLC

www.animasenvironmental.com

April 15, 2012

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

RECEIVED

MAY - 3 2013

Oil Conservation Division
2012 S. St. Francis Drive

Santa Fe, NM 87505

RE: 4th Quarter Remedial Progress Report 2012 S. St. Francis Drive
Thriftway Refinery
626 County Road 5500, Bloomfield, New Mexico

624 E. Comanche
Farmington, NM 87401
505-564-2281

Durango, Colorado
970-403-3084

Dear Mr. von Gonten and Mr. Hansen:

Animas Environmental Services, LLC (AES) has prepared this 4th Quarter 2012 (Year 3) 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. A General Site Plan is included as Figure 1.

1.0 MPE Well Installation and Free Product Measurement

1.1 *Installation of MPE Wells, October 2012*

BioTech installed seven multi-phase extraction (MPE) wells (MPE-84 through MPE-90) at the site in October 2012. The MPE wells were installed on 60-foot centers in order to provide a full radius of influence of up to 40 feet from each well, as presented in the Corrective Action Plan (CAP). All MPE wells were completed to 3 feet above grade and were manifolded together with 2-inch diameter vacuum hose.

1.2 *Development of MPE Wells*

MPE wells were developed by BioTech personnel using a combination of surge and pump techniques. Approximately 15 to 30 gallons of water were removed from MPE-84 through MPE-90. Groundwater pumped from the wells was placed in the two onsite lined

ponds for evaporation. The MPE wells were developed in general accordance with AES' Well Installation and Development SOP and applicable ASTM standards.

1.3 Measurement of Groundwater in MPE Wells

BioTech personnel measured depth to groundwater in MPE wells on November 19 and 20, 2012. Depth to water ranged from 9.15 feet below TOC in MPE-80 to 24.29 feet below TOC in MPE-1. During the fourth quarter 2012, free product was measured in 39 MPE wells with free product thicknesses ranging from 0.01 ft to 1.52 ft. Table 1 includes MPE depth to water and NAPL thickness measurements.

2.0 Installation of Monitor Well TW-52

2.1 Installation of TW-52

BioTech installed one off-site 2-inch diameter monitor well (TW-52) on October 2, 2012. This well was installed to delineate the down-gradient/cross-gradient extent of methyl tert-butyl ether (MTBE) contamination. TW-52 was installed using a hollow-stem hand auger, and well completion depth was approximately 7 feet bgs. The location of TW-52 is included on Figure 1.

2.2 Development of TW-52

Monitor well TW-52 was developed by BioTech personnel using a combination of surge and pump techniques. Approximately 15 gallons of water was removed from the well. Groundwater pumped from the well was placed in the two onsite lined ponds for evaporation. The monitor well was developed in general accordance with AES' Well Installation and Development SOP and applicable ASTM standards. Well development forms are presented in the Appendix.

3.3 Groundwater Sampling and Analytical Results, TW-52

Following well development, BioTech completed groundwater monitoring and sampling within TW-52 on October 8, 2012. Monitor well TW-52 was analyzed for the following:

- Benzene, toluene, ethylbenzene, and xylenes (BTEX), MTBE, and total naphthalene per U.S. Environmental Protection Agency (USEPA) Method 8260;

The sample was analyzed at Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico.

Laboratory analytical results reported concentrations of BTEX and naphthalene below laboratory detection limits. The MTBE concentration was reported at 180 µg/L.

3.0 Groundwater Monitoring and Sampling

BioTech conducted groundwater monitoring and gauging of the monitor wells at the site on November 2, 9, 12, and 14. Sampling of selected groundwater monitor wells occurred on November 26, 27, 28, and December 3 and 4, 2012. Based on the current sampling plan, monitoring and gauging events occurred during the first and third quarters of 2012, with groundwater sampling scheduled during the second and fourth quarters. Wells that were gauged and sampled during the November/December 2012 event are presented below:

Year 3 Quarter #4 Monitor Well Gauging and Sampling List

<i>Well ID</i>	<i>Gauging Only</i>	<i>Gauging and Sampling</i>
TW-1 through TW-6	X	
TW-7 and TW-8		X
TW-9 through TW-11	X	
TW-12* through TW-14*	X	
TW-15 through TW-17	X	
TW-18		X
TW-19* and TW-22*	X	
TW-23	X	
TW-24 through TW-29 (all*)	X	
TW-30 and TW-31		X
TW-33*	X	
TW-34 and	X	
TW-35* and 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	X	
TW-49		X

Well ID	Gauging Only	Gauging and Sampling
TW-50 through TW-52		X
MW-5	X	
MW-5 and MW-7		X
MW-20 and MW-21		X
* During 4 th Quarter 2012, these wells contained free product (including sheen of free product) and were not sampled.		

3.1 Measurement of Groundwater Elevations

Depth to groundwater in each of the selected wells was measured in November 2012 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 the Appendix.

3.2 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 and December 2012 in 18 wells, including TW-12, TW-13, TW-14, TW-19 through TW-22, TW-24, TW-25, TW-26, TW-28, TW-29, TW-33, TW-35, 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)

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

ρ_w is the water density, assumed to be 1.0 (g/mL)

3.3 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, 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.

3.4 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

3.5 Laboratory Analyses

Samples collected from monitor wells TW-7, TW-18, TW-31, TW-39, TW-42, TW-43, TW-45, TW-46, TW-49, TW-50, and MW-7 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 USEPA Method 8015B;
- BTEX, MTBE, and naphthalene per USEPA Method 8260;

Samples collected from monitor wells TW-37, TW-47, TW-51, MW-20, and MW-21 were analyzed for the following:

- TPH for GRO, MRO, and DRO per USEPA Method 8015B;
- BTEX, MTBE, and naphthalene per USEPA Method 8260; and
- Chloride and sulfate per USEPA Method 300.0.

Samples collected from monitor wells TW-8, TW-30, TW-41, and TW-52 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_3 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 in Albuquerque, New Mexico.

4.0 Groundwater Sampling Results

4.1 *Hydraulic Gradient and Water Quality Data*

4.1.1 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 and December 2012 ranged from 5,424.26 feet above mean sea level (AMSL) in MW-20 to 5,440.40 feet AMSL in TW-19. Groundwater elevations decreased across the site by an average of 0.1 feet since the gauging event in August 2012. Groundwater gradient was calculated between TW-1 and TW-42, with a magnitude of 0.006 ft/ft to the northwest for November/December 2012. The groundwater flow direction has remained stable, in a northwesterly direction, and is consistent with historical site data.

Table 2 includes depth to groundwater measurements and elevations. Groundwater elevation contours for November/December 2012 are included on Figure 2. Electronic copies of the Water Sample Collection Forms are included in the Appendix.

4.1.2 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/December 2012 sampling event ranged from 8.63°C in TW-42 to 16.37°C in

TW-18. Groundwater pH ranged between 7.27 (MW-21) and 7.91 (TW-18), and conductivity readings were between 2.811 mS/cm in TW-7 and 8.861 mS in TW-47. Dissolved oxygen concentrations ranged from 0.07 mg/L in TW-39 to 5.66 mg/L in TW-52. ORP ranged from -62.2 mV (TW-18) to -26.3 mV (MW-21).

4.2 Free Product

Free product was measured in 18 monitor wells, including TW-12, TW-13, TW-14, TW-19, TW-20, TW-21, TW-22, TW-24, TW-25, TW-26, TW-28, TW-29, TW-33, TW-35, TW-36, TW-38, TW-40, and TW-44. Measured LNAPL thicknesses ranged from 0.05 feet (TW-12) to 1.56 feet (TW-28). Free product thickness contours for November/December 2012 are presented in Figure 3, and Graphs 1 through 4 includes free product thicknesses and corrected groundwater elevations over time in the eastern portion of the product plume (TW-13, TW-14, TW-19, and TW-22, respectively).

4.3 Dissolved Phase Contaminant Concentrations

4.3.1 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 2 of the 20 wells sampled, including TW-37 (140 µg/L) and TW-41 (100 µg/L). Dissolved phase benzene concentration contours for November/December 2012 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 seven of the wells sampled in November/December 2012, including TW-37 (120 µg/L), TW-43 (270 µg/L), TW-45 (280 µg/L), TW-51 (340 µg/L), TW-52 (230 µg/L), MW-7 (120 µg/L), and MW-20 (190 µg/L). All other wells were either below the laboratory detection limits (1.0 µg/L) or below applicable WQCC standards. MTBE concentration contours for November/December 2012 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 (48 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 3, and electronic copies of laboratory analytical reports are presented in the Appendix.

4.3.2 Geochemical Parameters

Geochemical analytical results from November/December 2012 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 4, and analytical reports are included in the Appendix.
- Dissolved calcium concentrations ranged from 270 mg/L (TW-41) to 470 mg/L (TW-8 and TW-30);
- Dissolved magnesium concentrations ranged from 49 mg/L (TW-8) to 73 mg/L (TW-52);
- Dissolved potassium concentrations ranged from 5.1 mg/L (TW-8) to 8.9 mg/L (TW-30);
- Dissolved sodium concentrations ranged from 840 mg/L (TW-8) to 1,400 mg/L (TW-52);
- Bromide concentrations ranged from 1.3 mg/L (TW-8) to 5.9 mg/L (TW-30);
- Chloride concentrations were reported above the WQCC standard of 250 mg/L in TW-30 (970 mg/L), TW-41 (640 mg/L), TW-47 (1,100 mg/L), TW-51 (260 mg/L), MW-20 (390 mg/L), and MW-21 (630 mg/L);
- Fluoride concentrations were reported in TW-8 (0.74 mg/L), TW-30 (0.61 mg/L), and TW-52 (0.63 mg/L);
- Sulfate concentrations were reported above the WQCC standard of 600 mg/L in all sampled wells. Reported sulfate concentrations ranged from 810 mg/L (TW-41) to 4,200 mg/L (TW-47);
- Specific conductance in the sampled wells ranged from 4,900 $\mu\text{mhos}/\text{cm}$ to 7,100 $\mu\text{mhos}/\text{cm}$;
- Hardness as CaCO_3 ranged from 920 mg/L to 1,400 mg/L;
- TDS concentrations were above the WQCC standard of 1,000 mg/L in all wells sampled, with the highest TDS concentrations detected in TW-30 (5,440 mg/L).

Geochemical analytical data are summarized in Tables 4 and 5, and electronic copies of laboratory analytical reports are presented in the Appendix.

5.0 MPE Remediation System Operations

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. The MPE remediation system (Engine #2) was brought back online on May 11, 2012, and was in operation from May through November 2012. During October and November 2012, the unit operated within MPE wells MPE-73, MPE-74, and MPE-75.

BioTech personnel routinely inspect the system and record performance data. During O&M visits, BioTech personnel perform routine maintenance on the MPE remediation unit. Maintenance includes checking fluid levels, checking and replacing air filters, changing spark plugs, changing oil, flushing the radiator, and inspecting the catox unit.

In Engine #2, well vacuums for the reporting period from October through November 2012 typically ranged between 40 and 80 in-H₂O during MPE operations, with total process flow typically ranging between 7 and 47 scfm. Well flow dilution air is estimated to be approximately 10 percent at each well (as needed to lift product).

5.1 System Operations

Based on system operations for October and November 2012, the following estimated remedial summary is presented:

MPE Remediation System Summary, Thriftway Refinery				
Parameters	Engine #1	Engine #2	Total	
	Reporting Period (10/1/12–11/9/12)	Reporting Period (10/1/12–11/9/12)	Cumulative to Date	
Estimated Petroleum Hydrocarbons Removed (lbs)*	NA	1,882.98	22,466.44	
Equivalent Gallons Gasoline Removed (gal)*	NA	303.79	3,623.93	
Total Cubic Feet Processed (scf)	NA	1,403,209	17,163,417	

*from soil vapors only

MPE Remediation System Run Time Summary, Thriftway Refinery				
Month	Engine #1	Engine #1	Engine #2	Engine #2
	Run Time (hrs)	Percent Run Time	Run Time (hrs)	Percent Run Time
October and November 2012	NA	NA**	725	80 %

**Engine #1 is currently undergoing an engine rebuild.

5.2 Air Emissions Sampling

Influent and effluent photo-ionization detector readings and air samples were collected from the well gas influent and from the post-cat sample ports of Engine #2 on October 8, 2012. Note that air emission samples were not collected from Engine #1, which has not been in operation. Air samples were collected in Tedlar bags and subsequently submitted to Hall in Albuquerque, New Mexico, where they were analyzed for BTEX and MTBE per EPA Method 8021B and EPA Method 8015B GRO. The analyzed air contaminants from samples collected from Engine #2 showed a 99 percent reduction in contaminant emissions which was achieved through combustion and post-combustion catalytic oxidation.

5.2.1 Engine #2

Analytical results for the **pre-cat** sample (**influent**) showed reported concentrations:

- 746.5 ppmv benzene;
- 535.5 ppmv toluene;
- 126.7 ppmv ethylbenzene;
- 633.6 ppmv xylenes;
- <30.6 ppmv MTBE; and
- 88,800 ppmv TPH-GRO.

The analytical results for the **post-cat** sample (**effluent**) had reported concentrations:

- 1.723 ppmv benzene;
- 1.679 ppmv toluene;
- 1.816 ppmv ethylbenzene;
- 12.672 ppmv xylene;
- <0.637 ppmv MTBE; and
- 264 ppmv TPH-GRO.

Contaminant removal through combustion and the catox was calculated to be greater than 99 percent for BTEX, MTBE, and TPH-GRO. Tabulated air analyses are included in Table 6, and air laboratory analytical reports (electronic) are presented in the Appendix.

6.0 Phytoremediation Project

During October and November 2012, New Mexico State University (NMSU) Farmington Agricultural Science Center collected end of season data within the phytoremediation project portion of the refinery. According to the most recent NMSU report, results at the

location have been mixed for survival rates, height, diameter at breast height (DBH), and leaf vigor. According to the report:

Phase 1 involved the planting of 233 bareroot seedlings of local and hybrid poplars (*Populus spp.*), plus the xeric woody perennial, four-wing saltbush (*Atriplex canescens*), in four rows along the northern perimeter of the site. Phase 1 plantings demonstrated adequate survival and growth after three growing seasons. Survival for hybrid poplar clones PC-6, DN-34, and OP-367 was 86.0%, 85.0%, and 82.9%, respectively, with native cottonwood at 82.9%, reflecting reasonable survival for these entries. Four-wing saltbush had 50.8% survival. Height and DBH were satisfactory for the three top poplar clones and the cottonwood, with height ranging from 5.9 to 8.8 feet (1.8 to 2.7 m), and DBH ranging from 0.6 to 0.9 inches (1.0 to 1.6 cm).

Phase 2, which began in March 2011 and is situated just west of Phase 1, involved the planting of 239 dormant poplar poles, 15-20 feet (4.5-6 m) in length with a 1 to 2-inch (2.5-5 cm) aboveground diameter at breast height (DBH). Poles were inserted into groundwater 5 feet (1.5 m) apart with 10 feet (3 m) alleys between rows. Phase 2 poplars (OP-367) had near 100% survival and an average new stem growth of 8 inches after the first growing season; however, general health of these trees decreased somewhat during the second growing season. Average height in 2012 was 14.8 feet (4.5 m), a seasonal increase of 1 feet (0.3 m). Average DBH was 1.5 inches (3.8 cm), and average leaf vigor was 3.4.

Phase 3, which began in April 2012, involved the planting of an additional 224 hybrid poplar poles with similar size and layout dimensions in the northwest corner of the site. Drip irrigation was supplied to all trees from an on-site well. Phase 3 poplars (OP-367) failed to demonstrate acceptable survival or growth. Only 27% of trees were deemed to be 'healthy' (i.e., with a healthy/intact mainstem and a leaf vigor rating of 3 or higher). Many of the trees exhibited severe leaf yellowing and mainstem die-back at 3-7 feet (0.9-2.1 m) above tree base.



Figure 1. Phase 1 plots (planted in 2010) with local cottonwood and hybrid poplar demonstrating exceptional growth and leafiness. Open area in center has been naturally revegetated with native grasses and forbs.



Figure 2. Phase 2 hybrid poplars (planted in 2011) demonstrating good growth and leafiness. Naturally revegetated native grass and herbaceous forb species are established along the drip irrigation line.



Figure 3. Phase 3 hybrid poplars (planted in 2012) showing poor growth and leafiness. Naturally revegetated native grass and herbaceous forb species are evident.

Detailed results and discussion related to end of season data are included within the attached *Poplar Phytoremediation Project on an Abandoned Oil Refinery Site in Northwestern New Mexico*. NMSU has recommended additional plantings of hybrid poplar and four wing salt bush to occur in the Phase 3 area during the second quarter of 2013.

7.0 Summary and Conclusions

BioTech Remediation completed groundwater monitoring and gauging at the site in November and December 2012. Groundwater elevations in November/December 2012 decreased by an average of 0.1 feet since August 2012 and are consistent with historical seasonal fluctuations. The groundwater gradient was calculated to be approximately 0.006 ft/ft in a northwest direction across the site, which is also consistent with historical site data.

In November/December 2012, free product was observed and measured in 18 monitor wells, including TW-12, TW-13, TW-14, TW-19, TW-20, TW-21, TW-22, TW-24, TW-25, TW-26, TW-28, TW-29, TW-33, TW-35, TW-36, TW-38, TW-40, and TW-44. Measured thicknesses ranged from 0.05 feet (TW-12) to 1.56 feet (TW-28). During the fourth quarter 2012, free product was also measured in 39 MPE wells with free product thicknesses ranging from 0.01 ft to 1.52 ft.

Based upon the analytical results for the November/December 2012 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 140 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-51 (340 µg/L). Monitor well TW-41 exceeded the WQCC standard for naphthalene with 48 µg/L.

Geochemical data for the November/December 2012 sampling event showed that chloride concentrations exceeded the WQCC standard of 250 mg/L in six of the nine sampled wells, with the highest concentration being reported in TW-47 (1,100 mg/L). All sampled wells had concentrations of sulfate above the WQCC standard of 600 mg/L, with the highest concentration reported in TW-47 with 4,200 mg/L. All sampled wells exceeded the WQCC standard of 1,000 mg/L for TDS, with the highest concentration reported in TW-30 (5,440 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 system (Engine #2) was reinstalled at site in May 2012. The system was in operation at the site through early November 2012 when it was removed from the site for the winter. A total of approximately **22,466** lbs of petroleum hydrocarbons have been mechanically removed from the site since system startup on March 10, 2010.

8.0 Recommendations and Scheduled Site Activities

The following items were scheduled to occur during the 1st Quarter of 2013:

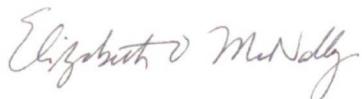
1. In accordance with the conditions of the Interim Groundwater Sampling Plan approval by NMOCD, the quarterly groundwater and NAPL monitoring and gauging event was conducted during March 2013.
2. Additional monitor wells TW-53 and TW-54 were installed on January 2, 2013. Details will be included in the first quarter 2013 report.
3. No monitoring activities of the phytoremediation project occurred during the first quarter of 2013. Phytoremediation monitoring and planting activities are scheduled for the second quarter of 2013.

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

Sincerely,



Deborah Watson, Project Manager



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

Attachments:

Tables

- Table 1. Summary of Groundwater and Free Product Measurements of Phases 1 through 5 MPE Wells
- Table 2. Summary of Recent Groundwater Measurements and Water Quality Data
- Table 3. Summary of Groundwater Analytical Results (VOC, Total Petroleum Hydrocarbons, and TDS)
- Table 4. Summary of Groundwater RCRA 8 Metals Analytical Results
- Table 5. Summary of Groundwater Dissolved Cations, Anions, Specific Conductance, Hardness, and Total Dissolved Solids Analytical Results
- Table 6. Summary of Air Laboratory Analytical Results

Figures

- Figure 1. General Site Plan
- Figure 2. Groundwater Elevations, November and December 2012
- Figure 3. Free Product Thickness Contours, November and December 2012
- Figure 4. Dissolved Benzene Concentration Contours, November and December 2012
- Figure 5. Dissolved MTBE Concentration Contours, November and December 2012

Graphs

- Graphs 1 through 4. Free Product Thicknesses and Groundwater Elevations over Time in TW-13, TW-14, TW-19, and TW-22

Appendix (Electronic)

- Water Sample Collection Forms
- Laboratory Analytical Reports Hall #1210482, 1211A49, 1211983, 1211987, 1212204, and 1212115

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

TABLE 1
 SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
 PHASES 1 through 5 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>
<i>Phase 1 Wells</i>					
MPE-1	03-Mar-10	TBD		23.63	
MPE-1	10-May-10	TBD		23.46	
MPE-1	17-Aug-10	TBD		23.65	
MPE-1	11-Nov-10	TBD		23.82	
MPE-1	25-Feb-11	TBD		23.63	
MPE-1	20-May-11	TBD		23.63	
MPE-1	25-Aug-11	TBD		24.01	
MPE-1	10-Nov-11	TBD		24.04	
MPE-1	29-Feb-12	TBD		23.87	
MPE-1	25-May-12	TBD		23.78	
MPE-1	13-Aug-12	TBD		24.15	
MPE-1	19-Nov-12	TBD		24.24	
MPE-2	03-Mar-10	TBD	21.51	21.54	0.03
MPE-2	18-May-10	TBD		21.29	
MPE-2	17-Aug-10	TBD	21.61	21.62	0.01
MPE-2	11-Nov-10	TBD	21.69	21.78	0.09
MPE-2	25-Feb-11	TBD		21.61	
MPE-2	20-May-11	TBD		21.46	
MPE-2	25-Aug-11	TBD		21.91	
MPE-2	10-Nov-11	TBD	21.94	22.03	0.09
MPE-2	29-Feb-12	TBD	21.77	21.86	0.09
MPE-2	25-May-12	TBD	21.65	21.82	0.17
MPE-2	13-Aug-12	TBD	22.00	22.31	0.31
MPE-2	19-Nov-12	TBD	22.09	22.35	0.26
MPE-3	03-Mar-10	TBD		20.79	
MPE-3	10-May-10	TBD		20.63	
MPE-3	17-Aug-10	TBD		20.83	
MPE-3	11-Nov-10	TBD		21.01	
MPE-3	25-Feb-11	TBD		20.89	
MPE-3	20-May-11	TBD		20.81	
MPE-3	25-Aug-11	TBD		21.22	
MPE-3	10-Nov-11	TBD		21.23	
MPE-3	29-Feb-12	TBD		21.03	
MPE-3	25-May-12	TBD		20.97	
MPE-3	13-Aug-12	TBD		21.34	
MPE-3	19-Nov-12	TBD		21.43	

TABLE 1
SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
PHASES 1 through 5 MPE WELLS
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)
MPE-4	03-Mar-10	TBD		19.95	
MPE-4	10-May-10	TBD		19.80	
MPE-4	17-Aug-10	TBD		20.01	
MPE-4	11-Nov-10	TBD		20.20	
MPE-4	25-Feb-11	TBD		20.07	
MPE-4	20-May-11	TBD		19.97	
MPE-4	25-Aug-11	TBD		20.47	
MPE-4	10-Nov-11	TBD		20.43	
MPE-4	29-Feb-12	TBD		20.27	
MPE-4	25-May-12	TBD		20.14	
MPE-4	13-Aug-12	TBD		20.53	
MPE-4	19-Nov-12	TBD		20.61	
MPE-5	03-Mar-10	TBD	19.30	19.41	0.11
MPE-5	18-May-10	TBD		19.00	
MPE-5	17-Aug-10	TBD	19.32	19.50	0.18
MPE-5	11-Nov-10	TBD	19.54	19.69	0.15
MPE-5	25-Feb-11	TBD	19.42	19.45	0.03
MPE-5	20-May-11	TBD	19.33	19.34	0.01
MPE-5	25-Aug-11	TBD	19.72	19.92	0.20
MPE-5	10-Nov-11	TBD	19.74	19.92	0.18
MPE-5	29-Feb-12	TBD	19.59	19.64	0.05
MPE-5	25-May-12	TBD	19.47	19.63	0.16
MPE-5	13-Aug-12	TBD	19.79	20.20	0.41
MPE-5	19-Nov-12	TBD	19.84	20.45	0.61
MPE-6	03-Mar-10	TBD		19.66	
MPE-6	10-May-10	TBD		NM	
MPE-6	17-Aug-10	TBD		19.70	
MPE-6	11-Nov-10	TBD		19.91	
MPE-6	01-Mar-11	TBD		19.69	
MPE-6	20-May-11	TBD		19.64	
MPE-6	25-Aug-11	TBD		20.07	
MPE-6	10-Nov-11	TBD	20.09	20.10	0.01
MPE-6	29-Feb-12	TBD		19.87	
MPE-6	25-May-12	TBD	19.83	19.84	0.01
MPE-6	13-Aug-12	TBD	20.20	20.22	0.02
MPE-6	19-Nov-12	TBD	20.28	20.30	0.02

TABLE 1
 SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
 PHASES 1 through 5 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-7	03-Mar-10	TBD		20.46	
MPE-7	10-May-10	TBD		NM	
MPE-7	17-Aug-10	TBD		20.49	
MPE-7	11-Nov-10	TBD		20.68	
MPE-7	01-Mar-11	TBD		20.54	
MPE-7	20-May-11	TBD		20.49	
MPE-7	25-Aug-11	TBD		20.88	
MPE-7	10-Nov-11	TBD		20.89	
MPE-7	29-Feb-12	TBD		20.73	
MPE-7	21-May-12	TBD		20.66	
MPE-7	13-Aug-12	TBD		20.99	
MPE-7	19-Nov-12	TBD		21.08	
MPE-8	03-Mar-10	TBD		21.74	
MPE-8	10-May-10	TBD		21.60	
MPE-8	17-Aug-10	TBD		21.81	
MPE-8	11-Nov-10	TBD		21.98	
MPE-8	01-Mar-11	TBD		21.95	
MPE-8	20-May-11	TBD		21.78	
MPE-8	25-Aug-11	TBD		22.32	
MPE-8	10-Nov-11	TBD		22.19	
MPE-8	29-Feb-12	TBD		22.00	
MPE-8	21-May-12	TBD		21.96	
MPE-8	13-Aug-12	TBD		22.30	
MPE-8	19-Nov-12	TBD		22.37	
MPE-9	03-Mar-10	TBD		23.44	
MPE-9	10-May-10	TBD		23.29	
MPE-9	17-Aug-10	TBD		23.51	
MPE-9	11-Nov-10	TBD		23.66	
MPE-9	01-Mar-11	TBD		23.49	
MPE-9	20-May-11	TBD		23.43	
MPE-9	25-Aug-11	TBD		23.87	
MPE-9	10-Nov-11	TBD		23.97	
MPE-9	29-Feb-12	TBD		23.68	
MPE-9	21-May-12	TBD		23.66	
MPE-9	13-Aug-12	TBD		24.00	
MPE-9	19-Nov-12	TBD		24.06	

TABLE 1
 SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
 PHASES 1 through 5 MPE WELLS
 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)
MPE-10	03-Mar-10	TBD		23.28	
MPE-10	10-May-10	TBD		23.10	
MPE-10	17-Aug-10	TBD		23.34	
MPE-10	11-Nov-10	TBD		23.46	
MPE-10	01-Mar-11	TBD		23.38	
MPE-10	20-May-11	TBD		23.31	
MPE-10	25-Aug-11	TBD		23.71	
MPE-10	10-Nov-11	TBD		23.67	
MPE-10	29-Feb-12	TBD		23.53	
MPE-10	21-May-12	TBD		23.47	
MPE-10	13-Aug-12	TBD		23.82	
MPE-10	19-Nov-12	TBD		23.86	
MPE-11	03-Mar-10	TBD		21.83	
MPE-11	10-May-10	TBD		21.68	
MPE-11	17-Aug-10	TBD		NM-Roots in Well	
MPE-11	11-Nov-10	TBD		NM-Roots in Well	
MPE-11	01-Mar-11	TBD		NM-Roots in Well	
MPE-11	20-May-11	TBD		NM-Roots in Well	
MPE-11	25-Aug-11	TBD		21.65	
MPE-11	10-Nov-11	TBD		21.66	
MPE-11	29-Feb-12	TBD		21.61	
MPE-11	21-May-12	TBD		NM-Roots in Well	
MPE-11	13-Aug-12	TBD		NM-Root Growth at 21.6'	
MPE-11	19-Nov-12	TBD		NM-Roots in Well	
MPE-12	03-Mar-10	TBD		22.34	
MPE-12	10-May-10	TBD		22.20	
MPE-12	17-Aug-10	TBD		22.45	
MPE-12	11-Nov-10	TBD		NM-Roots in Well	
MPE-12	01-Mar-11	TBD		NM-Roots in Well	
MPE-12	20-May-11	TBD		NM-Roots in Well	
MPE-12	25-Aug-11	TBD		22.79	
MPE-12	10-Nov-11	TBD		22.83	
MPE-12	29-Feb-12	TBD		22.59	
MPE-12	21-May-12	TBD		22.57	
MPE-12	13-Aug-12	TBD		NM-Root Growth at 22.7'	
MPE-12	19-Nov-12	TBD		NM-Roots in Well	

TABLE 1
 SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
 PHASES 1 through 5 MPE WELLS
 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)
MPE-13	03-Mar-10	TBD		22.70	
MPE-13	10-May-10	TBD		22.57	
MPE-13	17-Aug-10	TBD	22.78	22.82	0.04
MPE-13	11-Nov-10	TBD	22.90	22.96	0.06
MPE-13	01-Mar-11	TBD		22.82	
MPE-13	20-May-11	TBD		22.73	
MPE-13	25-Aug-11	TBD	23.12	23.24	0.12
MPE-13	10-Nov-11	TBD	23.11	23.18	0.07
MPE-13	29-Feb-12	TBD	22.97	22.99	0.02
MPE-13	21-May-12	TBD	22.91	22.97	0.06
MPE-13	13-Aug-12	TBD	23.22	23.45	0.23
MPE-13	19-Nov-12	TBD		23.23	
MPE-14	03-Mar-10	TBD		21.80	
MPE-14	10-May-10	TBD		21.65	
MPE-14	17-Aug-10	TBD	21.84	21.85	0.01
MPE-14	11-Nov-10	TBD		22.00	
MPE-14	01-Mar-11	TBD		21.86	
MPE-14	20-May-11	TBD		21.90	
MPE-14	25-Aug-11	TBD		22.23	
MPE-14	10-Nov-11	TBD	22.20	22.34	0.14
MPE-14	29-Feb-12	TBD		22.05	
MPE-14	21-May-12	TBD		22.01	
MPE-14	13-Aug-12	TBD	22.30	22.55	0.25
MPE-14	19-Nov-12	TBD	23.25	23.66	0.41
MPE-16	03-Mar-10	TBD		19.92	
MPE-16	10-May-10	TBD		19.78	
MPE-16	17-Aug-10	TBD		19.96	
MPE-16	11-Nov-10	TBD		20.14	
MPE-16	01-Mar-11	TBD		20.21	
MPE-16	20-May-11	TBD		19.97	
MPE-16	25-Aug-11	TBD		20.34	
MPE-16	10-Nov-11	TBD		20.35	
MPE-16	29-Feb-12	TBD		20.19	
MPE-16	21-May-12	TBD		20.12	
MPE-16	13-Aug-12	TBD		20.48	
MPE-16	19-Nov-12	TBD		20.55	

TABLE 1
 SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
 PHASES 1 through 5 MPE WELLS
 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)
MPE-17	03-Mar-10	TBD		20.11	
MPE-17	10-May-10	TBD		19.98	
MPE-17	17-Aug-10	TBD		20.04	
MPE-17	11-Nov-10	TBD		20.34	
MPE-17	01-Mar-11	TBD		20.21	
MPE-17	20-May-11	TBD		20.16	
MPE-17	25-Aug-11	TBD		20.49	
MPE-17	10-Nov-11	TBD		20.54	
MPE-17	29-Feb-12	TBD		20.49	
MPE-17	23-May-12	TBD	20.34	20.36	0.02
MPE-17	13-Aug-12	TBD	20.64	20.65	0.01
MPE-17	19-Nov-12	TBD	20.73	20.74	0.01
MPE-18	03-Mar-10	TBD		19.23	
MPE-18	10-May-10	TBD		NM	
MPE-18	17-Aug-10	TBD	19.27	19.28	0.01
MPE-18	11-Nov-10	TBD		19.34	
MPE-18	01-Mar-11	TBD		19.46	
MPE-18	20-May-11	TBD		19.35	
MPE-18	25-Aug-11	TBD		19.46	
MPE-18	10-Nov-11	TBD		19.67	
MPE-18	29-Feb-12	TBD		19.48	
MPE-18	23-May-12	TBD		19.49	
MPE-18	13-Aug-12	TBD		19.78	
MPE-18	19-Nov-12	TBD		19.86	
MPE-19	03-Mar-10	TBD		19.02	
MPE-19	10-May-10	TBD		18.86	
MPE-19	17-Aug-10	TBD		19.06	
MPE-19	11-Nov-10	TBD		19.25	
MPE-19	01-Mar-11	TBD		19.05	
MPE-19	20-May-11	TBD		19.02	
MPE-19	25-Aug-11	TBD		19.42	
MPE-19	10-Nov-11	TBD		19.47	
MPE-19	29-Feb-12	TBD		19.28	
MPE-19	23-May-12	TBD		19.23	
MPE-19	13-Aug-12	TBD		19.55	
MPE-19	19-Nov-12	TBD		19.62	

TABLE 1
 SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
 PHASES 1 through 5 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>
<i>Phase 2 Wells</i>					
MPE-20	03-Mar-10	TBD		18.72	
MPE-20	10-May-10	TBD		18.58	
MPE-20	17-Aug-10	TBD		18.75	
MPE-20	11-Nov-10	TBD		18.96	
MPE-20	01-Mar-11	TBD		18.87	
MPE-20	20-May-11	TBD		18.79	
MPE-20	25-Aug-11	TBD		19.14	
MPE-20	10-Nov-11	TBD		19.17	
MPE-20	29-Feb-12	TBD		18.98	
MPE-20	23-May-12	TBD		18.96	
MPE-20	13-Aug-12	TBD		19.25	
MPE-20	19-Nov-12	TBD		19.34	
MPE-21	03-Mar-10	TBD	19.88	19.99	0.11
MPE-21	18-May-10	TBD		19.50	
MPE-21	09-Jun-10	TBD		19.75	
MPE-21	17-Aug-10	TBD	19.90	19.91	0.01
MPE-21	11-Nov-10	TBD	20.12	20.21	0.09
MPE-21	01-Mar-11	TBD		19.99	
MPE-21	20-May-11	TBD		19.93	
MPE-21	25-Aug-11	TBD	20.32	20.37	0.05
MPE-21	10-Nov-11	TBD		20.41	
MPE-21	29-Feb-12	TBD	20.13	20.42	0.29
MPE-21	23-May-12	TBD	20.08	20.45	0.37
MPE-21	13-Aug-12	TBD	20.33	20.85	0.52
MPE-21	19-Nov-12	TBD	20.28	21.55	1.27
MPE-22	03-Mar-10	TBD	20.73	20.81	0.08
MPE-22	18-May-10	TBD		NM	
MPE-22	09-Jun-10	TBD	20.4	20.90	0.50
MPE-22	16-Jun-10	TBD		20.53	
MPE-22	17-Aug-10	TBD	20.71	20.88	0.17
MPE-22	11-Nov-10	TBD	20.94	20.95	0.01
MPE-22	01-Mar-11	TBD		20.84	
MPE-22	20-May-11	TBD		20.73	
MPE-22	25-Aug-11	TBD	21.11	21.15	0.04
MPE-22	10-Nov-11	TBD		21.28	

TABLE 1
SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
PHASES 1 through 5 MPE WELLS
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)
MPE-22	29-Feb-12	TBD		20.97	
MPE-22	23-May-12	TBD		20.96	
MPE-22	13-Aug-12	TBD	21.18	21.56	0.38
MPE-22	19-Nov-12	TBD	21.22	21.84	0.62
MPE-23	03-Mar-10	TBD		21.10	
MPE-23	10-May-10	TBD		20.97	
MPE-23	17-Aug-10	TBD		21.14	
MPE-23	11-Nov-10	TBD		21.33	
MPE-23	01-Mar-11	TBD		21.29	
MPE-23	20-May-11	TBD		20.80	
MPE-23	25-Aug-11	TBD		20.33	
MPE-23	10-Nov-11	TBD		20.25	
MPE-23	29-Feb-12	TBD		20.09	
MPE-23	23-May-12	TBD		20.96	
MPE-23	13-Aug-12	TBD		21.28	
MPE-23	19-Nov-12	TBD		21.41	
MPE-24	03-Mar-10	TBD		22.69	
MPE-24	10-May-10	TBD		22.53	
MPE-24	17-Aug-10	TBD		22.70	
MPE-24	11-Nov-10	TBD		22.88	
MPE-24	01-Mar-11	TBD		22.78	
MPE-24	20-May-11	TBD		22.64	
MPE-24	25-Aug-11	TBD		23.09	
MPE-24	10-Nov-11	TBD		23.12	
MPE-24	29-Feb-12	TBD		22.98	
MPE-24	23-May-12	TBD		22.90	
MPE-24	13-Aug-12	TBD		23.20	
MPE-24	19-Nov-12	TBD		23.27	
MPE-25	03-Mar-10	TBD		23.02	
MPE-25	10-May-10	TBD		22.87	
MPE-25	17-Aug-10	TBD		23.12	
MPE-25	11-Nov-10	TBD		23.23	
MPE-25	01-Mar-11	TBD		23.08	
MPE-25	20-May-11	TBD		22.99	
MPE-25	25-Aug-11	TBD		23.55	
MPE-25	10-Nov-11	TBD		23.54	

TABLE 1
 SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
 PHASES 1 through 5 MPE WELLS
 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)
MPE-25	29-Feb-12	TBD		23.26	
MPE-25	23-May-12	TBD		23.23	
MPE-25	13-Aug-12	TBD		23.59	
MPE-25	19-Nov-12	TBD		23.62	
MPE-26	03-Mar-10	TBD	22.75	23.41	0.66
MPE-26	18-May-10	TBD	22.58	23.38	0.80
MPE-26	28-May-10	TBD	22.55	23.42	0.87
MPE-26	09-Jun-10	TBD	22.56	23.73	1.17
MPE-26	17-Aug-10	TBD	22.94	23.34	0.40
MPE-26	11-Nov-10	TBD	23.04	23.59	0.55
MPE-26	03-Mar-11	TBD	22.96	23.38	0.42
MPE-26	20-May-11	TBD	22.82	22.86	0.04
MPE-26	25-Aug-11	TBD	23.29	23.99	0.70
MPE-26	10-Nov-11	TBD	23.17	24.14	0.97
MPE-26	29-Feb-12	TBD	22.89	23.95	1.06
MPE-26	23-May-12	TBD	23.00	23.28	0.28
MPE-26	13-Aug-12	TBD	23.28	24.25	0.97
MPE-26	19-Nov-12	TBD	23.22	24.29	1.07
MPE-27	03-Mar-10	TBD		21.92	
MPE-27	10-May-10	TBD		21.76	
MPE-27	17-Aug-10	TBD		22.03	
MPE-27	11-Nov-10	TBD		22.06	
MPE-27	03-Mar-11	TBD	NM-Roots in Well		
MPE-27	20-May-11	TBD	NM-Roots in Well		
MPE-27	25-Aug-11	TBD		21.42	
MPE-27	10-Nov-11	TBD		21.33	
MPE-27	29-Feb-12	TBD		22.06	
MPE-27	23-May-12	TBD		22.15	
MPE-27	13-Aug-12	TBD	NM-Root Growth at 22.2'		
MPE-27	19-Nov-12	TBD	NM-Roots in Well		
MPE-28	03-Mar-10	TBD		21.54	
MPE-28	10-May-10	TBD		21.39	
MPE-28	17-Aug-10	TBD		21.70	
MPE-28	11-Nov-10	TBD	NM-Roots in Well		
MPE-28	03-Mar-11	TBD	NM-Roots in Well		
MPE-28	20-May-11	TBD	NM-Roots in Well		

TABLE 1
 SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
 PHASES 1 through 5 MPE WELLS
 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)
MPE-28	25-Aug-11	TBD		22.19	
MPE-28	10-Nov-11	TBD		21.93	
MPE-28	29-Feb-12	TBD		21.74	
MPE-28	23-May-12	TBD		21.84	
MPE-28	13-Aug-12	TBD		22.18	
MPE-28	19-Nov-12	TBD		NM-Roots in Well	
MPE-29	03-Mar-10	TBD		20.54	
MPE-29	10-May-10	TBD		20.39	
MPE-29	17-Aug-10	TBD		20.73	
MPE-29	11-Nov-10	TBD		21.72	
MPE-29	03-Mar-11	TBD		21.45	
MPE-29	19-May-11	TBD		20.49	
MPE-29	25-Aug-11	TBD		21.03	
MPE-29	10-Nov-11	TBD		20.93	
MPE-29	29-Feb-12	TBD		20.87	
MPE-29	23-May-12	TBD		20.84	
MPE-29	13-Aug-12	TBD		21.11	
MPE-29	19-Nov-12	TBD		NM-Roots in Well	
MPE-30	03-Mar-10	TBD		21.19	
MPE-30	10-May-10	TBD		20.03	
MPE-30	17-Aug-10	TBD		21.33	
MPE-30	12-Nov-10	TBD		21.36	
MPE-30	03-Mar-11	TBD		20.99	
MPE-30	19-May-11	TBD		21.18	
MPE-30	25-Aug-11	TBD		21.75	
MPE-30	10-Nov-11	TBD		21.68	
MPE-30	29-Feb-12	TBD		21.36	
MPE-30	23-May-12	TBD		21.46	
MPE-30	13-Aug-12	TBD		NM-Root Growth at 21.4'	
MPE-30	19-Nov-12	TBD		NM-Roots in Well	
MPE-31	03-Mar-10	TBD		22.46	
MPE-31	10-May-10	TBD		22.30	
MPE-31	17-Aug-10	TBD		22.57	
MPE-31	12-Nov-10	TBD		22.64	
MPE-31	03-Mar-11	TBD		22.45	
MPE-31	19-May-11	TBD		22.45	

TABLE 1
 SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
 PHASES 1 through 5 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-31	25-Aug-11	TBD		22.95	
MPE-31	10-Nov-11	TBD		22.87	
MPE-31	29-Feb-12	TBD		22.66	
MPE-31	23-May-12	TBD		22.71	
MPE-31	13-Aug-12	TBD		23.00	
MPE-31	19-Nov-12	TBD	NM-Roots in Well		
MPE-33	03-Mar-10	TBD		22.34	
MPE-33	10-May-10	TBD		22.19	
MPE-33	17-Aug-10	TBD		22.39	
MPE-33	12-Nov-10	TBD		22.54	
MPE-33	03-Mar-11	TBD		22.61	
MPE-33	19-May-11	TBD		22.34	
MPE-33	25-Aug-11	TBD		22.78	
MPE-33	10-Nov-11	TBD		22.78	
MPE-33	29-Feb-12	TBD	22.54	22.73	0.19
MPE-33	23-May-12	TBD	22.51	22.59	0.08
MPE-33	13-Aug-12	TBD	22.73	23.41	0.68
MPE-33	19-Nov-12	TBD	21.80	22.36	0.56
MPE-34	03-Mar-10	TBD		22.16	
MPE-34	10-May-10	TBD		22.01	
MPE-34	17-Aug-10	TBD		22.20	
MPE-34	12-Nov-10	TBD		22.37	
MPE-34	03-Mar-11	TBD		22.41	
MPE-34	19-May-11	TBD		22.19	
MPE-34	25-Aug-11	TBD		22.60	
MPE-34	10-Nov-11	TBD		22.67	
MPE-34	29-Feb-12	TBD		22.44	
MPE-34	23-May-12	TBD		22.38	
MPE-34	13-Aug-12	TBD		22.66	
MPE-34	19-Nov-12	TBD	22.61	23.25	0.64
MPE-35	24-Feb-10	TBD	20.71	20.95	0.24
MPE-35	03-Mar-10	TBD	20.64	20.98	0.34
MPE-35	18-May-10	TBD	20.34	20.67	0.33
MPE-35	09-Jun-10	TBD	20.26	20.79	0.53
MPE-35	16-Jun-10	TBD		20.46	
MPE-35	17-Aug-10	TBD	NM-Attached to RSI Unit		

TABLE 1
SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
PHASES 1 through 5 MPE WELLS
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)
MPE-35	12-Nov-10	TBD	20.86	21.27	0.41
MPE-35	03-Mar-11	TBD	20.87	21.25	0.38
MPE-35	19-May-11	TBD		20.74	
MPE-35	25-Aug-11	TBD	21.05	21.59	0.54
MPE-35	10-Nov-11	TBD	21.07	21.70	0.63
MPE-35	29-Feb-12	TBD	21.00	21.09	0.09
MPE-35	23-May-12	TBD	20.88	21.12	0.24
MPE-35	13-Aug-12	TBD	21.05	21.95	0.90
MPE-35	19-Nov-12	TBD	21.13	22.00	0.87
MPE-36	03-Mar-10	TBD		19.91	
MPE-36	10-May-10	TBD		NM	
MPE-36	16-Jun-10	TBD		19.72	
MPE-36	17-Aug-10	TBD		19.94	
MPE-36	12-Nov-10	TBD		20.11	
MPE-36	03-Mar-11	TBD		19.92	
MPE-36	19-May-11	TBD		19.98	
MPE-36	25-Aug-11	TBD		20.27	
MPE-36	10-Nov-11	TBD	20.26	20.66	0.40
MPE-36	29-Feb-12	TBD	20.13	20.37	0.24
MPE-36	23-May-12	TBD	20.07	20.21	0.14
MPE-36	13-Aug-12	TBD	20.32	20.72	0.40
MPE-36	19-Nov-12	TBD	20.35	20.97	0.62
MPE-37	03-Mar-10	TBD	20.11	20.67	0.56
MPE-37	18-May-10	TBD		19.98	
MPE-37	16-Jun-10	TBD		20.07	
MPE-37	17-Aug-10	TBD		20.31	
MPE-37	12-Nov-10	TBD		20.51	
MPE-37	03-Mar-11	TBD		20.33	
MPE-37	19-May-11	TBD		20.37	
MPE-37	25-Aug-11	TBD		20.33	
MPE-37	10-Nov-11	TBD	20.68	20.7	0.02
MPE-37	29-Feb-12	TBD		20.52	
MPE-37	23-May-12	TBD		20.49	
MPE-37	13-Aug-12	TBD		20.76	
MPE-37	19-Nov-12	TBD	20.84	20.88	0.04
MPE-38	03-Mar-10	TBD	19.80	19.83	0.03

TABLE 1
SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
PHASES 1 through 5 MPE WELLS
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)
MPE-38	18-May-10	TBD	19.49	20.40	0.91
MPE-38	09-Jun-10	TBD	19.51	20.31	0.80
MPE-38	16-Jun-10	TBD	19.61	20.30	0.69
MPE-38	17-Aug-10	TBD	NM-Attached to RSI Unit		
MPE-38	12-Nov-10	TBD	19.99	20.59	0.60
MPE-38	03-Mar-11	TBD	20.06	20.63	0.57
MPE-38	19-May-11	TBD		19.83	
MPE-38	25-Aug-11	TBD	20.18	20.26	0.08
MPE-38	10-Nov-11	TBD	20.20	20.28	0.08
MPE-38	29-Feb-12	TBD	20.03	20.05	0.02
MPE-38	23-May-12	TBD	19.96	20.05	0.09
MPE-38	13-Aug-12	TBD	20.24	20.40	0.16
MPE-38	19-Nov-12	TBD	20.34	20.40	0.06
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Phase 3 Wells					
MPE-39	18-Jun-10	TBD		17.29	
MPE-39	17-Aug-10	TBD		17.44	
MPE-39	12-Nov-10	TBD		17.64	
MPE-39	03-Mar-11	TBD		17.51	
MPE-39	19-May-11	TBD		17.49	
MPE-39	25-Aug-11	TBD		17.78	
MPE-39	10-Nov-11	TBD		17.83	
MPE-39	29-Feb-12	TBD		17.65	
MPE-39	23-May-12	TBD		17.63	
MPE-39	13-Aug-12	TBD		17.91	
MPE-39	19-Nov-12	TBD		17.99	
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MPE-40	18-Jun-10	TBD		17.46	
MPE-40	17-Aug-10	TBD		17.63	
MPE-40	12-Nov-10	TBD		17.83	
MPE-40	03-Mar-11	TBD		17.72	
MPE-40	19-May-11	TBD		17.64	
MPE-40	25-Aug-11	TBD		17.98	
MPE-40	15-Nov-11	TBD		18.06	
MPE-40	29-Feb-12	TBD		17.85	
MPE-40	23-May-12	TBD		18.50	
MPE-40	13-Aug-12	TBD		18.12	
MPE-40	19-Nov-12	TBD		18.21	
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TABLE 1
 SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
 PHASES 1 through 5 MPE WELLS
 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)
MPE-41	18-Jun-10	TBD		18.14	
MPE-41	17-Aug-10	TBD		NM-Attached to RSI Unit	
MPE-41	12-Nov-10	TBD		18.51	
MPE-41	03-Mar-11	TBD		18.57	
MPE-41	19-May-11	TBD		18.37	
MPE-41	25-Aug-11	TBD		18.66	
MPE-41	15-Nov-11	TBD		18.74	
MPE-41	29-Feb-12	TBD		18.52	
MPE-41	23-May-12	TBD		19.25	
MPE-41	13-Aug-12	TBD		18.78	
MPE-41	19-Nov-12	TBD		18.86	
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-42	29-Feb-12	TBD		19.25	
MPE-42	23-May-12	TBD		20.09	
MPE-42	13-Aug-12	TBD		19.54	
MPE-42	19-Nov-12	TBD	19.46	20.28	0.82
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-43	29-Feb-12	TBD		20.16	
MPE-43	23-May-12	TBD	20.18	20.80	0.62
MPE-43	13-Aug-12	TBD		20.38	
MPE-43	19-Nov-12	TBD		20.47	
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	

TABLE 1
SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
PHASES 1 through 5 MPE WELLS
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)
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-44	29-Feb-12	TBD	20.24	21.20	0.96
MPE-44	23-May-12	TBD	20.41	20.50	0.09
MPE-44	13-Aug-12	TBD	20.36	21.30	0.94
MPE-44	19-Nov-12	TBD	20.40	21.54	1.14
MPE-45	18-Jun-10	TBD		20.05	sheen
			NM-Attached to RSI Unit		
MPE-45	17-Aug-10	TBD			
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-45	29-Feb-12	TBD	20.45	20.77	0.32
MPE-45	23-May-12	TBD		21.52	
MPE-45	13-Aug-12	TBD	20.60	21.19	0.59
MPE-45	19-Nov-12	TBD	20.63	21.41	0.78
MPE-46	18-Jun-10	TBD		21.16	
			NM-Attached to RSI Unit		
MPE-46	17-Aug-10	TBD			
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	
MPE-46	25-Aug-11	TBD		21.72	
MPE-46	15-Nov-11	TBD		21.53	
MPE-46	29-Feb-12	TBD		21.25	
MPE-46	23-May-12	TBD	20.95	21.58	0.63
MPE-46	13-Aug-12	TBD		21.81	
MPE-46	19-Nov-12	TBD		21.82	
MPE-47	18-Jun-10	TBD		20.68	
MPE-47	17-Aug-10	TBD		20.92	
MPE-47	12-Nov-10	TBD	20.87	21.28	0.41
MPE-47	03-Mar-11	TBD	20.80	21.29	0.49
MPE-47	19-May-11	TBD	20.73	20.75	0.02
MPE-47	25-Aug-11	TBD	21.13	22.25	1.12

TABLE 1
 SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
 PHASES 1 through 5 MPE WELLS
 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)
MPE-47	15-Nov-11	TBD	21.00	21.82	0.82
MPE-47	29-Feb-12	TBD	20.93	21.19	0.26
MPE-47	23-May-12	TBD		19.24	
MPE-47	13-Aug-12	TBD	21.15	22.42	1.27
MPE-47	19-Nov-12	TBD	21.12	22.15	1.03
MPE-48	18-Jun-10	TBD		19.94	
MPE-48	17-Aug-10	TBD		20.22	
MPE-48	12-Nov-10	TBD		20.11	
MPE-48	03-Mar-11	TBD		20.16	
MPE-48	19-May-11	TBD		19.91	
MPE-48	25-Aug-11	TBD		20.55	
MPE-48	15-Nov-11	TBD		20.24	
MPE-48	29-Feb-12	TBD		20.14	
MPE-48	23-May-12	TBD		19.52	
MPE-48	13-Aug-12	TBD		20.55	
MPE-48	19-Nov-12	TBD	NM-Roots in Well		
MPE-49	18-Jun-10	TBD		19.13	
MPE-49	17-Aug-10	TBD		19.44	
MPE-49	12-Nov-10	TBD		19.32	
MPE-49	03-Mar-11	TBD		19.35	
MPE-49	25-May-11	TBD		19.08	
MPE-49	25-Aug-11	TBD		19.80	
MPE-49	15-Nov-11	TBD		19.59	
MPE-49	29-Feb-12	TBD		19.34	
MPE-49	23-May-12	TBD	20.56	20.82	0.26
MPE-49	13-Aug-12	TBD		19.98	
MPE-49	19-Nov-12	TBD	NM-Roots in Well		
MPE-50	18-Jun-10	TBD		20.24	
MPE-50	17-Aug-10	TBD	NM-Attached to RSI Unit		
MPE-50	12-Nov-10	TBD		20.49	
MPE-50	03-Mar-11	TBD	NM-Attached to RSI Unit		
MPE-50	25-May-11	TBD		20.39	
MPE-50	25-Aug-11	TBD		20.90	
MPE-50	15-Nov-11	TBD	20.65	21.02	0.37
MPE-50	29-Feb-12	TBD	20.52	20.75	0.23
MPE-50	23-May-12	TBD		21.01	

TABLE 1
SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
PHASES 1 through 5 MPE WELLS
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)
MPE-50	13-Aug-12	TBD	20.89	21.26	0.37
MPE-50	19-Nov-12	TBD	20.86	21.13	0.27
MPE-51	18-Jun-10	TBD		20.70	
MPE-51	17-Aug-10	TBD		20.68	
MPE-51	12-Nov-10	TBD		20.99	
MPE-51	03-Mar-11	TBD		21.04	
MPE-51	25-May-11	TBD		20.80	
MPE-51	25-Aug-11	TBD		21.27	
MPE-51	15-Nov-11	TBD		21.21	
MPE-51	29-Feb-12	TBD		21.05	
MPE-51	25-May-12	TBD	20.74	21.24	0.50
MPE-51	13-Aug-12	TBD		21.30	
MPE-51	20-Nov-12	TBD		21.35	
MPE-52	18-Jun-10	TBD		20.49	
MPE-52	17-Aug-10	TBD		20.64	
MPE-52	12-Nov-10	TBD		20.84	
MPE-52	03-Mar-11	TBD		20.70	
MPE-52	25-May-11	TBD		20.69	
MPE-52	25-Aug-11	TBD	20.97	21.23	0.26
MPE-52	15-Nov-11	TBD	20.92	21.34	0.42
MPE-52	29-Feb-12	TBD	20.73	21.13	0.40
MPE-52	25-May-12	TBD	19.49	19.93	0.44
MPE-52	13-Aug-12	TBD	21.04	21.46	0.42
MPE-52	20-Nov-12	TBD	21.08	21.62	0.54
MPE-53	18-Jun-10	TBD		19.23	
MPE-53	17-Aug-10	TBD		19.38	
MPE-53	12-Nov-10	TBD		19.55	
MPE-53	03-Mar-11	TBD		19.42	
MPE-53	25-May-11	TBD	19.29	19.74	0.45
MPE-53	25-Aug-11	TBD	19.76	20.74	0.98
MPE-53	15-Nov-11	TBD	19.65	20.75	1.10
MPE-53	29-Feb-12	TBD	19.47	20.13	0.66
MPE-53	25-May-12	TBD	19.22	19.33	0.11
MPE-53	14-Aug-12	TBD	19.70	20.53	0.83
MPE-53	20-Nov-12	TBD	19.75	20.66	0.91

TABLE 1
 SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
 PHASES 1 through 5 MPE WELLS
 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)
MPE-54	18-Jun-10	TBD		18.85	
MPE-54	17-Aug-10	TBD		19.02	
MPE-54	12-Nov-10	TBD		19.19	
MPE-54	03-Mar-11	TBD		19.15	
MPE-54	25-May-11	TBD		19.23	
MPE-54	25-Aug-11	TBD	19.38	19.88	0.50
MPE-54	15-Nov-11	TBD	19.47	20.03	0.56
MPE-54	29-Feb-12	TBD	19.26	19.35	0.09
MPE-54	25-May-12	TBD		18.71	
MPE-54	14-Aug-12	TBD	19.40	20.18	0.78
MPE-54	20-Nov-12	TBD	19.45	20.31	0.86
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MPE-55	18-Jun-10	TBD		18.36	
MPE-55	17-Aug-10	TBD		18.51	
MPE-55	12-Nov-10	TBD		18.70	
MPE-55	03-Mar-11	TBD		18.61	
MPE-55	25-May-11	TBD		18.52	
MPE-55	25-Aug-11	TBD		18.86	
MPE-55	15-Nov-11	TBD		18.91	
MPE-55	29-Feb-12	TBD		18.73	
MPE-55	25-May-12	TBD		14.14	
MPE-55	14-Aug-12	TBD		19.00	
MPE-55	20-Nov-12	TBD		19.06	
MPE-56	18-Jun-10	TBD		13.80	
MPE-56	17-Aug-10	TBD		13.94	
MPE-56	12-Nov-10	TBD		14.14	
MPE-56	03-Mar-11	TBD		14.21	
MPE-56	19-May-11	TBD		14.01	
MPE-56	25-Aug-11	TBD		14.28	
MPE-56	15-Nov-11	TBD		14.30	
MPE-56	29-Feb-12	TBD		14.22	
MPE-56	25-May-12	TBD		14.83	
MPE-56	14-Aug-12	TBD		14.41	
MPE-56	20-Nov-12	TBD		14.49	
MPE-57	18-Jun-10	TBD		--	
MPE-57	17-Aug-10	TBD		14.63	
MPE-57	12-Nov-10	TBD		14.75	

TABLE 1
 SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
 PHASES 1 through 5 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-57	03-Mar-11	TBD		14.67	
MPE-57	19-May-11	TBD		14.68	
MPE-57	25-Aug-11	TBD		15.09	
MPE-57	15-Nov-11	TBD		15.00	
MPE-57	29-Feb-12	TBD		14.14	
MPE-57	25-May-12	TBD		15.08	
MPE-57	14-Aug-12	TBD		15.10	
MPE-57	20-Nov-12	TBD		15.18	
<i>Phase 4 Wells</i>					
MPE-58	18-Jun-10	TBD		--	
MPE-58	17-Aug-10	TBD		14.86	
MPE-58	12-Nov-10	TBD		14.99	
MPE-58	03-Mar-11	TBD		15.06	
MPE-58	19-May-11	TBD		14.96	
MPE-58	25-Aug-11	TBD		15.27	
MPE-58	15-Nov-11	TBD		15.32	
MPE-58	29-Feb-12	TBD		15.09	
MPE-58	25-May-12	TBD		13.79	
MPE-58	14-Aug-12	TBD		15.34	
MPE-58	20-Nov-12	TBD		15.41	
MPE-59	25-May-12	TBD		14.08	
MPE-59	14-Aug-12	TBD		14.06	
MPE-59	20-Nov-12	TBD		14.12	
MPE-60	25-May-12	TBD		13.88	
MPE-60	14-Aug-12	TBD		14.34	
MPE-60	20-Nov-12	TBD		14.43	
MPE-61	25-May-12	TBD		14.13	
MPE-61	14-Aug-12	TBD		14.15	
MPE-61	20-Nov-12	TBD		14.25	
MPE-62	25-May-12	TBD	14.86	15.36	0.50
MPE-62	14-Aug-12	TBD		14.40	
MPE-62	20-Nov-12	TBD		14.31	
MPE-63	25-May-12	TBD		15.34	

TABLE 1
SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
PHASES 1 through 5 MPE WELLS
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)
MPE-63	14-Aug-12	TBD	15.09	15.93	0.84
MPE-63	20-Nov-12	TBD	15.16	16.17	1.01
MPE-64	25-May-12	TBD	15.98	16.00	0.02
MPE-64	14-Aug-12	TBD	15.54	15.55	0.01
MPE-64	20-Nov-12	TBD		15.60	
MPE-65	25-May-12	TBD		16.16	
MPE-65	14-Aug-12	TBD	16.28	16.31	0.03
MPE-65	20-Nov-12	TBD	16.28	16.54	0.26
MPE-66	25-May-12	TBD	17.40	17.41	0.01
MPE-66	14-Aug-12	TBD	16.33	17.15	0.82
MPE-66	20-Nov-12	TBD	16.40	17.12	0.72
MPE-67	25-May-12	TBD		15.67	
MPE-67	14-Aug-12	TBD		17.71	
MPE-67	20-Nov-12	TBD		17.74	
MPE-68	14-Aug-12	TBD		16.09	
MPE-68	20-Nov-12	TBD		15.91	
MPE-69	14-Aug-12	TBD		15.50	
MPE-69	20-Nov-12	TBD		15.45	
MPE-70	14-Aug-12	TBD	15.67	16.01	0.34
MPE-70	20-Nov-12	TBD	15.65	16.40	0.75
MPE-71	22-Jun-12	TBD	16.04	16.06	0.02
MPE-71	14-Aug-12	TBD	15.68	16.23	0.55
MPE-71	20-Nov-12	TBD	15.72	16.51	0.79
MPE-72	22-Jun-12	TBD	15.79	16.76	0.97
MPE-72	14-Aug-12	TBD		16.29	
MPE-72	21-Nov-12	TBD		16.34	
MPE-73	22-Jun-12	TBD	14.68	15.65	0.97
MPE-73	13-Aug-12	TBD	16.59	17.93	1.34
MPE-73	20-Nov-12	TBD	16.00	17.52	1.52

TABLE 1
SUMMARY OF GROUNDWATER AND FREE PRODUCT MEASUREMENTS OF
PHASES 1 through 5 MPE WELLS
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)
MPE-74	22-Jun-12	TBD	13.68	14.56	0.88
MPE-74	13-Aug-12	TBD	14.86	15.72	0.86
MPE-74	20-Nov-12	TBD	14.91	16.20	1.29
MPE-75	22-Jun-12	TBD		12.91	
MPE-75	13-Aug-12	TBD	13.88	14.88	1.00
MPE-75	20-Nov-12	TBD	13.95	14.85	0.90
MPE-76	22-Jun-12	TBD		12.47	
MPE-76	13-Aug-12	TBD	13.03	13.37	0.34
MPE-76	20-Nov-12	TBD	13.12	13.40	0.28
MPE-77	22-Jun-12	TBD	11.33	11.36	0.03
MPE-77	13-Aug-12	TBD		12.65	
MPE-77	20-Nov-12	TBD		12.70	
MPE-78	22-Jun-12	TBD		11.33	

TABLE 2
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C.	Depth to Product	Depth to Water	NAPL Thickness	Corrected GW	pH	Conductivity	Dissolved Oxygen	Temp.	ORP	Purge Volume	
TW-1	29-Feb-12	5471.58		30.96		5440.62	NM	NM	NM	NM	NM	NM	
TW-1	11-May-12	5471.58		30.81		5440.77	NM	NM	NM	NM	NM	NM	
TW-1	08-Aug-12	5471.58		31.28		5440.30	NM	NM	NM	NM	NM	NM	
TW-1	02-Nov-12	5471.58		31.39		5440.19	NM	NM	NM	NM	NM	NM	
TW-2	29-Feb-12	5469.31		29.19		5440.12	NM	NM	NM	NM	NM	NM	
TW-2	11-May-12	5469.31		29.04		5440.27	NM	NM	NM	NM	NM	NM	
TW-2	08-Aug-12	5469.31		29.49		5439.82	NM	NM	NM	NM	NM	NM	
TW-2	02-Nov-12	5469.31		29.61		5439.70	NM	NM	NM	NM	NM	NM	
TW-3	29-Feb-12	5468.14		28.2		5439.94	NM	NM	NM	NM	NM	NM	
TW-3	11-May-12	5468.14		28.07		5440.07	NM	NM	NM	NM	NM	NM	
TW-3	08-Aug-12	5468.14		28.34		5439.80	NM	NM	NM	NM	NM	NM	
TW-3	02-Nov-12	5468.14		NM		NOT MEASURED - ROOT GROWTH AT 28'							
TW-4	29-Feb-12	5458.72		19.32		5439.40	NM	NM	NM	NM	NM	NM	
TW-4	11-May-12	5458.72		19.17		5439.55	NM	NM	NM	NM	NM	NM	
TW-4	08-Aug-12	5458.72		19.66		5439.06	NM	NM	NM	NM	NM	NM	
TW-4	02-Nov-12	5458.72		19.77		5438.95	NM	NM	NM	NM	NM	NM	
TW-5	29-Feb-12	5465.18		25.77		5439.41	NM	NM	NM	NM	NM	NM	
TW-5	11-May-12	5465.18		25.61		5439.57	NM	NM	NM	NM	NM	NM	
TW-5	08-Aug-12	5465.18		26.05		5439.13	NM	NM	NM	NM	NM	NM	
TW-5	02-Nov-12	5465.18		26.17		5439.01	NM	NM	NM	NM	NM	NM	
TW-6	29-Feb-12	5463.57		24.94		5438.63	NM	NM	NM	NM	NM	NM	
TW-6	11-May-12	5463.57		24.81		5438.76	NM	NM	NM	NM	NM	NM	
TW-6	08-Aug-12	5463.57		25.23		5438.34	NM	NM	NM	NM	NM	NM	

TABLE 2
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.</i>	<i>Depth to Product</i>	<i>Depth to Water</i>	<i>NAPL Thickness</i>	<i>Corrected GW</i>	<i>pH</i>	<i>Conductivity</i>	<i>Dissolved Oxygen</i>	<i>Temp.</i>	<i>ORP</i>	<i>Purge Volume</i>
TW-6	02-Nov-12	5463.57		25.35		5438.22	NM	NM	NM	NM	NM	NM
TW-7	29-Feb-12	5461.17		22.41		5438.76	NM	NM	NM	NM	NM	NM
TW-7	17-May-12	5461.17		22.28		5438.89	7.23	2.517	0.44	17.05	-24.5	NM
TW-7	08-Aug-12	5461.17		22.69		5438.48	NM	NM	NM	NM	NM	NM
TW-7	02-Nov-12	5461.17		22.83		5438.34	7.74	2.811	0.57	14.31	-53.2	2.0
TW-8	19-Feb-12	5458.29		19.83		5438.46	NM	NM	NM	NM	NM	NM
TW-8	17-May-12	5458.29		19.75		5438.54	7.19	2.791	0.09	14.53	-21.6	NM
TW-8	08-Aug-12	5458.29		20.23		5438.06	NM	NM	NM	NM	NM	NM
TW-8	02-Nov-12	5458.29		20.30		5437.99	7.83	3.298	1.00	14.47	-58.9	3.6
TW-9	29-Feb-12	5450.61		12.28		5438.33	NM	NM	NM	NM	NM	NM
TW-9	11-May-12	5450.61		12.27		5438.34	NM	NM	NM	NM	NM	NM
TW-9	08-Aug-12	5450.61		12.85		5437.76	NM	NM	NM	NM	NM	NM
TW-9	02-Nov-12	5450.61		12.82		5437.79	NM	NM	NM	NM	NM	NM
TW-10	29-Feb-12	5450.16		12.49		5437.67	NM	NM	NM	NM	NM	NM
TW-10	11-May-12	5450.16		12.48		5437.68	NM	NM	NM	NM	NM	NM
TW-10	08-Aug-12	5450.16		13.04		5437.12	NM	NM	NM	NM	NM	NM
TW-10	02-Nov-12	5450.16		12.96		5437.20	NM	NM	NM	NM	NM	NM
TW-11	29-Feb-12	5456.31		18.25		5438.06	NM	NM	NM	NM	NM	NM
TW-11	11-May-12	5456.31		18.18		5438.13	NM	NM	NM	NM	NM	NM
TW-11	08-Aug-12	5456.31		18.56		5437.75	NM	NM	NM	NM	NM	NM
TW-11	02-Nov-12	5456.31		18.68		5437.63	NM	NM	NM	NM	NM	NM
TW-12	28-Feb-12	5460.44		22.57		5437.87	NM	NM	NM	NM	NM	NM

TABLE 2
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C.	Depth to Product	Depth to Water	NAPL Thickness	Corrected GW	pH	Conductivity	Dissolved Oxygen	Temp.	ORP	Purge Volume
TW-12	11-May-12	5460.44	22.46	22.53	0.07	5437.97	NM	NM	NM	NM	NM	NM
TW-12	08-Aug-12	5460.44	22.83	23.11	0.28	5437.56	NM	NM	NM	NM	NM	NM
TW-12	12-Nov-12	5460.44	22.95	23.00	0.05	5437.48	NM	NM	NM	NM	NM	NM
TW-13	29-Feb-12	5458.17	20.79	21.70	0.91	5437.22			Not Sampled - NAPL Present			
TW-13	11-May-12	5458.17	20.70	21.60	0.90	5437.31			Not Sampled - NAPL Present			
TW-13	08-Aug-12	5458.17	21.05	22.25	1.20	5436.91	NM	NM	NM	NM	NM	NM
TW-13	12-Nov-12	5458.17	21.05	22.35	1.30	5436.90	NM	NM	NM	NM	NM	NM
TW-14	29-Feb-12	5454.24	17.21	17.52	0.31	5436.98	NM	NM	NM	NM	NM	NM
TW-14	11-May-12	5454.24	17.16	17.27	0.11	5437.06	NM	NM	NM	NM	NM	NM
TW-14	08-Aug-12	5454.24	17.30	18.52	1.22	5436.73	NM	NM	NM	NM	NM	NM
TW-14	12-Nov-12	5454.24	17.42	18.81	1.39	5436.58	NM	NM	NM	NM	NM	NM
TW-15	29-Feb-12	5450.44		13.19		5437.25	NM	NM	NM	NM	NM	NM
TW-15	17-May-12	5450.44		13.20		5437.24	7.32	3.593	0.85	14.09	-29.0	NM
TW-15	08-Aug-12	5450.44		13.70		5436.74	NM	NM	NM	NM	NM	NM
TW-15	02-Nov-12	5450.44		13.61		5436.83	NM	NM	NM	NM	NM	NM
TW-16	29-Feb-12	5448.45		11.44		5437.01	NM	NM	NM	NM	NM	NM
TW-16	11-May-12	5448.45		11.54		5436.91	NM	NM	NM	NM	NM	NM
TW-16	08-Aug-12	5448.45				Not Measured - Root Growth at 11.0'						
TW-16	02-Nov-12	5448.45				Not Measured - Root Growth at 11.0'						
TW-17	29-Feb-12	5446.24		10.06		5436.18	NM	NM	NM	NM	NM	NM
TW-17	11-May-12	5446.24		10.13		5436.11	NM	NM	NM	NM	NM	NM
TW-17	08-Aug-12	5446.24		10.58		5435.66	NM	NM	NM	NM	NM	NM
TW-17	02-Nov-12	5446.24		14.42		5431.82	NM	NM	NM	NM	NM	NM

TABLE 2
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.</i>	<i>Depth to Product</i>	<i>Depth to Water</i>	<i>NAPL Thickness</i>	<i>Corrected GW</i>	<i>pH</i>	<i>Conductivity</i>	<i>Dissolved Oxygen</i>	<i>Temp.</i>	<i>ORP</i>	<i>Purge Volume</i>
TW-18	29-Feb-12	5452.73		16.48		5436.25	7.25	NM	NM	NM	NM	NM
TW-18	17-May-12	5452.73		16.41		5436.32	7.29	4.157	0.79	16.25	-27.7	NM
TW-18	08-Aug-12	5452.73		16.78		5435.95	NM	NM	NM	NM	NM	NM
TW-18	02-Nov-12	5452.73		16.87		5435.86	7.91	4.440	1.10	16.37	-62.2	3.0
TW-19	29-Feb-12	5458.49	17.74	18.11	0.37	5440.69			Not Sampled - NAPL Present			
TW-19	11-May-12	5458.49	17.70	17.84	0.14	5440.77			Not Sampled - NAPL Present			
TW-19	08-Aug-12	5458.49	17.93	18.57	0.64	5440.45	NM	NM	NM	NM	NM	NM
TW-19	14-Nov-12	5458.49	17.91	18.95	1.04	5440.40	NM	NM	NM	NM	NM	NM
TW-20	29-Feb-12	5453.74	17.55	19.02	1.47	5435.94			Not Sampled - NAPL Present			
TW-20	11-May-12	5453.74	17.47	18.88	1.41	5436.03			Not Sampled - NAPL Present			
TW-20	08-Aug-12	5453.74	17.95	18.32	0.37	5435.73	NM	NM	NM	NM	NM	NM
TW-20	14-Nov-12	5453.74	17.73	18.90	1.17	5435.81	NM	NM	NM	NM	NM	NM
TW-21	29-Feb-12	5451.85							TW damaged by demolition work			
TW-21	14-May-12	5451.85							TW damaged by demolition work			
TW-21	08-Aug-12	5451.85	16.78	17.60	0.82	5434.93	NM	NM	NM	NM	NM	NM
TW-21	14-Nov-12	5451.85	16.77	17.84	1.07	5434.89	NM	NM	NM	NM	NM	NM
TW-22	29-Feb-12	5450.19	14.96	15.30	0.34	5435.17			Not Sampled - NAPL Present			
TW-22	14-May-12	5450.19	14.87	15.12	0.25	5435.28			Not Sampled - NAPL Present			
TW-22	08-Aug-12	5450.19	15.10	15.70	0.60	5434.99			Not Sampled - NAPL Present			
TW-22	14-Nov-12	5450.19	15.20	15.85	0.65	5434.88			Not Sampled - NAPL Present			
TW-23	29-Feb-12	5443.64		9.01		5434.63	NM	NM	NM	NM	NM	NM
TW-23	14-May-12	5443.64							Not Measured - Root Growth at 9.0'			

TABLE 2
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C.	Depth to Product	Depth to Water	NAPL Thickness	Corrected GW	pH	Conductivity	Dissolved Oxygen	Temp.	ORP	Purge Volume
TW-23	08-Aug-12	5443.64							Not Measured - Root Growth at 9.0'			
TW-23	14-Nov-12	5443.64							Not Measured - Root Growth at 9.0'			
TW-24	29-Feb-12	5444.79	11.08	11.10	0.02	5433.71			Not Sampled - NAPL Present			
TW-24	14-May-12	5444.79		11.07		5433.72	NM	NM	NM	NM	NM	NM
TW-24	08-Aug-12	5444.79	11.34	11.44		5433.35	NM	NM	NM	NM	NM	NM
TW-24	14-Nov-12	5444.79	11.37	11.47	0.10	5433.40	NM	NM	NM	NM	NM	NM
TW-25	29-Feb-12	5448.80	14.25	14.71	0.46	5434.47			Not Sampled - NAPL Present			
TW-25	14-May-12	5448.80	14.16	14.45	0.29	5434.59			Not Sampled - NAPL Present			
TW-25	08-Aug-12	5448.80	14.35	15.15	0.80	5434.31	NM	NM	NM	NM	NM	NM
TW-25	14-Nov-12	5448.80	14.43	15.31	0.88	5434.22	NM	NM	NM	NM	NM	NM
TW-26	29-Feb-12	5450.34	15.94	16.85	0.91	5434.24			Not Sampled - NAPL Present			
TW-26	14-May-12	5450.34	15.86	16.64	0.78	5434.35			Not Sampled - NAPL Present			
TW-26	08-Aug-12	5450.34	16.02	17.42	1.40	5434.08	NM	NM	NM	NM	NM	NM
TW-26	14-Nov-12	5450.34	16.12	17.62	1.50	5433.96	NM	NM	NM	NM	NM	NM
TW-28	29-Feb-12	5449.24	15.33	16.46	1.13	5433.71			Not Sampled - NAPL Present			
TW-28	14-May-12	5449.24	15.26	16.19	0.93	5433.82			Not Sampled - NAPL Present			
TW-28	08-Aug-12	5449.24	15.39	16.81	1.42	5433.60	NM	NM	NM	NM	NM	NM
TW-28	14-Nov-12	5449.24	15.50	17.06	1.56	5433.47	NM	NM	NM	NM	NM	NM
TW-29	29-Feb-12	5441.87	9.37	9.78	0.41	5432.43			Not Sampled - NAPL Present			
TW-29	14-May-12	5441.87	9.23	9.42	0.19	5432.61			Not Sampled - NAPL Present			
TW-29	08-Aug-12	5441.87	9.40	10.30	0.90	5432.31	NM	NM	NM	NM	NM	NM
TW-29	14-Nov-12	5441.87	9.51	10.50	0.99	5432.19	NM	NM	NM	NM	NM	NM

TABLE 2
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C.	Depth to Product	Depth to Water	NAPL Thickness	Corrected GW	pH	Conductivity	Dissolved Oxygen	Temp.	ORP	Purge Volume
TW-30	28-Feb-12	5437.93		6.18		5431.75	NM	NM	NM	NM	NM	NM
TW-30	14-May-12	5437.93		5.96		5431.97	NM	NM	NM	NM	NM	NM
TW-30	08-Aug-12	5437.93		6.40		5431.53	NM	NM	NM	NM	NM	NM
TW-30	09-Nov-12	5437.93		6.48		5431.45	7.70	5.352	0.48	11.64	-50.5	5.5
TW-31	28-Feb-12	5438.54		7.11		5431.43	NM	NM	NM	NM	NM	NM
TW-31	14-May-12	5438.54		6.76		5431.78	NM	NM	NM	NM	NM	NM
TW-31	08-Aug-12	5438.54		7.18		5431.36	NM	NM	NM	NM	NM	NM
TW-31	09-Nov-12	5438.54		7.36		5431.18	7.64	4.072	0.23	14.46	-47.7	3.0
TW-32	29-Feb-12	5441.61	9.27	10.72	1.45	5432.09			Not Sampled - NAPL Present			
TW-32	14-May-12	5441.61	9.13	10.47	1.34	5432.25			Not Sampled - NAPL Present			
TW-32	10-Aug-12	5441.61	9.34	10.79	1.45	5432.02	NM	NM	NM	NM	NM	NM
TW-33	29-Feb-12	5445.85	13.10	13.15	0.05	5432.74			Not Sampled - NAPL Present			
TW-33	14-May-12	5445.85	12.93	12.98	0.05	5432.91			Not Sampled - NAPL Present			
TW-33	08-Aug-12	5445.85	13.10	13.40	0.30	5432.70	NM	NM	NM	NM	NM	NM
TW-33	09-Nov-12	5445.85	13.22	13.50	0.28	5432.58	NM	NM	NM	NM	NM	NM
TW-34	29-Feb-12	5455.80		19.91		5435.89	NM	NM	NM	NM	NM	NM
TW-34	22-May-12	5455.80		19.99		5435.81	NM	NM	NM	NM	NM	NM
TW-34	10-Aug-12	5455.80		20.55		5435.25	NM	NM	NM	NM	NM	NM
TW-34	09-Nov-12	5455.80		20.38		5435.42	NM	NM	NM	NM	NM	NM
TW-35	29-Feb-12	5449.14		15.28		5433.86	NM	NM	NM	NM	NM	NM
TW-35	22-May-12	5449.14		15.51		5433.63	NM	NM	NM	NM	NM	NM
TW-35	10-Aug-12	5449.14	15.35	15.98	0.63	5433.68	NM	NM	NM	NM	NM	NM
TW-35	09-Nov-12	5449.14	15.45	16.01	0.56	5433.59	NM	NM	NM	NM	NM	NM

TABLE 2
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C.	Depth to Product	Depth to Water	NAPL Thickness	Corrected GW	pH	Conductivity	Dissolved Oxygen	Temp.	ORP	Purge Volume
TW-36	29-Feb-12	5441.91	13.14	13.22	0.08	5428.76			Not Sampled - NAPL Present			
TW-36	22-May-12	5441.91	13.13	13.30	0.17	5428.75			Not Sampled - NAPL Present			
TW-36	10-Aug-12	5441.91	13.32	13.72	0.40	5428.52	NM	NM	NM	NM	NM	NM
TW-36	09-Nov-12	5441.91	13.34	13.74	0.40	5428.50	NM	NM	NM	NM	NM	NM
TW-37	28-Feb-12	5439.59		10.67		5428.92	NM	NM	NM	NM	NM	NM
TW-37	17-May-12	5439.59		10.59		5429.00	7.26	3.124	0.95	16.40	-25.8	NM
TW-37	10-Aug-12	5439.59		10.80		5428.79	NM	NM	NM	NM	NM	NM
TW-37	09-Nov-12	5439.59		10.90		5428.69	7.60	3.374	0.13	16.17	-45.4	3.0
TW-38	29-Feb-12	5442.11	11.58	11.60	0.02	5430.53	NM	NM	NM	NM	NM	NM
TW-38	14-May-12	5442.11		11.56		5430.55	NM	NM	NM	NM	NM	NM
TW-38	10-Aug-12	5442.11	11.64	11.78	0.14	5430.45	NM	NM	NM	NM	NM	NM
TW-38	09-Nov-12	5442.11	11.77	11.97	0.20	5430.31	NM	NM	NM	NM	NM	NM
TW-39	28-Feb-12	5438.43		7.87		5430.56	NM	NM	NM	NM	NM	NM
TW-39	14-May-12	5438.43		7.30		5431.13	7.17	3.934	0.56	17.39	-20.7	NM
TW-39	10-Aug-12	5438.43		7.91		5430.52	NM	NM	NM	NM	NM	NM
TW-39	09-Nov-12	5438.43		8.16		5430.27	7.52	3.510	0.07	15.11	-40.6	3.0
TW-40	29-Feb-12	5437.50	7.86	8.33	0.47	5429.56			Not Sampled - NAPL Present			
TW-40	14-May-12	5437.50	7.27	7.55	0.28	5430.18			Not Sampled - NAPL Present			
TW-40	10-Aug-12	5437.50	7.82	7.89	0.07	5429.67	NM	NM	NM	NM	NM	NM
TW-40	09-Nov-12	5437.50	8.24	8.38	0.14	5429.24	NM	NM	NM	NM	NM	NM
TW-41	28-Feb-12	5434.77		6.06		5428.71	NM	NM	NM	NM	NM	NM
TW-41	21-May-12	5434.77		5.85		5428.92	7.08	4.146	0.26	16.69	-15.6	NM

TABLE 2
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C.	Depth to Product	Depth to Water	NAPL Thickness	Corrected GW	pH	Conductivity	Dissolved Oxygen	Temp.	ORP	Purge Volume
TW-41	10-Aug-12	5434.77		5.67		5429.10	NM	NM	NM	NM	NM	NM
TW-41	09-Nov-12	5434.77		6.34		5428.43	7.40	3.985	0.15	14.72	-34.1	3.0
TW-42	28-Feb-12	5433.76		6.14		5427.62	NM	NM	NM	NM	NM	NM
TW-42	21-May-12	5433.76		7.01		5426.75	7.18	4.835	0.19	14.92	-21.0	NM
TW-42	10-Aug-12	5433.76		5.79		5427.97	NM	NM	NM	NM	NM	NM
TW-42	09-Nov-12	5433.76		6.26		5427.50	7.55	3.735	1.10	8.63	-41.9	3.0
TW-43	28-Feb-12	5440.42		12.27		5428.15	NM	NM	NM	NM	NM	NM
TW-43	21-May-12	5440.42		12.26		5428.16	7.11	4.350	0.88	15.95	-17.1	NM
TW-43	10-Aug-12	5440.42		12.48		5427.94	NM	NM	NM	NM	NM	NM
TW-43	09-Nov-12	5440.42		12.50		5427.92	7.36	4.010	1.50	12.73	-31.1	3.0
TW-44	29-Feb-12	5444.08	14.96	16.17	1.21	5428.91						
TW-44	14-May-12	5444.08	14.98	16.10	1.12	5428.91						
TW-44	10-Aug-12	5444.08	15.10	16.48	1.38	5428.74	NM	NM	NM	NM	NM	NM
TW-44	12-Nov-12	5444.08	15.15	16.59	1.44	5428.68	NM	NM	NM	NM	NM	NM
TW-45	29-Feb-12	TBS		7.02			NM	NM	NM	NM	NM	NM
TW-45	21-May-12	TBS		7.08			7.18	5.029	1.88	15.13	-21.1	NM
TW-45	10-Aug-12	TBS		7.30			NM	NM	NM	NM	NM	NM
TW-45	12-Nov-12	TBS		7.28			7.43	3.867	1.30	12.48	-35.2	3.0
TW-46	29-Feb-12	TBS		7.36			NM	NM	NM	NM	NM	NM
TW-46	21-May-12	TBS		7.37			7.14	4.727	0.60	15.22	-18.7	NM
TW-46	10-Aug-12	TBS		7.52			NM	NM	NM	NM	NM	NM
TW-46	12-Nov-12	TBS		7.56			7.59	4.095	0.79	13.71	-44.7	3.0

TABLE 2
SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C.	Depth to Product	Depth to Water	NAPL Thickness	Corrected GW	pH	Conductivity	Dissolved Oxygen	Temp.	ORP	Purge Volume
TW-47	29-Feb-12	TBS		6.72			NM	NM	NM	NM	NM	NM
TW-47	22-May-12	TBS		7.84			NM	NM	NM	NM	NM	NM
TW-47	13-Aug-12	TBS		7.15			NM	NM	NM	NM	NM	NM
TW-47	12-Nov-12	TBS		7.05			7.50	8.861	1.23	14.15	-39.7	3.0
TW-48	28-Feb-12	TBS		7.28			NM	NM	NM	NM	NM	NM
TW-48	22-May-12	TBS		7.08			NM	NM	NM	NM	NM	NM
TW-48	13-Aug-12	TBS					Not Measured - Root Growth at 7.0'					
TW-48	12-Nov-12	TBS					Not Measured - Root Growth at 7.0'					
TW-49	29-Feb-12	TBS		6.11			NM	NM	NM	NM	NM	NM
TW-49	22-May-12	TBS		6.10			7.08	6.360	1.35	14.30	-15.6	NM
TW-49	13-Aug-12	TBS		6.49			NM	NM	NM	NM	NM	NM
TW-49	12-Nov-12	TBS		6.41			7.28	7.350	2.72	10.35	-26.6	3.0
TW-50	28-Feb-12	TBS		7.98			NM	NM	NM	NM	NM	NM
TW-50	22-May-12	TBS		7.58			7.15	5.354	0.45	16.25	-19.7	NM
TW-50	13-Aug-12	TBS		7.94			NM	NM	NM	NM	NM	NM
TW-50	12-Nov-12	TBS		8.28			7.56	4.756	1.59	11.69	-42.5	3.0
TW-51	13-Aug-12	TBS		7.26			NM	NM	NM	NM	NM	NM
TW-51	12-Nov-12	TBS		7.22			7.31	5.519	0.34	13.70	-28.8	3.0
TW-52	12-Nov-12	TBS		7.72			7.70	5.338	5.66	12.03	-50.3	2.0
MW-5	28-Feb-12	5428.97		5.09		5423.88	NM	NM	NM	NM	NM	NM
MW-5	22-May-12	5428.97		5.13		5423.84	NM	NM	NM	NM	NM	NM
MW-5	13-Aug-12	5428.97		5.24		5423.73	NM	NM	NM	NM	NM	NM

TABLE 2
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.</i>	<i>Depth to Product</i>	<i>Depth to Water</i>	<i>NAPL Thickness</i>	<i>Corrected GW</i>	<i>pH</i>	<i>Conductivity</i>	<i>Dissolved Oxygen</i>	<i>Temp.</i>	<i>ORP</i>	<i>Purge Volume</i>
MW-5	12-Nov-12	5428.97		DRY		NM	NM	NM	NM	NM	NM	NM
MW-7	28-Feb-12	5435.28		8.69		5426.59	NM	NM	NM	NM	NM	NM
MW-7	22-May-12	5435.28		8.08		5427.20	NM	NM	NM	NM	NM	NM
MW-7	13-Aug-12	5435.28		8.84		5426.44	NM	NM	NM	NM	NM	NM
MW-7	12-Nov-12	5435.28		9.09		5426.19	7.39	4.585	1.20	13.05	-33.4	3.0
MW-20	29-Feb-12	5430.45		5.99		5424.46	NM	NM	NM	NM	NM	NM
MW-20	21-May-12	5430.45		6.04		5424.41	7.09	4.748	0.38	14.15	-15.8	NM
MW-20	13-Aug-12	5430.45		6.13		5424.32	NM	NM	NM	NM	NM	NM
MW-20	12-Nov-12	5430.45		6.19		5424.26	7.33	4.164	0.39	12.81	-29.5	3.0
MW-21	29-Feb-12	5428.62		3.52		5425.1	NM	NM	NM	NM	NM	NM
MW-21	21-May-12	5428.62		3.50		5425.12	7.21	6.073	0.99	15.48	-23.1	NM
MW-21	13-Aug-12	5428.62		3.88		5424.74	NM	NM	NM	NM	NM	NM

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	<i>Benzene</i> μg/L	<i>Toluene</i> μg/L	<i>Ethyl-benzene</i> μg/L	<i>Xylenes</i> μg/L	<i>MTBE</i> μg/L	<i>Naphthalene</i> μg/L	<i>GRO C6-C10</i> mg/L	<i>DRO C10-C22</i> mg/L	<i>MRO</i> mg/L	<i>Total Dissolved Solids</i> mg/L
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			<i>2540C</i>
<i>NM WQCC STANDARD</i>		10	750	750	620	100	30	<i>NE</i>	<i>NE</i>	<i>NE</i>	1,000
TW-1	15-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA
TW-1	19-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	2,530
TW-2	15-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA
TW-2	19-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	4,020
TW-3	15-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA
TW-3	19-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	4,170
TW-4	16-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA
TW-4	19-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	6,530
TW-5	15-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA
TW-5	19-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	3,180
TW-6	15-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA
TW-6	19-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	4,020
TW-7	15-Dec-08	67	1,700	710	4,200	<10	308	15	2.1	<5.0	NA
TW-7	19-Aug-09	3.8	11	98	15	<1.0	19	0.79	<1.0	<5.0	3,930
TW-7	18-May-11	<5.0	23	310	37	<5.0	49	NA	NA	NA	4,330
TW-7	17-Nov-11	1.5	19	100	45	<1.0	25	1.40	<1.0	<5.0	4,230
TW-7	17-May-12	2.5	24	370	150	<1.0	32	NA	NA	NA	4,430

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
 (VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	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
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			2540C
<i>NM WQCC STANDARD</i>		10	750	750	620	100	30	NE	NE	NE	1,000
TW-7	26-Nov-12	<5.0	<5.0	120	20	<5.0	<10	1.3	<1.0	<5.0	NA
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-8	17-May-12	17	<1.0	130	46	<1.0	<2.0	NA	NA	NA	3,940
TW-8	26-Nov-12	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	0.11	<1.0	<5.0	4,340
TW-9	16-Dec-08	<1.0	<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	<1.0	<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	<1.0	<2.0	<1.0	<2.0	<0.050	<1.0	<5.0	6,260
TW-11	11-May-10	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<0.050	<1.0	<5.0	6,400
TW-11	17-Nov-11	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<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

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	<i>Benzene</i> μg/L	<i>Toluene</i> μg/L	<i>Ethyl-benzene</i> μg/L	<i>Xylenes</i> μg/L	<i>MTBE</i> μg/L	<i>Naphthalene</i> μg/L	<i>GRO C6-C10</i> mg/L	<i>DRO C10-C22</i> mg/L	<i>MRO</i> mg/L	<i>Total Dissolved Solids</i> mg/L
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			2540C
<i>NM WQCC STANDARD</i>		10	750	750	620	100	30	NE	NE	NE	1,000
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									
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	Not Sampled-NAPL present									
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-15	17-May-12	11	1.6	37	<2.0	<1.0	<2.0	NA	NA	NA	4,920

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	<i>Benzene</i> <i>µg/L</i>	<i>Toluene</i> <i>µg/L</i>	<i>Ethyl-benzene</i> <i>µg/L</i>	<i>Xylenes</i> <i>µg/L</i>	<i>MTBE</i> <i>µg/L</i>	<i>Naphthalene</i> <i>µg/L</i>	<i>GRO C6-C10</i> <i>mg/L</i>	<i>DRO C10-C22</i> <i>mg/L</i>	<i>MRO</i> <i>mg/L</i>	<i>Total Dissolved Solids</i> <i>mg/L</i>
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			<i>2540C</i>
<i>NM WQCC STANDARD</i>		<i>10</i>	<i>750</i>	<i>750</i>	<i>620</i>	<i>100</i>	<i>30</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1,000</i>
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
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-18	17-May-12	5.3	<1.0	31	<2.0	<1.0	<2.0	NA	NA	NA	5,410
TW-18	26-Nov-12	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<0.050	<1.0	<5.0	NA
TW-19	17-Dec-08	Not Sampled-NAPL present									
TW-19	21-Aug-09	Not Sampled-NAPL present									
TW-19	17-Feb-10	Not Sampled-Surface Casing Damaged									
TW-19	7-May-10	Not Sampled-NAPL present									
TW-19	18-Aug-10	Not Sampled-NAPL present (sheen)									
TW-19	15-Nov-10	Not Sampled-NAPL present									
TW-19	18-May-11	Not Sampled-NAPL present									

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
 (VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	<i>Benzene</i> μg/L	<i>Toluene</i> μg/L	<i>Ethyl-benzene</i> μg/L	<i>Xylenes</i> μg/L	<i>MTBE</i> μg/L	<i>Naphthalene</i> μg/L	<i>GRO C6-C10</i> mg/L	<i>DRO C10-C22</i> mg/L	<i>MRO</i> mg/L	<i>Total Dissolved Solids</i> mg/L
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			<i>2540C</i>
<i>NM WQCC STANDARD</i>		10	750	750	620	100	30	NE	NE	NE	1,000
TW-19	15-Nov-11	Not Sampled-NAPL present									
TW-20	17-Dec-08	Not Sampled-NAPL present									
TW-20	21-Aug-09	Not Sampled-NAPL present									
TW-20	17-Feb-10	Not Sampled-NAPL present									
TW-20	7-May-10	Not Sampled-NAPL present									
TW-20	18-Aug-10	Attached to RSI Unit									
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									

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
 (VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	<i>Benzene</i> μg/L	<i>Toluene</i> μg/L	<i>Ethyl-benzene</i> μg/L	<i>Xylenes</i> μg/L	<i>MTBE</i> μg/L	<i>Naphthalene</i> μg/L	<i>GRO C6-C10</i> mg/L	<i>DRO C10-C22</i> mg/L	<i>MRO</i> mg/L	<i>Total Dissolved Solids</i> mg/L
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			2540C
<i>NM WQCC STANDARD</i>		10	750	750	620	100	30	NE	NE	NE	1,000
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
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				Not Sampled-NAPL present						
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				Not Sampled-NAPL present (sheen)						
TW-24	15-Nov-10				Not Sampled-NAPL present						
TW-24	18-May-11				Not Sampled-NAPL present						
TW-24	15-Nov-11				Not Sampled-NAPL present						
TW-25	17-Dec-08				Not Sampled-NAPL present						
TW-25	21-Aug-09				Not Sampled-NAPL present						
TW-25	17-Feb-10				Not Sampled-NAPL present						
TW-25	7-May-10				Not Sampled-NAPL present						
TW-25	18-Aug-10				Not Sampled-NAPL present						
TW-25	15-Nov-10				Not Sampled-NAPL present						

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	<i>Benzene</i> μg/L	<i>Toluene</i> μg/L	<i>Ethyl-benzene</i> μg/L	<i>Xylenes</i> μg/L	<i>MTBE</i> μg/L	<i>Naphthalene</i> μg/L	<i>GRO C6-C10</i> mg/L	<i>DRO C10-C22</i> mg/L	<i>MRO</i> mg/L	<i>Total Dissolved Solids</i> mg/L
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			<i>2540C</i>
<i>NM WQCC STANDARD</i>		10	750	750	620	100	30	NE	NE	NE	1,000
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										
TW-26	18-Aug-10										
TW-26	15-Nov-10										
TW-26	18-May-11										
TW-26	15-Nov-11										
TW-28	17-Dec-08										
TW-28	21-Aug-09										
TW-28	17-Feb-10										
TW-28	7-May-10										
TW-28	18-Aug-10										
TW-28	15-Nov-10										
TW-28	18-May-11										
TW-28	15-Nov-11										
TW-29	17-Dec-08										
TW-29	21-Aug-09										

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
 (VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	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
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			2540C
<i>NM WQCC STANDARD</i>		10	750	750	620	100	30	NE	NE	NE	1,000
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										
TW-29	18-Aug-10										
TW-29	15-Nov-10										
TW-29	18-May-11										
TW-29	15-Nov-11										
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-30	27-Nov-12	2.9	<1.0	<1.0	<2.0	6.3	<2.0	0.16	<1.0	<5.0	5,440
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	NA
TW-31	27-Nov-12	<1.0	<1.0	<1.0	<2.0	5.4	<2.0	<0.050	<1.0	<5.0	NA

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	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
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
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										
TW-33	17-Dec-08										
TW-33	21-Aug-09										
TW-33	17-Feb-10										
TW-33	7-May-10										
TW-33	18-Aug-10										
TW-33	15-Nov-10										
TW-33	18-May-11										
TW-33	15-Nov-11										
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

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
 (VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	<i>Benzene</i> <i>µg/L</i>	<i>Toluene</i> <i>µg/L</i>	<i>Ethyl-benzene</i> <i>µg/L</i>	<i>Xylenes</i> <i>µg/L</i>	<i>MTBE</i> <i>µg/L</i>	<i>Naphthalene</i> <i>µg/L</i>	<i>GRO C6-C10</i> <i>mg/L</i>	<i>DRO C10-C22</i> <i>mg/L</i>	<i>MRO</i> <i>mg/L</i>	<i>Total Dissolved Solids mg/L</i>
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			<i>2540C</i>
<i>NM WQCC STANDARD</i>		<i>10</i>	<i>750</i>	<i>750</i>	<i>620</i>	<i>100</i>	<i>30</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1,000</i>
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	<1.0	<2.0	<1.0	<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	<1.0	<2.0	<1.0	<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	
TW-36	21-Aug-09	<i>Not Sampled-NAPL present</i>									
TW-36	17-Feb-10	<i>Not Sampled-NAPL present</i>									
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	<i>Not Sampled-NAPL present</i>									
TW-36	15-Nov-10	<i>Not Sampled-NAPL present</i>									
TW-36	18-May-11	<i>Not Sampled-NAPL present</i>									
TW-36	15-Nov-11	<i>Not Sampled-NAPL present</i>									
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

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	<i>Benzene</i> <i>µg/L</i>	<i>Toluene</i> <i>µg/L</i>	<i>Ethyl-benzene</i> <i>µg/L</i>	<i>Xylenes</i> <i>µg/L</i>	<i>MTBE</i> <i>µg/L</i>	<i>Naphthalene</i> <i>µg/L</i>	<i>GRO C6-C10</i> <i>mg/L</i>	<i>DRO C10-C22</i> <i>mg/L</i>	<i>MRO</i> <i>mg/L</i>	<i>Total Dissolved Solids</i> <i>mg/L</i>
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			<i>2540C</i>
<i>NM WQCC STANDARD</i>		10	750	750	620	100	30	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1,000</i>
TW-37	18-May-11	420	<5.0	21	<10	230	<10	NA	NA	NA	<i>3,680</i>
TW-37	22-Nov-11	210	<1.0	<1.0	5	110	<2.0	1.7	2	<5.0	NA
TW-37	17-May-12	290	<1.0	110	98	79	2.9	NA	NA	NA	<i>3,220</i>
TW-37	27-Nov-12	140	<5.0	13	<10	120	<10	2.0	18	<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	<i>Not Sampled-NAPL present</i>									
TW-38	18-Feb-10	26	<1.0	6.3	18	88	<2.0	0.50	<1.0	<5.0	<i>4,070</i>
TW-38	12-May-10	63	<1.0	15	50	110	3.5	0.67	<1.0	<5.0	<i>4,210</i>
TW-38	19-Aug-10	140	<1.0	30	58	95	2.2	1.20	<1.0	<5.0	<i>3,910</i>
TW-38	16-Nov-10	140	<1.0	41	71	83	<2.0	1.1	<1.0	<5.0	<i>3,930</i>
TW-38	18-May-11	37	<5.0	6.1	22	140	<10	NA	NA	NA	<i>4,010</i>
TW-38	15-Nov-11	<i>Not Sampled-NAPL present</i>									
TW-39	17-Dec-08	<i>Not Sampled-NAPL present</i>									
TW-39	21-Aug-09	1.7	<1.0	2.8	<1.5	16	<2.0	0.47	<1.0	<5.0	<i>4,460</i>
TW-39	17-Feb-10	2.6	<1.0	2.5	3.5	9.8	<2.0	0.45	<1.0	<5.0	<i>3,580</i>
TW-39	12-May-10	17	<1.0	32	14	19	<2.0	0.45	<1.0	<5.0	<i>4,740</i>
TW-39	19-Aug-10	87	<1.0	77	100	1.5	2.9	1.2	<1.0	<5.0	<i>3,290</i>
TW-39	16-Nov-10	92	<1.0	110	1.8	5.9	<2.0	1.4	<1.0	<5.0	<i>3,070</i>
TW-39	19-May-11	41	<5.0	65	<10	<5.0	<10	NA	NA	NA	<i>3,980</i>
TW-39	17-Nov-11	9	<5.0	82	<10	<5.0	<10	1.4	<1.0	<5.0	NA
TW-39	17-May-12	3.3	<1.0	1.1	<2.0	8.5	<2.0	NA	NA	NA	<i>3,830</i>

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	<i>Benzene</i> <i>µg/L</i>	<i>Toluene</i> <i>µg/L</i>	<i>Ethyl-benzene</i> <i>µg/L</i>	<i>Xylenes</i> <i>µg/L</i>	<i>MTBE</i> <i>µg/L</i>	<i>Naphthalene</i> <i>µg/L</i>	<i>GRO C6-C10</i> <i>mg/L</i>	<i>DRO C10-C22</i> <i>mg/L</i>	<i>MRO</i> <i>mg/L</i>	<i>Total Dissolved Solids</i> <i>mg/L</i>
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			<i>2540C</i>
<i>NM WQCC STANDARD</i>		10	750	750	620	100	30	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1,000</i>
TW-39	27-Nov-12	<1.0	<1.0	<1.0	<2.0	11	<2.0	0.76	<1.0	<5.0	NA
TW-40	17-Dec-08	Not Sampled-NAPL present									
TW-40	21-Aug-09	Not Sampled-NAPL present									
TW-40	17-Feb-10	Not Sampled-NAPL present									
TW-40	7-May-10	Not Sampled-NAPL present									
TW-40	18-Aug-10	Not Sampled-NAPL present									
TW-40	15-Nov-10	Not Sampled-NAPL present									
TW-40	18-May-11	Not Sampled-NAPL present									
TW-40	15-Nov-11	Not Sampled-NAPL present									
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
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-41	21-May-12	99	<10	530	2,200	16	47	NA	NA	NA	4,160
TW-41	27-Nov-12	100	<10	470	1,800	14	48	8.8	1.6	<5.0	3,400
TW-42	16-Dec-08	<1.0	<1.0	31	<1.5	130	<10	0.18	1.2	<5.0	NA

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	<i>Benzene</i> μg/L	<i>Toluene</i> μg/L	<i>Ethyl-benzene</i> μg/L	<i>Xylenes</i> μg/L	<i>MTBE</i> μg/L	<i>Naphthalene</i> μg/L	<i>GRO C6-C10</i> mg/L	<i>DRO C10-C22</i> mg/L	<i>MRO</i> mg/L	<i>Total Dissolved Solids</i> mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
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	<5.0	<10	600	<10	NA	NA	NA	4,720
TW-42	22-Nov-11	<1.0	<1.0	<1.0	<2.0	53	<2.0	0.17	<1.0	<5.0	NA
TW-42	21-May-12	<1.0	<1.0	<1.0	<2.0	38	<2.0	NA	NA	NA	4,660
TW-42	28-Nov-12	<1.0	<1.0	<1.0	<2.0	13	<2.0	0.13	<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	NA
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
TW-43	21-May-12	<1.0	<1.0	<1.0	<2.0	450	<2.0	NA	NA	NA	4,420
TW-43	28-Nov-12	<1.0	<1.0	<1.0	<2.0	270	<2.0	0.20	<1.0	<5.0	NA
TW-44	17-Dec-08	58	<5.0	69	340	330	245	2.0	1.8	<5.0	NA
TW-44	24-Aug-09	56	<1.0	6.9	7.3	360	<2.0	0.20	1.2	<5.0	5,520
TW-44	18-Feb-10	Not Sampled-NAPL present									

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
 (VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	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
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			2540C
<i>NM WQCC STANDARD</i>		10	750	750	620	100	30	NE	NE	NE	1,000
TW-44	7-May-10						Not Sampled-NAPL present				
TW-44	18-Aug-10						Not Sampled-NAPL present				
TW-44	15-Nov-10						Not Sampled-NAPL present				
TW-44	18-May-11						Not Sampled-NAPL present				
TW-44	15-Nov-11						Not Sampled-NAPL present				
TW-45	13-May-10	<1.0	<1.0	<1.0	<2.0	160	<2.0	0.20	<1.0	<5.0	4,480
TW-45	20-Aug-10	<1.0	<1.0	<1.0	<2.0	300	<2.0	0.33	<1.0	<5.0	4,750
TW-45	17-Nov-10	<1.0	<1.0	<1.0	<1.5	170	<2.0	0.23	<1.0	<5.0	4,530
TW-45	18-May-11	<5.0	<5.0	<5.0	<10	630	<10	NA	NA	NA	4,700
TW-45	21-May-12	<1.0	<1.0	<1.0	<2.0	230	<2.0	NA	NA	NA	4,500
TW-45	28-Nov-12	<1.0	<1.0	<1.0	<2.0	280	<2.0	0.17	<1.0	<5.0	NA
TW-46	13-May-10	<1.0	<1.0	<1.0	<2.0	110	<2.0	0.14	<1.0	<5.0	4,080
TW-46	20-Aug-10	<1.0	<1.0	<1.0	<2.0	88	<2.0	0.13	<1.0	<5.0	4,430
TW-46	18-May-11	<5.0	<5.0	<5.0	<10	160	<10	NA	NA	NA	3,640
TW-46	22-Nov-11	<1.0	<1.0	<1.0	<2.0	35	<2.0	0.054	<1.0	<5.0	NA
TW-46	21-May-12	<1.0	<1.0	<1.0	<2.0	74	<2.0	NA	NA	NA	3,870
TW-46	28-Nov-12	<1.0	<1.0	<1.0	<2.0	46	<2.0	<0.050	<1.0	<5.0	NA
TW-47	13-May-10	<1.0	<1.0	<1.0	<2.0	9.4	<2.0	<0.050	<1.0	<5.0	10,000
TW-47	20-Aug-10	<1.0	<1.0	<1.0	<2.0	18	<2.0	<0.050	<1.0	<5.0	9,940
TW-47	17-Nov-10	<1.0	<1.0	<1.0	<1.5	8.2	<2.0	<0.050	<1.0	<5.0	8,800

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
 (VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	<i>Benzene</i> μg/L	<i>Toluene</i> μg/L	<i>Ethyl-benzene</i> μg/L	<i>Xylenes</i> μg/L	<i>MTBE</i> μg/L	<i>Naphthalene</i> μg/L	<i>GRO C6-C10</i> mg/L	<i>DRO C10-C22</i> mg/L	<i>MRO</i> mg/L	<i>Total Dissolved Solids</i> mg/L
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			<i>2540C</i>
<i>NM WQCC STANDARD</i>		10	750	750	620	100	30	<i>NE</i>	<i>NE</i>	<i>NE</i>	1,000
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-47	28-Nov-12	<1.0	<1.0	<1.0	<2.0	28	<2.0	<0.050	<1.0	<5.0	NA
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-49	21-May-12	<1.0	<1.0	<1.0	<2.0	14	<2.0	NA	NA	NA	5,610
TW-49	3-Dec-12	<10	<10	<10	<20	<10	<20	<0.50	<1.0	<5.0	NA
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
TW-50	21-May-12	2.9	<1.0	23	19	17	<2.0	NA	NA	NA	4,140
TW-50	4-Dec-12	<1.0	<1.0	2.3	3.1	19	<2.0	0.22	<1.0	<5.0	NA
TW-51	18-Jul-12	<2.0	<2.0	4.4	<4.0	260	8.7	NA	NA	NA	5,490
TW-51	3-Dec-12	<1.0	<1.0	<1.0	<2.0	340	<2.0	0.29	<1.0	<5.0	NA
TW-52	8-Oct-12	<1.0	<1.0	<1.0	<2.0	180	NA	NA	NA	NA	NA

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
 (VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	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
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			<i>2540C</i>
<i>NM WQCC STANDARD</i>		10	750	750	620	100	30	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1,000</i>
TW-52	3-Dec-12	<1.0	<1.0	<1.0	<2.0	230	<2.0	0.11	<1.0	<5.0	5,180
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
MW-5	27-Jun-06	1.5	<0.5	<0.5	<2.0	37	NA	<0.10	<2.5	NA	NA
MW-5	28-Dec-06	<0.5	<0.5	<0.5	<2.0	37	NA	<0.10	<1.0	NA	NA
MW-5	5-Jul-07*	2.4	<0.5	0.8	<2.0	28*	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	<5.0	NA
MW-5	18-Feb-10	<1.0	<1.0	<1.0	<2.0	49	<2.0	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	<5.0	4,590
MW-5	17-Nov-10	<1.0	<1.0	<1.0	<1.5	54	<2.0	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
MW-7	17-May-10	17	<1.0	<1.0	<2.0	23	<2.0	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	<5.0	4,720
MW-7	4-Dec-12	<1.0	<1.0	<1.0	<2.0	120	<2.0	0.18	<1.0	<5.0	NA

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	<i>Benzene</i> μg/L	<i>Toluene</i> μg/L	<i>Ethyl-benzene</i> μg/L	<i>Xylenes</i> μg/L	<i>MTBE</i> μg/L	<i>Naphthalene</i> μg/L	<i>GRO C6-C10</i> mg/L	<i>DRO C10-C22</i> mg/L	<i>MRO</i> mg/L	<i>Total Dissolved Solids</i> mg/L
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			<i>2540C</i>
<i>NM WQCC STANDARD</i>		<i>10</i>	<i>750</i>	<i>750</i>	<i>620</i>	<i>100</i>	<i>30</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1,000</i>
MW-20	30-Jan-02	1.6	3.7	6.3	1.2	670	NA	NA	NA	NA	NA
MW-20	26-Jul-02	ND	ND	ND	ND	950	NA	NA	NA	NA	NA
MW-20	26-Nov-02	1.6	ND	ND	2	350	NA	NA	NA	NA	NA
MW-20	5-Jun-03	7	ND	7.1	7.2	630	NA	NA	NA	NA	NA
MW-20	4-Nov-03	3.2	ND	ND	5.1	480	NA	NA	NA	NA	NA
MW-20	19-Jan-04	2.8	<0.5	1.4	3.3	680	NA	NA	NA	NA	NA
MW-20	25-May-04	1.9	<0.5	3.3	7.6	400	NA	0.82	NA	NA	NA
MW-20	27-Jul-04	2.1	<0.5	<0.5	2.3	590	NA	0.91	NA	NA	NA
MW-20	29-Dec-04	2.0	<0.5	<0.5	7.2	300	NA	0.89	NA	NA	NA
MW-20	19-Sep-05	<2.5	<2.5	<2.5	5.4	160	NA	1.2	NA	NA	NA
MW-20	4-Jan-06	<0.5	<0.5	<0.5	<2.0	400	NA	0.50	<1.0	NA	NA
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

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	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
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			2540C
<i>NM WQCC STANDARD</i>		10	750	750	620	100	30	NE	NE	NE	1,000
MW-20	21-May-12	<1.0	<1.0	<1.0	<2.0	150	<2.0	NA	NA	NA	4,050
MW-20	3-Dec-12	<1.0	<1.0	<1.0	<2.0	190	<2.0	0.48	<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
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

TABLE 3
 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
 (VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
 Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Well ID</i>	<i>Date Sampled</i>	<i>Benzene</i> μg/L	<i>Toluene</i> μg/L	<i>Ethyl-benzene</i> μg/L	<i>Xylenes</i> μg/L	<i>MTBE</i> μg/L	<i>Naphthalene</i> μg/L	<i>GRO C6-C10</i> mg/L	<i>DRO C10-C22</i> mg/L	<i>MRO</i> mg/L	<i>Total Dissolved Solids</i> mg/L
<i>Sample Method</i>		<i>EPA Method 8260</i>						<i>EPA Method 8015M</i>			<i>2540C</i>
<i>NM WQCC STANDARD</i>		<i>10</i>	<i>750</i>	<i>750</i>	<i>620</i>	<i>100</i>	<i>30</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1,000</i>
MW-21	18-May-11	<5.0	<5.0	<5.0	<1.5	160	<10	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
MW-21	21-May-12	<1.0	<1.0	<1.0	<2.0	91	<2.0	NA	NA	NA	4,590
MW-21	3-Dec-12	<1.0	<1.0	<1.0	<2.0	94	<2.0	0.068	<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 4
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	6010B
NM WQCC Standard		0.10	1.0	0.01	0.05	0.05	0.002	0.05	0.005
TW-1	19-Aug-09	<0.020	0.036	<0.0020	0.01	0.018	<0.00020	<0.050	<0.0050
TW-2	19-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.0053	<0.00020	<0.050	<0.0050
TW-3	19-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.0058	<0.00020	<0.050	<0.0050
TW-4	19-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.0053	<0.00020	<0.050	<0.0050
TW-5	19-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.0050	<0.00020	<0.050	<0.0050
TW-6	19-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.011	<0.00020	<0.050	<0.0050
TW-7	19-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.011	<0.00020	<0.050	<0.0050
TW-7	17-Nov-11	<0.020	0.21	<0.0020	0.0064	<0.0050	<0.00020	<0.050	<0.0050
TW-8	20-Aug-09	<0.020	0.021	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-8	26-Nov-12	<0.020	0.32	<0.0020	0.015	<0.0050	<0.00020	<0.050	<0.0050
TW-9	20-Aug-09	<0.020	0.033	<0.0020	<0.0060	0.0077	<0.00020	<0.050	<0.0050
TW-10	20-Aug-09	<0.020	0.038	<0.0020	<0.0060	0.021	<0.00020	<0.050	<0.0050
TW-11	20-Aug-09	<0.20	<0.20	<0.020	<0.060	<0.050	<0.00020	<0.50	<0.050
TW-12	20-Aug-09	<0.020	0.020	<0.0020	<0.0060	0.0072	<0.00020	<0.050	<0.0050

TABLE 4
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							
Analytical Method	6010B	6010B	6010B	6010B	6010B	6010B	7470	6010B	6010B
NM WQCC Standard	0.10	1.0	0.01	0.05	0.05	0.05	0.002	0.05	0.005
TW-15	20-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.0092	<0.00020	<0.050	<0.0050
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	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-18	16-Nov-10	<0.020	<0.020	<0.0020	<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-30	27-Nov-12	0.046	1.1	<0.0020	0.027	0.012	<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

TABLE 4
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	6010B
NM WQCC Standard		0.10	1.0	0.01	0.05	0.05	0.002	0.05	0.005
TW-37	21-Aug-09	<0.020	0.041	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-37	16-Nov-10	<0.020	0.061	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-38	16-Nov-10	<0.020	0.023	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-39	21-Aug-09	<0.020	0.08	<0.0020	0.0077	<0.0050	<0.00020	<0.050	<0.0050
TW-39	16-Nov-10	<0.020	0.029	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-41	24-Aug-09	<0.020	0.11	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-41	16-Nov-10	<0.020	0.069	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-41	22-Nov-11	0.029	0.75	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-41	27-Nov-12	0.048	0.59	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-42	24-Aug-09	<0.020	0.042	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-42	16-Nov-10	<0.020	<0.020	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-43	24-Aug-09	<0.020	<0.020	<0.0020	<0.0060	0.0061	<0.00020	<0.050	<0.0050
TW-43	16-Nov-10	<0.020	<0.020	<0.0020	<0.0060	0.0073	<0.00020	<0.050	<0.0050
TW-44	24-Aug-09	<0.020	0.043	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-45	17-Nov-10	0.070	<0.020	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-47	17-Nov-10	<0.10	<0.10	<0.010	<0.030	<0.025	<0.00020	<0.25	<0.025
TW-47	22-Nov-11	<0.020	0.13	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050

TABLE 4
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							
	Analytical Method	6010B	6010B	6010B	6010B	6010B	7470	6010B	6010B
	NM WQCC Standard	0.10	1.0	0.01	0.05	0.05	0.002	0.05	0.005
TW-49	17-Nov-10	<0.10	<0.10	<0.010	<0.030	<0.025	<0.00020	<0.25	<0.025
TW-50	17-Nov-11	<0020	0.10	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
TW-52	3-Dec-12	0.035	0.85	<0.0020	0.064	0.020	<0.00020	<0.050	<0.0050
MW-5	17-Nov-10	<0.020	<0.020	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
MW-20	17-Nov-10	<0.020	0.02	<0.0020	<0.0060	<0.0050	<0.00020	<0.050	<0.0050
MW-21	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 5
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	Magnesium	Potassium	Sodium	Bromide	Chloride	Fluoride	Sulfate	Specific Conductance	Hardness as (CaCO_3)	TDS
		mg/L	μmhos/cm	mg/L	mg/L							
Analytical Method		6010B	6010B	6010B	6010B	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	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-8	26-Nov-12	470	49	5.1	840	1.3	160	0.74	2,600	5,000	1,400	4,340
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 5
 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	Magnesium	Potassium	Sodium	Bromide	Chloride	Fluoride	Sulfate	Specific Conductance	Hardness as (CaCO_3)	TDS
		mg/L	$\mu\text{mhos}/\text{cm}$	mg/L	mg/L							
	Analytical Method	6010B	6010B	6010B	6010B	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	1,000
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 5
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	Magnesium	Potassium	Sodium	Bromide	Chloride	Fluoride	Sulfate	Specific Conductance	Hardness as (CaCO_3)	TDS
		mg/L	$\mu\text{mhos}/\text{cm}$	mg/L	mg/L							
	Analytical Method	6010B	6010B	6010B	6010B	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	1,000
TW-16	20-Aug-09	360	32	8.5	1,100	1.1	150	0.75	2,600	4,800	1,000	4,240
TW-17	21-Aug-09	350	43	4.2	1,200	1.2	170	0.80	3,100	4,700	1,100	4,640
TW-18	21-Aug-09	500	54	3.6	830	0.43	52	0.77	2,800	4,300	1,500	4,440
TW-18	16-Nov-10	490	52	4.6	910	0.28	54	1	3,700	5,000	1,400	4,790
TW-18	17-Nov-11	480	49	4.1	1,100	0.26	66	0.73	4,700	5,400	1,400	5,360
TW-23	21-Aug-09	470	49	3.5	1,400	1.1	150	1.1	3,600	5,500	1,400	5,440
TW-30	21-Aug-09	700	57	5.9	1,100	3.7	860	0.56	2,000	5,000	2,000	4,550
TW-30	16-Nov-10	550	60	8.8	1,200	1.9	1,400	0.54	2,100	6,500	1,600	5,630
TW-30	17-Nov-11	670	61	9.3	1,500	3.1	1,400	<1.0	1,900	7,300	1,900	6,310
TW-30	27-Nov-12	470	52	8.9	1,300	5.9	970	0.61	2,400	7,100	1,400	5,440
TW-37	27-Nov-12	NA	NA	NA	NA	NA	190	NA	1,700	NA	NA	NA
TW-31	21-Aug-09	460	68	4.9	1,300	3.9	1,700	0.43	1,200	5,800	1,400	4,790
TW-31	16-Nov-10	520	66	6.9	940	0.65	750	0.67	2,000	5,500	1,600	4,680
TW-34	24-Aug-09	450	76	4.7	1,200	0.36	59	1.0	3,500	5,100	1,400	5,460
TW-34	22-Nov-11	480	79	4.8	1,100	<2.0	59	<2.0	4,100	5,500	1,500	5,420
TW-35	24-Aug-09	440	88	8.3	1,600	0.40	65	0.74	4,400	6,100	1,500	6,700
TW-35	17-Nov-10	480	84	8.6	1,600	0.26	70	0.81	4,700	6,600	1,600	6,770
TW-35	22-Nov-11	460	90	8.2	1,700	0.72	81	0.74	4,600	6,700	1,500	7,180

TABLE 5
 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	Magnesium	Potassium	Sodium	Bromide	Chloride	Fluoride	Sulfate	Specific Conductance	Hardness as (CaCO_3)	TDS
		mg/L	$\mu\text{mhos}/\text{cm}$	mg/L	mg/L							
	Analytical Method	6010B	6010B	6010B	6010B	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	1,000
TW-37	21-Aug-09	380	46	3.7	870	3.5	330	0.59	1,700	4,200	1,100	3,740
TW-37	16-Nov-10	340	45	3.5	760	0.49	310	0.51	1,500	4,200	1,000	3,380
TW-37	18-May-11	NA	NA	NA	NA	NA	260	NA	1,700	NA	NA	3,680
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-41	27-Nov-12	270	57	5.8	870	<5.0	640	<1.0	810	4,900	920	3,400
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

TABLE 5
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	Magnesium	Potassium	Sodium	Bromide	Chloride	Fluoride	Sulfate	Specific Conductance	Hardness as (CaCO_3)	TDS
		mg/L	μmhos/cm	mg/L	mg/L							
Analytical Method		6010B	6010B	6010B	6010B	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	1,000
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
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-47	28-Nov-12	NA	NA	NA	NA	NA	1,100	NA	4,200	NA	NA	NA
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	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
TW-51	3-Dec-12	NA	NA	NA	NA	NA	260	NA	2,400	NA	NA	NA
TW-52	3-Dec-12	440	73	6.1	1,400	1.9	210	0.63	3,200	6,700	1,400	5,180
MW-5	17-Nov-10	150	29	6.1	1,200	0.77	310	<2.0	3,000	5,400	500	4,630
MW-20	17-Nov-10	410	47	4.1	840	0.72	430	<0.50	2,000	4,700	1,200	3,950
MW-20	18-May-11	NA	NA	NA	NA	NA	380	NA	1,900	NA	NA	4,260
MW-20	3-Dec-12	NA	NA	NA	NA	NA	390	NA	1,700	NA	NA	NA
MW-21	17-Nov-10	460	64	7.4	1,400	0.87	820	NA	3,500	NA	NA	NA
MW-21	18-May-11	NA	NA	NA	NA	NA	750	NA	2,700	NA	NA	NA
MW-21	3-Dec-12	NA	NA	NA	NA	NA	630	NA	1,600	NA	NA	NA

Notes:

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Analyte not detected above listed method limit

TABLE 5
 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	Magnesium	Potassium	Sodium	Bromide	Chloride	Fluoride	Sulfate	Specific Conductance	Hardness as (CaCO_3)	TDS
		mg/L	$\mu\text{mhos}/\text{cm}$	mg/L								
Analytical Method	6010B	6010B	6010B	6010B	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	1,000	

NA Not Analyzed
 NE Not established
 mg/L Milligrams per liter (ppm)

TABLE 6
SUMMARY OF AIR LABORATORY ANALYTICAL RESULTS
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

<i>Sample ID</i>	<i>Sample Date</i>	<i>Lab Analytical Method</i>	<i>Benzene (ppmv)</i>	<i>Toluene (ppmv)</i>	<i>Ethyl-benzene (ppmv)</i>	<i>Xylene (ppmv)</i>	<i>MTBE (ppmv)</i>	<i>TPH GRO (ppmv)</i>
Engine #1 Pre-Enginet†	16-Mar-10	8021/8015	109.10	60.850	15.84	105.6	<12.745	14,160
Engine #1 Pre-Enginet†	20-Aug-10	8021/8015	7.178	8.762	<1.056	9.293	<3.3137	1,152
Engine #1 Pre-Enginet†	1-Mar-11							
Engine #1 Pre-Cat†	16-Mar-10	8021/8015	0.092	0.071	0.097	0.781	<0.0637	11.04
Engine #1 Pre-Cat†	20-Aug-10	8021/8015	<0.02871	0.027	<0.02112	0.125	<0.0637	3.360
Engine #1 Pre-Cat†	1-Mar-11							
Engine #1 Post-Cat†	16-Mar-10	8021/8015	0.057	0.032	0.038	0.317	<0.0637	6.00
Engine #1 Post-Cat†	20-Aug-10	8021/8015	0.049	0.088	0.032	0.465	<0.0637	10.08
Engine #1 Post-Cat†	1-Mar-11							
Percent Contaminant Reduction by Catox (%) Mar 2010			99.999	99.999	99.998	99.997	99.995	100.000
Percent Contaminant Reduction by Catox (%) Aug 2010			99.993	99.990	99.970	99.950	99.981	99.991
Engine #2 Pre-Enginet†	16-Mar-10	8021/8015	2.153	5.598	0.887	8.448	<1.2745	600
Engine #2 Pre-Enginet†	20-Aug-10							
Engine #2 Pre-Enginet†	1-Mar-11	8021/8015	8.326	4.868	<1.056	3.590	<3.3137	864
Engine #2 Pre-Enginet†*	2-Jun-11	8021/8015	0.402	0.119	<0.02112	<0.0634	<0.0637	2.88
Engine #2 Pre-Cat†	8-Oct-12	8021/8015	746.5	535.5	126.7	633.6	<30.6	88,800
Engine #2 Pre-Cat†	16-Mar-10	8021/8015	0.281	0.166	0.080	0.697	<0.0637	15.12
Engine #2 Pre-Cat†	20-Aug-10							
Engine #2 Pre-Cat†	1-Mar-11	8021/8015	0.267	0.080	<0.02112	<0.0634	<0.0637	2.64
Engine #2 Pre-Cat†	2-Jun-11	8021/8015	0.270	0.071	<0.02112	<0.0634	<0.0637	2.64
Engine #2 Post-Cat†	16-Mar-10	8021/8015	<0.0287	<0.02434	<0.02112	0.139	<0.064	2.88
Engine #2 Post-Cat†	20-Aug-10							
Engine #2 Post-Cat†	1-Mar-11	8021/8015	0.287	0.093	<0.02112	<0.0634	<0.0637	2.28

TABLE 6
SUMMARY OF AIR LABORATORY ANALYTICAL RESULTS
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Engine #2 Post-Cat†*	2-Jun-11	8021/8015	<0.0287	<0.02434	<0.02112	<0.0634	<0.0637	<1.2
Engine #2 Post-Cat†	8-Oct-12	8021/8015	1.723	1.679	1.816	12.672	<0.637	264
<hr/>								
Percent Contaminant Reduction by Catox (%) Mar 2010		99.986	99.996	99.976	99.983	99.949	99.995	
Percent Contaminant Reduction by Catox (%) Mar 2011		99.966	99.981	99.970	99.982	99.981	99.997	
Percent Contaminant Reduction by Catox (%) June 2011		99.929	99.796	99.000	99.000	99.000	99.000	97.600
Percent Contaminant Reduction by Catox (%) October 2012		99.998	99.997	99.986	99.980	99.998	99.997	

Notes:

< Analyte not detected above listed method limit

ppmv Parts per million (by volume)

† These results were reported in $\mu\text{g}/\text{L}$, they were converted to ppmv using the following formulas

Benzene ppmv = $\mu\text{g}/\text{L} \times 0.2871$

MTBE ppmv = $\mu\text{g}/\text{L} \times 0.2549$

Toluene ppmv = $\mu\text{g}/\text{L} \times 0.2434$

GRO ppmv = $\mu\text{g}/\text{L} \times 0.24$ **GRO is an estimation

Ethylbenzene ppmv = $\mu\text{g}/\text{L} \times 0.2112$

Xylenes ppmv = $\mu\text{g}/\text{L} \times 0.2112$

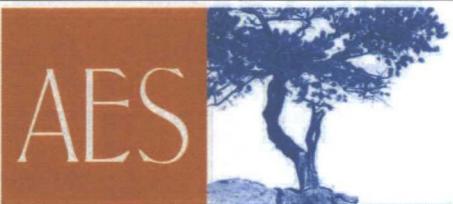
* The June 2011 pre-engine and post -cat samples were inadvertently switched.

FIGURE 1



FIGURE 2

GROUNDWATER ELEVATION
CONTOURS
NOVEMBER 2012
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	February 28, 2013
CHECKED BY:	DATE CHECKED:
D. Watson	February 28, 2013
APPROVED BY:	DATE APPROVED:
E. McNally	February 28, 2013

LEGEND

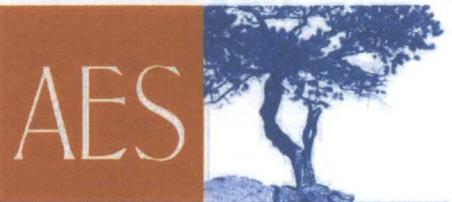
- MONITOR WELL LOCATIONS
- 5440.19 GROUNDWATER ELEVATION IN FEET (AMSL)
- 5434 — GROUNDWATER ELEVATION CONTOUR IN FEET (AMSL)

NOTE: GROUNDWATER MEASUREMENTS WERE MADE ON NOVEMBER 2, 9, 12, AND 14, 2012.
LOCATIONS OF TW-45 THROUGH TW-50 ARE APPROXIMATE.



FIGURE 3

**FREE PRODUCT THICKNESS
CONTOURS**
NOVEMBER 2012
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 28, 2013
CHECKED BY: D. Watson	DATE CHECKED: February 28, 2013
APPROVED BY: E. McNally	DATE APPROVED: February 28, 2013

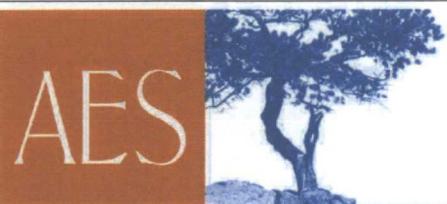
LEGEND	
MONITOR WELL LOCATIONS	● MPE REMEDIATION WELL
2.01 FREE PRODUCT THICKNESS IN FEET	— CONTOUR IN FEET
0.01 FREE PRODUCT THICKNESS	

NOTE: ALL MEASUREMENTS WERE MADE ON NOVEMBER 2, 9, 12, 14, 2012 AND DECEMBER 3-4, 2012. LOCATIONS OF TW-45 THROUGH TW-50 ARE APPROXIMATE.



FIGURE 4

DISSOLVED BENZENE
CONCENTRATION CONTOURS
NOVEMBER 2012
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	April 11, 2013
CHECKED BY:	DATE CHECKED:
D. Watson	April 11, 2013
APPROVED BY:	DATE APPROVED:
E. McNally	April 11, 2013

LEGEND

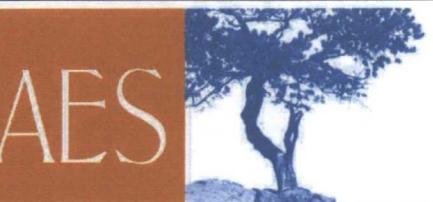
- MONITOR WELL LOCATIONS
- DISSOLVED BENZENE CONCENTRATIONS
- DISSOLVED BENZENE CONCENTRATION CONTOURS

NOTE: ALL SAMPLED WERE COLLECTED ON NOVEMBER 26, 27, AND 28, 2012 AND DECEMBER 3 AND 4, 2012. ALL SAMPLES ANALYZED PER EPA METHOD 8260B. ALL ANALYTICAL RESULTS REPORTED AS $\mu\text{g}/\text{L}$ (PPB). LOCATIONS OF TW-45 THROUGH TW-50 ARE APPROXIMATE.



FIGURE 5

**DISSOLVED MTBE
CONCENTRATION CONTOURS
NOVEMBER 2012
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: April 11, 2013
CHECKED BY: D. Watson	DATE CHECKED: April 11, 2013
APPROVED BY: E. McNally	DATE APPROVED: April 11, 2013

LEGEND



MONITOR WELL LOCATIONS

280 DISSOLVED MTBE CONCENTRATIONS

— 100 — DISSOLVED MTBE CONCENTRATION
CONTOURS

NOTE: ALL SAMPLED WERE COLLECTED ON NOVEMBER 26, 27, AND 28, 2012 AND DECEMBER 3 AND 4, 2012. ALL SAMPLES ANALYZED PER EPA METHOD 8260B. ALL ANALYTICAL RESULTS REPORTED AS $\mu\text{g}/\text{L}$ (PPB). LOCATIONS OF TW-45 THROUGH TW-50 ARE APPROXIMATE.

