GW - 55

REPORTS

Date:
August 10, 2011

Animas Environmental Services, LLC

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August 10, 2011

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

RE: 2nd Quarter Remedial Progress Report 2011 for the Thriftway Refinery, 626 County Road 5500, Bloomfield, New Mexico

Dear Mr. von Gonten and Mr. Hansen:

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

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

1.0 Groundwater Monitoring and Gauging

BioTech conducted groundwater monitoring and gauging of the monitor wells at the site on May 17 and 18, 2011. Based on the current sampling plan, monitoring and gauging events occur during the first and third quarters of 2011, with groundwater sampling scheduled during the second and fourth quarters. The information below lists wells that were gauged and sampled during the May 2011 event.

Year 2 Quarter #2 Monitor Well Gauging and Sampling List

Well Name	Gauging Only	Gauging and Sampling
TW-1 through TW-6	X	
TW-7 and TW-8		X
TW-9 through TW-12	X	
TW-13* and TW-14*	X	
TW-15 through TW-18	X	
TW-19* and TW-20*	X	
TW-22*	X	
TW-23	X	
TW-24 through TW-26 (all*)	X	
TW-28* and TW-29*	X	
TW-30 and TW-31	X	
TW-32* and TW-33*	X	
TW-34 and TW-35	X	
TW-36*	X	
TW-37 through TW-39		X
TW-40*	X	
TW-41		X
TW-42	X	
TW-43		X
TW-44*	X	
TW-45 and TW-46		X
TW-47 through TW-49	X	
TW-50		X
MW-5 and MW-7	X	
MW-20 and MW-21		X
* During May 2011, these wells contained free product (including sheen of free product) and were not sampled.		

1.1 Measurement of Groundwater Elevations

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

1.2 Measurement of Free Product

Each well previously known to contain light non-aqueous phase liquid (LNAPL, or "free product") was measured with an electronic interface probe, and the depths to the top of product and the oil/water interface were recorded on a groundwater measurement form. Free product was measured in May 2011 in 12 wells, including TW-20, TW-22, TW-24,

TW-25, TW-26, TW-28, TW-29, TW-32, TW-33, TW-36, TW-40, and TW-44. A sheen of free product was observed in three wells, including TW-13, TW-14, and TW-19.

In monitor wells containing free product, corrected groundwater elevations (Hc) 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)

1.3 Groundwater Sampling

Once the depth to groundwater was measured in each well to be sampled, the well was purged with a new disposable bailer to remove stagnant water from the well. Groundwater samples were then collected. Groundwater sampling procedures included the following:

1. A new disposable bailer was used at each well. Samples were collected using a slow release valve attached to the bottom of the bailer (to ensure a slow flow and less volatilization of contaminants from groundwater). Each sample container was filled completely, ensuring there were no bubbles or headspace in the sample bottles.

2. Each bottle was labeled, and chain-of-custody documentation was filled out as each well was sampled. Clean sample containers, obtained from the analyzing laboratory, were utilized during the sampling events.

3. Samples were placed in an insulated cooler and maintained at temperature below 6 °C during transportation to Hall Environmental Analysis Laboratory (Hall), Albuquerque, New Mexico.

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

1.4 Equipment Decontamination Protocols

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

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

1.5 Laboratory Analyses

Samples collected from 12 wells, including TW-7, TW-8, TW-37 through TW-39, TW-41, TW-42, TW-45, TW-46, TW-50, MW-20, and MW-21, were analyzed for the following:

- Benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-t-butyl ether (MTBE), and naphthalene per EPA Method 8260;
- Chloride and sulfate per EPA Method 300.0; and
- Total dissolved solids (TDS) per Standard Method 2540C.

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

2.0 Groundwater Monitoring Results

2.1 Hydraulic Gradient and Water Quality Data

2.1.1 Hydraulic Gradient

Using surveyed top of casing (TOC) elevations and the recorded groundwater depths, AES determined specific groundwater elevations, relative to sea level, for each well measured. Groundwater elevations across the site in May 2011 ranged from 5,423.94 feet above mean sea level (AMSL) in MW-5 to 5,440.96 feet AMSL in TW-1. Groundwater elevations have increased across the site by an average of 0.16 feet since the last sampling event in February 2011. Groundwater gradient was calculated between TW-1 and MW-5, with a magnitude of 0.008 ft/ft to the northwest for May 2011. The groundwater flow direction has remained stable, in a northwesterly direction, and is consistent with historical site data.

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

2.1.2 Water Quality Data

During the purging of each well prior to sampling, water quality data was recorded until temperature, pH, conductivity, dissolved oxygen (DO) , and oxidation-reduction potential (ORP) measurements stabilized. Recorded temperatures during the May 2011 sampling event ranged from 11.33 °C in MW-20 to 14.65 °C in TW-7. Groundwater pH ranged between 6.93 (TW-43) and 7.19 (TW-39), and conductivity readings were between 2.778 mS/cm in TW-46 and 5.675 mS in TW-41. Dissolved oxygen concentrations ranged from 0.25 mg/L in TW-8 to 1.05 mg/L in MW-21. ORP ranged from -21.8 mV (TW-7) to -7.1 mV (TW-43).

2.2 Free Product

Free product was measured in 12 monitor wells, including TW-20, TW-22, TW-24, TW-25, TW-26, TW-28, TW-29, TW-32, TW-33, TW-36, TW-40, and TW-44. Measured LNAPL thicknesses ranged from 0.01 feet (TW-36) to 1.46 feet (TW-32). A sheen of free product was observed in TW-13, TW-14, and TW-19. Free product thickness contours for May 2011 are presented in Figure 3, and Graph 1 includes free product thicknesses over time in the eastern portion of the product plume (TW-13, TW-14, TW-19, and TW-22).

2.3 Dissolved Phase Contaminant Concentrations

2.3.1 Volatile Organics

Dissolved phase benzene concentrations outside the area of free product exceeded the New Mexico Water Quality Control Commission (WQCC) standard of 10 µg/L in six of the 12 wells sampled, including TW-8 (32 µg/L), TW-37 (420 µg/L), TW-38 (37 µg/L), TW-39 (41 µg/L), TW-41 (110 µg/L), TW-50 (13 µg/L). Dissolved phase benzene concentration contours for May 2011 are included on Figure 4.

Toluene and ethylbenzene concentrations outside the area of free product were below laboratory detection limits or below the applicable WQCC standards of 750 µg/L in all sampled wells. Xylene concentrations were also below laboratory detection limits or below the applicable WQCC standard of 620 µg/L in all wells sampled, with the exception of TW-41 (2,700 µg/L).

Dissolved phase MTBE concentrations outside the area of free product were above the WQCC standard of 100 µg/L in six of the wells sampled in May 2011, including TW-37 (230 µg/L), TW-38 (140 µg/L), TW-42 (600 µg/L), TW-45 (630 µg/L), TW-46 (160 µg/L), and MW-21 (160 µg/L). All other wells were either below the laboratory detection limits (5.0 µg/L and 10.0 µg/L) or below applicable WQCC standards. MTBE concentration contours for May 2011 are included on Figure 5.

Dissolved phase total naphthalene concentrations outside the area of free product were above the WQCC standard of 30 µg/L in two wells, TW-7 (49 µg/L) and TW-41 (70 µg/L). The remaining wells sampled were either below laboratory detection limits or below the applicable WQCC standard.

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

2.3.2 Geochemical Parameters

Chloride concentrations were reported above the WQCC standard of 250 mg/L in TW-37 (260 mg/L), TW-39 (550 mg/L), TW-41 (910 mg/L), TW-45 (280 mg/L), TW-46 (400 mg/L), TW-50 (1,100 mg/L), MW-20 (380 mg/L), and MW-21 (750 mg/L). The remaining wells had chloride concentrations below the WQCC standard.

Sulfate concentrations were reported above the WQCC standard of 600 mg/L in all sampled wells. Reported sulfate concentrations ranged from 970 mg/L (TW-50) to 2,800 mg/L (TW-7).

TDS concentrations were above the WQCC standard of 1,000 mg/L in all wells sampled, with the highest TDS concentrations detected in MW-21 (5,500 mg/L).

Groundwater geochemical results have been summarized in Table 2A. Electronic copies of laboratory analytical reports are included in Appendix A

3.0 Measurement of Groundwater and Free Product in MPE Wells

BioTech personnel measured depth to groundwater in the Phase 1, 2, and 3 MPE wells on May 19, May 20, and 25, 2011. Depth to water ranged from 14.01 feet below TOC in MPE-56 to 23.63 feet below TOC in MPE-1. On May 19, May 20, and 25, 2011, free product was reported in MPE-5 (0.01 feet), MPE-26 (0.04 feet), MPE-44 (0.01 feet), MPE-47 (0.02 feet), and MPE-53 (0.45 feet). Roots in the wells prevented recording of

groundwater measurements in MPE-11, MPE-12, MPE-27, and MPE-28. MPE well data is included in Table 3.

4.0 MPE Remediation System Operations

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

Both Engine #1 and Engine #2 were shut-down during September 2010 due to extensive mechanical problems, so no data report has been generated since September 2010. Following an engine rebuild, Engine #2 was installed at the site on January 4, 2011, and has been in operation during the first and second quarters of 2011. The unit was taken off-line on June 23, 2011, as part of pulsing of the system. The most recent MPE well locations and remediation system layout is included on Figure 4.

RSI Engine #2 Active MPE Well Summary, Thriftway Refinery, Bloomfield, New Mexico

Date of MPE Adjustments	***Engine #2-(operating within the following MPE Wells)***
March 30, 2011	TW-13,TW-19,MPE-26, MPE-35, MPE-43, MPE-44, MPE-45, MPE-46
May 2, 2011	MPE Well Adjustment- TW-13, TW-19, MPE-26 and MPE-38
May 3, 2011	Engine shutdown-high water levels
May 4, 2011	TW-13, TW-19, MPE-26 and MPE-38
May 6, 2011	Engine shutdown-high water levels
May 10, 2011	TW-13, TW-19, MPE-26 and MPE-38
May 17, 2011	MPE Well Adjustment-TW-13, TW-20, and MPE-26
June 8, 2011	MPE Well Adjustment-TW-22and MPE-53
June 16, 2011	Engine shutdown-high water levels
June 17, 2011	TW-22and MPE-53
June 23, 2011	Engine (taken off-line as part of pulsing of system).

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. Engine #1 is currently not in operation, therefore, no data report was generated for Engine #1 during the reporting period of April through June 2011.

In Engine #2, well vacuums for the reporting period from April through June 30, 2011, typically ranged between 20 and 110 in-H_2O 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).

4.1 System Operations

Based on system operations from April 1 to June 30, 2011, the following remedial summary is presented:

MPE Remediation System Summary, Thriftway Refinery, Bloomfield, New Mexico

Parameters	***Engine #1 Reporting Period (4/1/11—6/30/11)***	***Engine #2 Reporting Period (4/1/11—6/30/11)***	***Total Cumulative to Date***
Estimated Petroleum Hydrocarbons Removed (lbs)*	NA	2,681.83	19,156.96
Equivalent Gallons Gasoline Removed (gal)*	NA	432.67	3,090.02
Total Cubic Feet Processed (scf)	NA	1,998,509	14,697,171

*from soil vapors only

MPE Remediation System Run Time Summary, Thriftway Refinery, Bloomfield, New Mexico

Month	***Engine #1 Run Time (hrs)***	***Engine #1 Percent Run Time***	***Engine #2 Run Time (hrs)***	***Engine #2 Percent Run Time***
April through June 2011	NA	No data**	1,099	50 %

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

During the second quarter Engine #2 had a 96 percent run time for April, a 30 percent run time for May, and a 26 percent run time for June 2011. Operation of Engine #2 was reduced during June due to the diminishing amount of free product available for extraction. An operations report for Engine #2 (electronic) from April 1 through June 30, 2011, is presented in Appendix A.

4.2 Air Emissions Sampling

Influent and effluent photo-ionization detector readings and air samples were collected from the well gas influent and from the pre-cat and post-cat sample ports of Engine #2 on June 2, 2011. Air 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. During sampling, the pre-engine sample and post-cat samples collected from Engine #2 were inadvertently switched and labeled incorrectly. 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.

4.2.1 Engine #2

Analytical results for the well gas influent had reported concentrations of 0.402 parts per million by volume (ppmv) benzene, and 2.88 ppmv TPH-GRO. Ethylbenzene (0.021 ppmv), xylenes (0.063), and MTBE (0.064 ppmv) concentrations were reported below laboratory detection limits.

Analytical results for the pre-cat sample showed reported concentrations of 0.270 ppmv benzene, 0.071 ppmv toluene, and 2.64 ppmv TPH-GRO. Concentrations of ethylbenzene (0.021 ppmv), xylenes (0.063 ppmv), and MTBE (0.064 ppmv) were reported below laboratory detection limits. The analytical results for the post-cat sample had reported concentrations below laboratory detection limits for benzene (0.0287 ppmv), toluene (0.024 ppmv), ethylbenzene (0.021 ppmv), xylene (0.063 ppmv), MTBE (0.064 ppmv), and TPH-GRO (1.2 ppmv). Contaminant removal through combustion and the catox was calculated to be greater than 99 percent for BTEX and MTBE and 97.6 percent for TPH-GRO.

Tabulated air analyses are included in Table 4, and air laboratory analytical reports (electronic) are presented in Appendix A.

5.0 Phytoremediation Project

During the first quarter of 2011, BioTech personnel and New Mexico State University (NMSU) Farmington Agricultural Science Center personnel planted 240 20-feet tall poplar trees at the site. Throughout the second quarter, BioTech personnel have irrigated the plants associated with the phytoremediation program (plantings of 2010 and 2011).

On June 22, 2011, BioTech personnel, along with Mick O'Neill and NMSU students, conducted a site inspection. Poplars from both plantings, Spring 2010 and Spring 2011, showed excellent foliage in June 2011. Out of the 240 recently planted poplar poles, only one has died, resulting in a survival rate greater than 99 percent.

A photo log (June 22, 2011) documenting recent site conditions and current phytoremediation plant health is included in Appendix A. A copy of the NMSU *Preliminary Update – Poplar Phytoremediation Project on an Abandoned Oil Refinery Site in Northwestern New Mexico* is also included in Appendix A.

6.0 Summary and Conclusions

BioTech Remediation completed groundwater monitoring and gauging at the site in May 2011. Groundwater elevations in May 2011 increased by an average of 0.16 feet since February 2011 and are consistent with historical seasonal fluctuations. The groundwater gradient was calculated to be approximately 0.008 ft/ft in a northwest direction across the site, which is also consistent with historical site data.

In May 2011, free product was observed and measured in 12 monitor wells, including TW-20, TW-22, TW-24, TW-25, TW-26, TW-28, TW-29, TW-32, TW-33, TW-36, TW-40, and TW-44. Measured thicknesses ranged from 0.01 feet (TW-36) and 1.46 feet (TW-32). Sheens of free product were observed in TW-13, TW-14, and TW-19. In May 2011, free product was also observed in remediation wells MPE-5, MPE-26, MPE-44, MPE-47, and MPE-53.

Based upon the analytical results for the May 2011 sampling event, dissolved phase contaminant concentrations of benzene, xylenes, MTBE, and TDS exceeded the New Mexico WQCC standards in several wells. The highest benzene concentration was reported at 420 µg/L in TW-37. Xylene concentrations above the applicable WQCC standard of 620 µg/L was reported in TW-41 (2,700 µg/L). The highest dissolved phase MTBE concentration was detected in TW-45 (630 µg/L). Monitor wells TW-7 and TW-41 exceeded the WQCC standard for naphthalene with 49 µg/L and 70 µg/L, respectively.

Geochemical data for the May 2011 sampling event showed that chloride concentrations exceeded the WQCC standard of 250 mg/L in eight of the 12 sampled wells with the highest concentration being reported in TW-50 (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-7 with 2,800 mg/L. All wells exceeded the WQCC standard of 1,000 mg/L for TDS with the highest concentration reported in Mw-21 (5,500 mg/L). The groundwater monitor wells at the site have historically shown elevated TDS concentrations, which is attributable to the site's proximity to the Kutz Wash and shallow depth to groundwater.

The MPE remediation unit has been operating since March 10, 2010. Both engines (Engine #1 and Engine #2) were operated through mid September 2010, when both were removed from the site for scheduled rebuilds. Engine #2, following an engine rebuild, was installed and turned on at the site on January 4, 2011, and has been in operation during the first and second quarters of 2011. Based on system data and field monitoring measurements, AES estimates that approximately **2,682 lbs** of petroleum hydrocarbons have been removed as vapor and utilized as fuel for the RSI unit during the reporting period of April 1 through June 30, 2011. A total of **19,157** lbs of petroleum hydrocarbons have been mechanically removed from the site since system startup on March 10, 2010.

7.0 Recommendations and Scheduled Site Activities

The following items are scheduled to occur during the 3rd Quarter of 2011:

1. In accordance with the conditions of the Interim Groundwater Sampling Plan approval by NMOCD, the quarterly groundwater and NAPL monitoring and gauging event will be conducted in August, and the second semi-annual sampling event will be conducted in November 2011.

2. A representative from BioTech and/or NMSU Agricultural Science Center at Farmington will continue to monitor the status and growth of plants and trees associated with the phytoremediation project. BioTech will continue irrigation of this area during the third quarter.

3. Once Engine #2 is returned to service, BioTech will collect air emission samples from the well gas influent and from the pre-cat and post-cat sample ports. Air samples will be analyzed for BTEX and MTBE per EPA Method 8021B and EPA Method 8015B GRO.

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

Sincerely,

Deborah Watson, Project Manager

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

Tables

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

Figures

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

Graphs

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

Appendices

Appendix A. *Electronic*
Water Sample Collection Forms
Laboratory Analytical Reports
RSI Operational Data Report
Photograph Log of Current Status of Phytoremediation Project, June 2011
Preliminary Update-Poplar Phytoremediation Project on an Abandoned Oil Refinery Site in Northwestern New Mexico (NMSU 2011)

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

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TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-1	15-Dec-08	5471.58		27.95		5443.63	6.24	2.772	7.51*	14.64	113.8	0.25
TW-1	26-Jan-09	5471.58		30.53		5441.05	NM	NM	NM	NM	NM	NM
TW-1	19-Aug-09	5471.58		30.73		5440.85	7.09	1.795	8.08	16.17	289.1	1.00
TW-1	19-Feb-10	5471.58		30.68		5440.90	NM	NM	NM	NM	NM	NM
TW-1	07-May-10	5471.58		30.43		5441.15	NM	NM	NM	NM	NM	NM
TW-1	18-Aug-10	5471.58		30.64		5440.94	NM	NM	NM	NM	NM	NM
TW-1	15-Nov-10	5471.58		30.88		5440.70	NM	NM	NM	NM	NM	NM
TW-1	17-Feb-11	5471.58		30.74		5440.84	NM	NM	NM	NM	NM	NM
TW-1	17-May-11	5471.58		30.62		5440.96	NM	NM	NM	NM	NM	NM
TW-2	15-Dec-08	5469.31		28.91		5440.40	6.63	4.421	3.60	13.08	125.5	1.25
TW-2	26-Jan-09	5469.31		28.80		5440.51	NM	NM	NM	NM	NM	NM
TW-2	19-Aug-09	5469.31		28.97		5440.34	7.03	2.948	2.68	16.85	291.3	2.00
TW-2	19-Feb-10	5469.31		28.93		5440.38	NM	NM	NM	NM	NM	NM
TW-2	07-May-10	5469.31		28.71		5440.60	NM	NM	NM	NM	NM	NM
TW-2	18-Aug-10	5469.31		28.88		5440.43	NM	NM	NM	NM	NM	NM
TW-2	15-Nov-10	5469.31		29.11		5440.20	NM	NM	NM	NM	NM	NM
TW-2	17-Feb-11	5469.31		28.97		5440.34	NM	NM	NM	NM	NM	NM
TW-2	17-May-11	5469.31		28.85		5440.46	NM	NM	NM	NM	NM	NM
TW-3	15-Dec-08	5468.14		27.99		5440.15	6.63	4.249	2.01	14.44	-1.6	1.25
TW-3	26-Jan-09	5468.14		27.87		5440.27	NM	NM	NM	NM	NM	NM
TW-3	19-Aug-09	5468.14		28.05		5440.09	6.95	4.16	2.120	16.34	289.5	2.50
TW-3	19-Feb-10	5468.14		27.96		5440.18	NM	NM	NM	NM	NM	NM
TW-3	10-May-10	5468.14		27.73		5440.41	NM	NM	NM	NM	NM	NM
TW-3	18-Aug-10	5468.14		27.95		5440.19	NM	NM	NM	NM	NM	NM
TW-3	15-Nov-10	5468.14		28.16		5439.98	NM	NM	NM	NM	NM	NM

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

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-3	17-Feb-11	5468.14		28.01		5440.13	NM	NM	NM	NM	NM	NM
TW-3	17-May-11	5468.14		27.88		5440.26	NM	NM	NM	NM	NM	NM
TW-4	16-Dec-08	5458.72		19.16		5439.56	6.67	7.258	4.09	13.40	170.6	1.25
TW-4	26-Jan-09	5458.72		NM			NM	NM	NM	NM	NM	NM
TW-4	19-Aug-09	5458.72		19.22		5439.50	7.08	6.739	4.19	16.19	289.9	4.30
TW-4	19-Feb-10	5458.72		19.09		5439.63	NM	NM	NM	NM	NM	NM
TW-4	10-May-10	5458.72		18.86		5439.86	NM	NM	NM	NM	NM	NM
TW-4	18-Aug-10	5458.72		19.12		5439.60	NM	NM	NM	NM	NM	NM
TW-4	15-Nov-10	5458.72		19.31		5439.41	NM	NM	NM	NM	NM	NM
TW-4	17-Feb-11	5458.72		19.12		5439.60	NM	NM	NM	NM	NM	NM
TW-4	17-May-11	5458.72		19.01		5439.71	NM	NM	NM	NM	NM	NM
TW-5	15-Dec-08	5465.18		25.54		5439.64	6.56	3.704	3.26	14.25	16.0	1.25
TW-5	26-Jan-09	5465.18		25.44		5439.74	NM	NM	NM	NM	NM	NM
TW-5	19-Aug-09	5465.18		25.58		5439.60	6.96	3.636	5.53	16.55	298.9	3.60
TW-5	19-Feb-10	5465.18		25.53		5439.65	NM	NM	NM	NM	NM	NM
TW-5	10-May-10	5465.18		25.31		5439.87	NM	NM	NM	NM	NM	NM
TW-5	18-Aug-10	5465.18		25.49		5439.69	NM	NM	NM	NM	NM	NM
TW-5	15-Nov-10	5465.18		25.70		5439.48	NM	NM	NM	NM	NM	NM
TW-5	17-Feb-11	5465.18		25.55		5439.63	NM	NM	NM	NM	NM	NM
TW-5	17-May-11	5465.18		25.42		5439.76	NM	NM	NM	NM	NM	NM
TW-6	15-Dec-08	5463.57		24.78		5438.79	6.50	4.719	0.99	14.50	9.0	1.25
TW-6	26-Jan-09	5463.57		24.67		5438.90	NM	NM	NM	NM	NM	NM
TW-6	19-Aug-09	5463.57		24.82		5438.75	6.95	4.535	1.81	16.24	295.6	4.00
TW-6	19-Feb-10	5463.57		24.74		5438.83	NM	NM	NM	NM	NM	NM

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

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-6	10-May-10	5463.57		24.54		5439.03	NM	NM	NM	NM	NM	NM
TW-6	18-Aug-10	5463.57		24.73		5438.84	NM	NM	NM	NM	NM	NM
TW-6	15-Nov-10	5463.57		24.90		5438.67	NM	NM	NM	NM	NM	NM
TW-6	17-Feb-11	5463.57		24.57		5439.00	NM	NM	NM	NM	NM	NM
TW-6	17-May-11	5463.57		24.64		5438.93	NM	NM	NM	NM	NM	NM
TW-7	15-Dec-08	5461.17		22.25		5438.92	6.47	5.302	0.82	14.88	0.8	1.25
TW-7	26-Jan-09	5461.17		22.14		5439.03	NM	NM	NM	NM	NM	NM
TW-7	19-Aug-09	5461.17		22.25		5438.92	6.92	4.780	1.67	16.37	290.3	3.00
TW-7	19-Feb-10	5461.17		22.17		5439.00	NM	NM	NM	NM	NM	NM
TW-7	10-May-10	5461.17		21.97		5439.20	NM	NM	NM	NM	NM	NM
TW-7	18-Aug-10	5461.17		22.17		5439.00	NM	NM	NM	NM	NM	NM
TW-7	15-Nov-10	5461.17		22.37		5438.80	NM	NM	NM	NM	NM	NM
TW-7	17-Feb-11	5461.17		22.78		5438.39	NM	NM	NM	NM	NM	NM
TW-7	18-May-11	5461.17		22.10		5439.07	7.19	3.455	0.49	14.65	-21.8	2
TW-8	16-Dec-08	5458.29		19.76		5438.53	6.42	5.575	0.51	12.78	-258.2	1.25
TW-8	26-Jan-09	5458.29		19.62		5438.67	NM	NM	NM	NM	NM	NM
TW-8	20-Aug-09	5458.29		19.88		5438.41	7.12	4.523	1.40	14.52	264.7	4.00
TW-8	19-Feb-10	5458.29		19.59		5438.70	NM	NM	NM	NM	NM	NM
TW-8	10-May-10	5458.29		19.73		5438.56	NM	NM	NM	NM	NM	NM
TW-8	18-Aug-10	5458.29		19.72		5438.57	NM	NM	NM	NM	NM	NM
TW-8	15-Nov-10	5458.29		19.87		5438.42	NM	NM	NM	NM	NM	NM
TW-8	17-Feb-11	5458.29		20.21		5438.08	NM	NM	NM	NM	NM	NM
TW-8	18-May-11	5458.29		19.59		5438.70	7.13	4.364	0.25	13.05	-18.3	2
TW-9	16-Dec-08	5450.61		12.20		5438.41	6.90	3.473	2.27	14.53	15.6	1.25

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-9	26-Jan-09	5450.61		12.05		5438.56	NM	NM	NM	NM	NM	NM
TW-9	20-Aug-09	5450.61		12.49		5438.12	7.57	2.397	1.33	16.93	269.2	2.50
TW-9	19-Feb-10	5450.61		11.99		5438.62	NM	NM	NM	NM	NM	NM
TW-9	10-May-10	5450.61		11.89		5438.72	NM	NM	NM	NM	NM	NM
TW-9	18-Aug-10	5450.61		12.30		5438.31	NM	NM	NM	NM	NM	NM
TW-9	15-Nov-10	5450.61		12.36		5438.25	NM	NM	NM	NM	NM	NM
TW-9	17-Feb-11	5450.61		12.09		5438.52	NM	NM	NM	NM	NM	NM
TW-9	17-May-11	5450.61		12.13		5438.48	NM	NM	NM	NM	NM	NM
TW-10	16-Dec-08	5450.16		12.42		5437.74	6.49	3.876	0.98	11.97	-189.3	1.25
TW-10	26-Jan-09	5450.16		12.25		5437.91	NM	NM	NM	NM	NM	NM
TW-10	20-Aug-09	5450.16		12.70		5437.46	7.37	4.019	1.42	16.75	254.7	4.00
TW-10	19-Feb-10	5450.16		12.19		5437.97	NM	NM	NM	NM	NM	NM
TW-10	10-May-10	5450.16		12.15		5438.01	NM	NM	NM	NM	NM	NM
TW-10	18-Aug-10	5450.16		12.52		5437.64	NM	NM	NM	NM	NM	NM
TW-10	15-Nov-10	5450.16		12.54		5437.62	NM	NM	NM	NM	NM	NM
TW-10	17-Feb-11	5450.16		12.87		5437.29	NM	NM	NM	NM	NM	NM
TW-10	17-May-11	5450.16		12.36		5437.80	NM	NM	NM	NM	NM	NM
TW-11	16-Dec-08	5456.31		18.12		5438.19	6.75	6.941	1.41	14.32	72.0	1.25
TW-11	26-Jan-09	5456.31		18.02		5438.29	NM	NM	NM	NM	NM	NM
TW-11	20-Aug-09	5456.31		18.22		5438.09	7.43	6.704	2.52	15.35	261.4	4.00
TW-11	17-Feb-10	5456.31		18.04		5438.27	7.14	10.42	3.98	12.88	49.7	4.20
TW-11	11-May-10	5456.31		17.89		5438.42	7.22	6.44	2.32	13.25	232.1	3.75
TW-11	18-Aug-10	5456.31		18.04		5438.27	NM	NM	NM	NM	NM	NM
TW-11	15-Nov-10	5456.31		18.24		5438.07	NM	NM	NM	NM	NM	NM
TW-11	17-Feb-11	5456.31		18.15		5438.16	NM	NM	NM	NM	NM	NM

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-11	17-May-11	5456.31		18.01		5438.30	NM	NM	NM	NM	NM	NM
TW-12	15-Dec-08	5460.44		22.44		5438.00	6.49	4.247	0.95	16.15	-97.3	1.25
TW-12	26-Jan-09	5460.44	22.34	22.44	0.1	5438.08	NM	NM	NM	NM	NM	NM
TW-12	20-Aug-09	5460.44		22.50		5437.94	7.02	3.881	2.34	17.09	266.5	2.50
TW-12	17-Feb-10	5460.44		22.39		5438.05	6.94	5.727	1.46	15.59	206.2	3.00
TW-12	11-May-10	5460.44		22.21		5438.23	7.05	3.295	0.76	15.56	217.9	3.75
TW-12	19-Aug-10	5460.44		22.39		5438.05	6.93	3.343	0.55	16.74	399.3	2.50
TW-12	15-Nov-10	5460.44		22.54		5437.90	6.93	3.343	0.55	16.74	399.3	2.50
TW-12	17-Feb-11	5460.44		22.39		5438.05	NM	NM	NM	NM	NM	NM
TW-12	17-May-11	5460.44		22.30		5438.14	NM	NM	NM	NM	NM	NM
TW-13	16-Dec-08	5458.17	20.64	21.48	0.84	5437.38	Not Sampled - NAPL Present					
TW-13	26-Jan-09	5458.17	20.52	21.46	0.94	5437.49	NM	NM	NM	NM	NM	NM
TW-13	12-Aug-09	5458.17	20.75	21.77	1.02	5437.24	NM	NM	NM	NM	NM	NM
TW-13	11-Nov-09	5458.17	20.76	21.86	1.10	5437.22	NM	NM	NM	NM	NM	NM
TW-13	15-Feb-10	5458.17	20.59	21.48	0.89	5437.43	NM	NM	NM	NM	NM	NM
TW-13	07-May-10	5458.17	20.44	21.03	0.59	5437.63	NM	NM	NM	NM	NM	NM
TW-13	21-Jun-10	5458.17	20.48	21.15	0.67	5437.57	NM	NM	NM	NM	NM	NM
TW-13	18-Aug-10	5458.17	20.77	21.15	0.38	5437.33	NM	NM	NM	NM	NM	NM
TW-13	15-Nov-10	5458.17	20.79	21.39	0.60	5437.28	NM	NM	NM	NM	NM	NM
TW-13	23-Feb-11	5458.17	20.58	21.50	0.92	5437.43	NM	NM	NM	NM	NM	NM
TW-13	18-May-11	5458.17		20.66		5437.51	Not Sampled - Sheen of NAPL Present					
TW-14	16-Dec-08	5454.24		16.82		5437.42	Not Sampled - Sheen of NAPL present					
TW-14	26-Jan-09	5454.24	16.71	17.02	0.31	5437.48	NM	NM	NM	NM	NM	NM
TW-14	20-Aug-09	5454.24	16.89	17.02	0.13	5437.33	Not Sampled - NAPL present					

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

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-14	11-Nov-09	5454.24	17.20	17.67	0.47	5436.96	NM	NM	NM	NM	NM	NM
TW-14	15-Feb-10	5454.24	16.98	17.22	0.24	5437.22	NM	NM	NM	NM	NM	NM
TW-14	11-May-10	5454.24		16.85	sheen	5437.39	7.25	3.49	0.11	16.95	214.6	NM
TW-14	18-Aug-10	5454.24	17.01	17.03	0.02	5437.23	NM	NM	NM	NM	NM	NM
TW-14	15-Nov-10	5454.24		17.17		5437.07	NM	NM	NM	NM	NM	NM
TW-14	17-Feb-11	5454.24	17.04	17.05	0.01	5437.20	NM	NM	NM	NM	NM	NM
TW-14	18-May-11	5454.24		16.99		5437.25	Not Sampled - Sheen of NAPL present					
TW-15	16-Dec-08	5450.44		13.15		5437.29	6.69	6.647	1.25	13.17	-176.5	1.25
TW-15	26-Jan-09	5450.44		12.99		5437.45	NM	NM	NM	NM	NM	NM
TW-15	20-Aug-09	5450.44		13.35		5437.09	7.26	6.056	3.64	16.49	320.0	4.30
TW-15	17-Feb-10	5450.44		12.93		5437.51	NM	NM	NM	NM	NM	NM
TW-15	10-May-10	5450.44		12.86		5437.58	NM	NM	NM	NM	NM	NM
TW-15	18-Aug-10	5450.44		13.21		5437.23	NM	NM	NM	NM	NM	NM
TW-15	15-Nov-10	5450.44		13.24		5437.20	NM	NM	NM	NM	NM	NM
TW-15	17-Feb-11	5450.44		13.05		5437.39	NM	NM	NM	NM	NM	NM
TW-15	17-May-11	5450.44		13.09		5437.35	NM	NM	NM	NM	NM	NM
TW-16	16-Dec-08	5448.45		8.76		5439.69	6.71	6.593	1.64	14.90	7.3	1.25
TW-16	26-Jan-09	5448.45		11.11		5437.34	NM	NM	NM	NM	NM	NM
TW-16	20-Aug-09	5448.45		11.85		5436.60	7.40	6.025	3.66	16.57	285.2	1.00
TW-16	17-Feb-10	5448.45		11.1		5437.35	NM	NM	NM	NM	NM	NM
TW-16	17-May-10	5448.45		11.25		5437.2	7.33	3.684	2.19	13.64	227.1	3.75
TW-16	18-Aug-10	5448.45		11.45		5437.00	NM	NM	NM	NM	NM	NM
TW-16	15-Nov-10	5448.45		11.52		5436.93	NM	NM	NM	NM	NM	NM
TW-16	17-Feb-11	5448.45		11.21		5437.24	NM	NM	NM	NM	NM	NM
TW-16	17-May-11	5448.45		11.32		5437.13	NM	NM	NM	NM	NM	NM

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

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-17	16-Dec-08	5446.24		9.99		5436.25	6.68	6.643	1.26	14.10	-31.3	1.25
TW-17	26-Jan-09	5446.24		9.82		5436.42	NM	NM	NM	NM	NM	NM
TW-17	21-Aug-09	5446.24		10.31		5435.93	7.13	6.100	8.37	17.86	289.9	3.00
TW-17	17-Feb-10	5446.24		9.75		5436.49	NM	NM	NM	NM	NM	NM
TW-17	10-May-10	5446.24		9.83		5436.41	NM	NM	NM	NM	NM	NM
TW-17	18-Aug-10	5446.24		10.21		5436.03	NM	NM	NM	NM	NM	NM
TW-17	15-Nov-10	5446.24		10.18		5436.06	NM	NM	NM	NM	NM	NM
TW-17	17-Feb-11	5446.24		9.92		5436.32	NM	NM	NM	NM	NM	NM
TW-17	17-May-11	5446.24		10.03		5436.21	NM	NM	NM	NM	NM	NM
TW-18	16-Dec-08	5452.73		16.40		5436.33	6.65	5.094	0.88	16.42	-170.9	1.25
TW-18	26-Jan-09	5452.73		16.29		5436.44	NM	NM	NM	NM	NM	NM
TW-18	21-Aug-09	5452.73		16.48		5436.25	6.94	5.273	7.64	17.32	285.8	4.00
TW-18	17-Feb-10	5452.73		16.21		5436.52	6.8	7.990	2.04	15.58	210	3.30
TW-18	10-May-10	5452.73		16.11		5436.62	7.1	4.830	0.75	15.40	222	3.75
TW-18	18-Aug-10	5452.73		16.31		5436.42	NM	NM	NM	NM	NM	NM
TW-18	16-Nov-10	5452.73		16.50		5436.23	7.1	4.730	0.82	16.85	-19	3.00
TW-18	17-Feb-11	5452.73		16.33		5436.40	NM	NM	NM	NM	NM	NM
TW-18	18-May-11	5452.73		16.30		5436.43	NM	NM	NM	NM	NM	NM
TW-19	16-Dec-08	5458.49	22.15	22.62	0.47	5436.26	Not Sampled - NAPL Present					
TW-19	26-Jan-09	5458.49	22.01	22.57	0.56	5436.38	NM	NM	NM	NM	NM	NM
TW-19	13-Aug-09	5458.49	22.13	22.86	0.73	5436.23	Not Sampled - NAPL present					
TW-19	11-Nov-09	5458.49	TW damaged by demolition work									
TW-19	15-Feb-10	5458.49	TW damaged by demolition work									
TW-19	07-May-10	5458.49	17.45	17.52	0.07	5441.03	NM	NM	NM	NM	NM	NM

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-19	18-Aug-10	5458.49		17.66	Sheen	5440.83	NM	NM	NM	NM	NM	NM
TW-19	15-Nov-10	5458.49	17.79	18.02	0.23	5440.66	NM	NM	NM	NM	NM	NM
TW-19	17-Feb-11	5458.49	Attached to RSI Unit									
TW-19	18-May-11	5458.49		17.63		5440.86	Not Sampled - Sheen of NAPL Present					
TW-20	17-Dec-08	5453.74	15.14	15.86	0.72	5438.48	Not Sampled - NAPL Present					
TW-20	26-Jan-09	5453.74	17.36	18.62	1.26	5436.16	NM	NM	NM	NM	NM	NM
TW-20	13-Aug-09	5453.74	17.64	19.17	1.53	5435.84	Not Sampled - NAPL present					
TW-20	11-Nov-09	5453.74	17.52	19.45	1.93	5435.89	NM	NM	NM	NM	NM	NM
TW-20	15-Feb-10	5453.74	17.4	18.73	1.33	5436.11	NM	NM	NM	NM	NM	NM
TW-20	07-May-10	5453.74	17.28	18.25	0.97	5436.29	NM	NM	NM	NM	NM	NM
TW-20	07-May-10	5453.74	17.28	18.25	0.97	5436.29	NM	NM	NM	NM	NM	NM
TW-20	18-Aug-10	5453.74	Attached to RSI Unit									
TW-20	15-Nov-10	5453.74	17.56	18.88	1.32	5435.95	NM	NM	NM	NM	NM	NM
TW-20	17-Feb-11	5453.74	Attached to RSI Unit									
TW-20	17-May-11	5453.74	17.40	17.45	0.05	5436.33	Not Sampled - NAPL Present					
TW-21	17-Dec-08	5451.85	15.42	17.19	1.77	5436.12	Not Sampled - NAPL Present					
TW-21	26-Jan-09	5451.85	16.35	16.94	0.59	5435.40	NM	NM	NM	NM	NM	NM
TW-21	13-Aug-09	5451.85	16.50	16.94	0.44	5435.27	Not Sampled - NAPL present					
TW-21	12-Nov-09	5451.85	TW damaged by demolition work									
TW-21	15-Feb-10	5451.85	TW damaged by demolition work									
TW-21	07-May-10	5451.85	TW damaged by demolition work									
TW-21	18-Aug-10	5451.85	TW damaged by demolition work									
TW-21	15-Nov-10	5451.85	TW damaged by demolition work									
TW-21	23-Feb-11	5451.85	TW damaged by demolition work									
TW-21	17-May-11	5451.85	TW damaged by demolition work									

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-22	17-Dec-08	5450.19	14.75	14.76	0.01	5435.44	Not Sampled - NAPL Present					
TW-22	26-Jan-09	5450.19	14.69	15.26	0.57	5435.40	NM	NM	NM	NM	NM	NM
TW-22	13-Aug-09	5450.19	14.79	15.39	0.60	5435.30	Not Sampled - NAPL present					
TW-22	12-Nov-09	5450.19	14.88	15.58	0.70	5435.19	NM	NM	NM	NM	NM	NM
TW-22	15-Feb-10	5450.19	14.72	15.03	0.31	5435.42	NM	NM	NM	NM	NM	NM
TW-22	07-May-10	5450.19	14.63	14.73	0.10	5435.54	NM	NM	NM	NM	NM	NM
TW-22	18-Aug-10	5450.19	14.74	15.01	0.27	5435.40	NM	NM	NM	NM	NM	NM
TW-22	15-Nov-10	5450.19	14.94	15.14	0.20	5435.22	NM	NM	NM	NM	NM	NM
TW-22	23-Feb-11	5450.19	14.8	15.14	0.34	5435.33	NM	NM	NM	NM	NM	NM
TW-22	17-May-11	5450.19	14.79	15.02	0.23	5435.36	Not Sampled - NAPL Present					
TW-23	18-Dec-08	5443.64		6.60		5437.04	7.09	6.727	3.77	13.65	-138.4	1.25
TW-23	26-Jan-08	5443.64		8.73		5434.91	NM	NM	NM	NM	NM	NM
TW-23	21-Aug-09	5443.64		9.07		5434.57	7.17	7.95	5.40	18.47	286.8	3.00
TW-23	17-Feb-10	5443.64		8.61		5435.03	NM	NM	NM	NM	NM	NM
TW-23	10-May-10	5443.64		8.64		5435.00	NM	NM	NM	NM	NM	NM
TW-23	18-Aug-10	5443.64		8.94		5434.70	NM	NM	NM	NM	NM	NM
TW-23	15-Nov-10	5443.64		9.10		5434.54	NM	NM	NM	NM	NM	NM
TW-23	17-Feb-11	5443.64		9.51		5434.13	NM	NM	NM	NM	NM	NM
TW-23	17-May-11	5443.64		8.99		5434.65	NM	NM	NM	NM	NM	NM
TW-24	17-Dec-08	5444.79		10.97		5433.82	6.21	5.942	4.88	15.60	-64.3	1.25
TW-24	26-Jan-09	5444.79	11.84	11.85	0.01	5432.95	NM	NM	NM	NM	NM	NM
TW-24	21-Aug-09	5444.79	11.10	11.22	0.12	5433.67	Not Sampled - NAPL Present					
TW-24	13-Nov-09	5444.79	11.07	11.15	0.08	5433.71	NM	NM	NM	NM	NM	NM
TW-24	17-Feb-10	5444.79		10.78		5434.01	6.62	7.86	0.74	13.77	436.8	3.00

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-24	11-May-10	5444.79		10.63		5434.16	7.05	4.70	0.33	14.39	229	3.75
TW-24	18-Aug-10	5444.79		11.09	Sheen	5433.70	NM	NM	NM	NM	NM	NM
TW-24	15-Nov-10	5444.79	11.17	11.30	0.13	5433.60	NM	NM	NM	NM	NM	NM
TW-24	23-Feb-11	5444.79	11.09	11.15	0.06	5433.69	NM	NM	NM	NM	NM	NM
TW-24	17-May-11	5444.79	11.09	11.15	0.06	5433.69	Not Sampled - NAPL Present					
TW-25	17-Dec-08	5448.80	14.13	14.62	0.49	5434.59	Not Sampled - NAPL Present					
TW-25	26-Jan-09	5448.80	14.05	14.41	0.36	5434.69	NM	NM	NM	NM	NM	NM
TW-25	13-Aug-09	5448.80	14.14	14.63	0.49	5434.58	Not Sampled - NAPL present					
TW-25	12-Nov-09	5448.80	14.24	14.91	0.67	5434.44	NM	NM	NM	NM	NM	NM
TW-25	15-Feb-10	5448.80	14.03	14.41	0.38	5434.70	NM	NM	NM	NM	NM	NM
TW-25	07-May-10	5448.80	13.88	14.18	0.30	5434.87	NM	NM	NM	NM	NM	NM
TW-25	18-Aug-10	5448.80	14.00	14.39	0.39	5434.73	NM	NM	NM	NM	NM	NM
TW-25	15-Nov-10	5448.80	14.40	14.71	0.31	5434.35	NM	NM	NM	NM	NM	NM
TW-25	23-Feb-11	5448.80	14.21	14.45	0.24	5434.55	NM	NM	NM	NM	NM	NM
TW-25	17-May-11	5448.80	14.09	14.29	0.20	5434.68	Not Sampled - NAPL Present					
TW-26	17-Dec-08	5450.34	13.49	14.47	0.98	5436.68	Not Sampled - NAPL Present					
TW-26	26-Jan-09	5450.34	15.80	16.76	0.96	5434.37	NM	NM	NM	NM	NM	NM
TW-26	13-Aug-09	5450.34	15.83	17.29	1.46	5434.26	Not Sampled - NAPL present					
TW-26	12-Nov-09	5450.34	15.91	17.47	1.56	5434.16	NM	NM	NM	NM	NM	NM
TW-26	15-Feb-10	5450.34	15.81	16.86	1.05	5434.35	NM	NM	NM	NM	NM	NM
TW-26	07-May-10	5450.34	15.68	16.22	0.54	5434.57	NM	NM	NM	NM	NM	NM
TW-26	18-Aug-10	5450.34	15.75	16.75	1.00	5434.42	NM	NM	NM	NM	NM	NM
TW-26	15-Nov-10	5450.34	15.85	17.06	1.21	5434.28	NM	NM	NM	NM	NM	NM
TW-26	23-Feb-11	5450.34	15.81	16.75	0.94	5434.37	NM	NM	NM	NM	NM	NM
TW-26	17-May-11	5450.34	15.74	16.50	0.76	5434.47	Not Sampled - NAPL Present					

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-28	17-Dec-08	5449.24	15.37	15.96	0.59	5433.77	Not Sampled - NAPL Present					
TW-28	26-Jan-09	5449.24	15.28	15.79	0.51	5433.87	NM	NM	NM	NM	NM	NM
TW-28	13-Aug-09	5449.24	15.27	10.31	-4.96	5434.83	Not Sampled - NAPL present					
TW-28	12-Nov-09	5449.24	15.35	16.74	1.39	5433.65	NM	NM	NM	NM	NM	NM
TW-28	15-Feb-10	5449.24	15.22	16.10	0.88	5433.87	NM	NM	NM	NM	NM	NM
TW-28	07-May-10	5449.24	15.08	15.47	0.39	5434.09	NM	NM	NM	NM	NM	NM
TW-28	18-Aug-10	5449.24	15.12	16.09	0.97	5433.95	NM	NM	NM	NM	NM	NM
TW-28	15-Nov-10	5449.24	15.49	16.67	1.18	5433.55	NM	NM	NM	NM	NM	NM
TW-28	23-Feb-11	5449.24	15.24	16.39	1.15	5433.80	NM	NM	NM	NM	NM	NM
TW-28	17-May-11	5449.24	15.19	16.09	0.90	5433.89	Not Sampled - NAPL Present					
TW-29	17-Dec-08	5441.87	9.19	9.20	0.01	5432.68	Not Sampled - NAPL Present					
TW-29	26-Jan-09	5441.87	9.12	9.14	0.02	5432.75	NM	NM	NM	NM	NM	NM
TW-29	13-Aug-09	5441.87	9.22	10.06	0.84	5432.50	Not Sampled - NAPL present					
TW-29	13-Nov-09	5441.87	9.25	9.91	0.66	5432.51	NM	NM	NM	NM	NM	NM
TW-29	17-Feb-10	5441.87		8.96		5432.91	6.00	8.583	0.60	13.79	357.9	3.60
TW-29	07-May-10	5441.87	8.91	8.96	0.05	5432.95	NM	NM	NM	NM	NM	NM
TW-29	18-Aug-10	5441.87	9.14	9.69	0.55	5432.63	NM	NM	NM	NM	NM	NM
TW-29	15-Nov-10	5441.87	9.43	10.23	0.80	5432.30	NM	NM	NM	NM	NM	NM
TW-29	23-Feb-11	5441.87	10.31	10.90	0.59	5431.46	NM	NM	NM	NM	NM	NM
TW-29	17-May-11	5441.87	9.35	9.83	0.48	5432.44	Not Sampled - NAPL Present					
TW-30	18-Dec-08	5437.93		5.90		5432.03	6.46	6.328	6.25*	12.89	-66.2	1.25
TW-30	26-Jan-09	5437.93		5.69		5432.24	NM	NM	NM	NM	NM	NM
TW-30	21-Aug-09	5437.93		6.07		5431.86	6.61	7.238	5.52	18.52	304.0	5.50
TW-30	17-Feb-10	5437.93		5.65		5432.28	6.26	8.169	1.47	11.21	476.9	5.60

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

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-30	11-May-10	5437.93		5.67		5432.26	6.77	5.188	0.76	12.56	238.8	3.75
TW-30	18-Aug-10	5437.93		5.99		5431.94	NM	NM	NM	NM	NM	NM
TW-30	16-Nov-10	5437.93		6.34		5431.59	6.96	6.832	0.61	15.28	-8.8	3.00
TW-30	17-Feb-11	5437.93		6.24		5431.69	NM	NM	NM	NM	NM	NM
TW-30	17-May-11	5437.93		6.22		5431.71	NM	NM	NM	NM	NM	NM
TW-31	16-Dec-08	5438.54		7.03		5431.51	6.37	7.298	2.97	14.00	12.8	1.25
TW-31	26-Jan-09	5438.54		6.94		5431.60	NM	NM	NM	NM	NM	NM
TW-31	21-Aug-09	5438.54		7.18		5431.36	6.84	10.35	6.90	21.75	319.9	3.00
TW-31	17-Feb-10	5438.54		6.82		5431.72	6.63	9.906	3.95	9.75	358.8	3.00
TW-31	11-May-10	5438.54		6.78		5431.76	6.96	7.523	1.31	13.25	228.9	4.00
TW-31	18-Aug-10	5438.54		6.98		5431.56	NM	NM	NM	NM	NM	NM
TW-31	16-Nov-10	5438.54		7.24		5431.30	6.98	5.526	0.99	15.87	-10.0	3.00
TW-31	17-Feb-11	5438.54		7.16		5431.38	NM	NM	NM	NM	NM	NM
TW-31	17-May-11	5438.54		7.07		5431.47	NM	NM	NM	NM	NM	NM
TW-32	17-Dec-08	5441.61	7.22	8.79	1.57	5434.12	Not Sampled - NAPL Present					
TW-32	26-Jan-09	5441.61	9.02	10.31	1.29	5432.37	NM	NM	NM	NM	NM	NM
TW-32	13-Aug-09	5441.61	9.12	10.86	1.74	5432.19	Not Sampled - NAPL present					
TW-32	12-Nov-09	5441.61	9.26	10.88	1.62	5432.07	NM	NM	NM	NM	NM	NM
TW-32	16-Feb-10	5441.61	8.97	9.98	1.01	5432.47	NM	NM	NM	NM	NM	NM
TW-32	07-May-10	5441.61	8.92	9.34	0.42	5432.62	NM	NM	NM	NM	NM	NM
TW-32	18-Aug-10	5441.61	9.00	10.18	1.18	5432.41	NM	NM	NM	NM	NM	NM
TW-32	15-Nov-10	5441.61	9.30	10.87	1.57	5432.04	NM	NM	NM	NM	NM	NM
TW-32	23-Feb-11	5441.61	9.23	10.79	1.56	5432.11	NM	NM	NM	NM	NM	NM
TW-32	17-May-11	5441.61	9.26	10.72	1.46	5432.10	Not Sampled - NAPL Present					

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-33	17-Dec-08	5445.85	12.96	13.02	0.06	5432.88	Not Sampled - NAPL Present					
TW-33	26-Jan-09	5445.85	12.92	13.02	0.10	5432.91	NM	NM	NM	NM	NM	NM
TW-33	13-Aug-09	5445.85	12.96	13.10	0.14	5432.87	Not Sampled - NAPL present					
TW-33	12-Nov-09	5445.85	13.10	13.40	0.30	5432.70	NM	NM	NM	NM	NM	NM
TW-33	16-Feb-10	5445.85	12.89	12.93	0.04	5432.95	NM	NM	NM	NM	NM	NM
TW-33	07-May-10	5445.85	12.68	12.70	0.02	5433.17	NM	NM	NM	NM	NM	NM
TW-33	18-Aug-10	5445.85	12.81	12.99	0.18	5433.01	NM	NM	NM	NM	NM	NM
TW-33	15-Nov-10	5445.85	12.97	13.15	0.18	5432.85	NM	NM	NM	NM	NM	NM
TW-33	17-Feb-11	5445.85	12.98	13.05	0.07	5432.86	NM	NM	NM	NM	NM	NM
TW-33	17-May-11	5445.85	12.80	12.82	0.02	5433.05	Not Sampled - NAPL Present					
TW-34	18-Dec-08	5455.80		19.82		5435.98	7.48	6.744	3.97	14.29	-183.8	1.25
TW-34	26-Jan-09	5455.80		19.74		5436.06	NM	NM	NM	NM	NM	NM
TW-34	19-Aug-09	5455.80		20.23		5435.57	7.06	10.07	6.19	15.43	303.7	3.00
TW-34	18-Feb-10	5455.80		19.79		5436.01	7.06	9.266	2.40	12.35	-55.0	3.00
TW-34	12-May-10	5455.80		19.6		5436.20	7.03	5.825	2.18	13.57	133.5	3.75
TW-34	18-Aug-10	5455.80		20.1		5435.70	NM	NM	NM	NM	NM	NM
TW-34	15-Nov-10	5455.80		19.93		5435.87	NM	NM	NM	NM	NM	NM
TW-34	23-Feb-11	5455.80		19.83		5435.97	NM	NM	NM	NM	NM	NM
TW-34	17-May-11	5455.80		19.73		5436.07	NM	NM	NM	NM	NM	NM
TW-35	18-Dec-08	5449.14		15.21		5433.93	7.04	7.929	4.39	14.98	-189.4	1.25
TW-35	26-Jan-09	5449.14		15.12		5434.02	NM	NM	NM	NM	NM	NM
TW-35	24-Aug-09	5449.14		15.29		5433.85	7.02	11.80	6.40	16.41	295.1	3.30
TW-35	18-Feb-10	5449.14		15.15		5433.99	7.20	11.52	2.91	12.99	-283.0	3.60
TW-35	12-May-10	5449.14		14.91		5434.23	7.17	6.714	1.91	12.77	197.4	3.75
TW-35	18-Aug-10	5449.14		15.08		5434.06	NM	NM	NM	NM	NM	NM

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-35	17-Nov-10	5449.14		15.23		5433.91	7.13	7.175	0.72	15.97	-18.3	3.00
TW-35	23-Feb-11	5449.14		15.17		5433.97	NM	NM	NM	NM	NM	NM
TW-35	17-May-11	5449.14		15.03		5434.11	NM	NM	NM	NM	NM	NM
TW-36	18-Dec-08	5441.91		13.03		5428.88	6.94	7.874	3.6	15.28	-270.7	1.25
TW-36	26-Jan-09	5441.91	12.94	12.97	0.03	5428.96	NM	NM	NM	NM	NM	NM
TW-36	13-Aug-09	5441.91	13.17	13.35	0.18	5428.71	Not Sampled - NAPL present					
TW-36	13-Nov-09	5441.91	13.25	13.63	0.38	5428.59	NM	NM	NM	NM	NM	NM
TW-36	16-Feb-10	5441.91	12.96	12.98	0.02	5428.95	NM	NM	NM	NM	NM	NM
TW-36	12-May-10	5441.91		12.70		5429.21	7.08	6.193	1.42	12.75	388.4	3.75
TW-36	18-Aug-10	5441.91	13.10	13.18	0.08	5428.80	NM	NM	NM	NM	NM	NM
TW-36	15-Nov-10	5441.91	13.20	13.35	0.15	5428.68	NM	NM	NM	NM	NM	NM
TW-36	23-Feb-11	5441.91		13.03		5428.88	NM	NM	NM	NM	NM	NM
TW-36	17-May-11	5441.91	12.97	12.98	0.01	5428.94	Not Sampled - NAPL Present					
TW-37	17-Dec-08	5439.59		10.57		5429.02	6.51	4.698	3.5	14.02	-221.3	1.25
TW-37	26-Jan-09	5439.59		10.47		5429.12	NM	NM	NM	NM	NM	NM
TW-37	21-Aug-09	5439.59		10.71		5428.88	7.22	6.162	4.35	18.77	296.1	3.00
TW-37	16-Feb-10	5439.59		10.44		5429.15	6.77	6.700	1.11	12.18	430.5	3.00
TW-37	11-May-10	5439.59		10.16		5429.43	6.98	4.092	1.27	12.84	224.6	3.75
TW-37	19-Aug-10	5439.59		10.53		5429.06	7.05	4.268	0.41	18.90	324.2	1.50
TW-37	16-Nov-10	5439.59		10.68		5428.91	7.05	4.503	0.61	16.79	-13.6	3.00
TW-37	17-Feb-11	5439.59		10.58		5429.01	NM	NM	NM	NM	NM	NM
TW-37	18-May-11	5439.59		10.5		5429.09	7.05	4.162	0.77	13.42	-13.9	0.50
TW-38	17-Dec-08	5442.11		9.55		5432.56	6.95	5.466	4.06	12.82	-179.3	1.25
TW-38	26-Jan-09	5442.11		11.36		5430.75	NM	NM	NM	NM	NM	NM

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-38	21-Aug-09	5442.11	11.57	11.58	0.01	5430.54	Not Sampled - NAPL Present					
TW-38	12-Nov-09	5442.11	11.64	11.70	0.06	5430.46	NM	NM	NM	NM	NM	NM
TW-38	18-Feb-10	5442.11		11.28		5430.83	6.73	7.314	0.57	12.54	549.0	2.10
TW-38	12-May-10	5442.11		11.09		5431.02	7.06	4.741	2.37	12.83	205.3	3.75
TW-38	19-Aug-10	5442.11		11.30		5430.81	6.99	4.573	0.48	18.42	353.8	2.50
TW-38	16-Nov-10	5442.11		11.54		5430.57	7.10	4.657	0.79	16.96	-16.7	3.00
TW-38	17-Feb-11	5442.11		11.49		5430.62	NM	NM	NM	NM	NM	NM
TW-38	18-May-11	5442.11		11.42		5430.69	7.06	3.756	0.97	13.91	-14.3	0.50
TW-39	18-Dec-08	5438.43	7.7	7.71	0.01	5430.73	Not Sampled - Sheen of NAPL Present					
TW-39	26-Jan-09	5438.43		7.44		5430.99	NM	NM	NM	NM	NM	NM
TW-39	21-Aug-09	5438.43		7.96		5430.47	6.93	8.946	4.48	23.34	328.1	3.00
TW-39	17-Feb-10	5438.43		7.11		5431.32	6.64	6.092	1.22	8.11	244.4	2.10
TW-39	12-May-10	5438.43		6.98		5431.45	6.93	6.104	1.91	12.70	214.3	3.75
TW-39	19-Aug-10	5438.43		7.42		5431.01	7.19	3.956	0.30	22.67	359.2	2.50
TW-39	16-Nov-10	5438.43		7.95		5430.48	7.17	4.224	0.85	15.29	-20.8	3.00
TW-39	17-Feb-11	5438.43		9.01		5429.42	NM	NM	NM	NM	NM	NM
TW-39	19-May-11	5438.43		7.73		5430.70	7.13	4.654	1.00	11.84	-18.2	0.50
TW-40	18-Dec-08	5437.50		5.30		5432.20	Not Sampled - Sheen of NAPL Present					
TW-40	26-Jan-09	5437.50		7.27		5430.23	NM	NM	NM	NM	NM	NM
TW-40	13-Aug-09	5437.50	7.90	8.53	0.63	5429.49	Not Sampled - NAPL present					
TW-40	13-Nov-09	5437.50	7.93	8.49	0.56	5429.47	NM	NM	NM	NM	NM	NM
TW-40	16-Feb-10	5437.50	6.84	7.76	0.92	5430.50	NM	NM	NM	NM	NM	NM
TW-40	07-May-10	5437.50	6.78	7.90	1.12	5430.53	NM	NM	NM	NM	NM	NM
TW-40	18-Aug-10	5437.50	7.50	7.88	0.38	5429.93	NM	NM	NM	NM	NM	NM
TW-40	15-Nov-10	5437.50	7.97	8.51	0.54	5429.44	NM	NM	NM	NM	NM	NM

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-40	17-Feb-11	5437.50	7.94	8.38	0.44	5429.48	NM	NM	NM	NM	NM	NM
TW-40	17-May-11	5437.50	7.72	8.19	0.47	5429.70	Not Sampled - NAPL Present					
TW-41	18-Dec-08	5434.77		5.85		5428.92	6.16	5.669	3.92	10.95	-339.4	1.25
TW-41	26-Jan-09	5434.77		5.59		5429.18	NM	NM	NM	NM	NM	NM
TW-41	24-Aug-09	5434.77		6.27		5428.50	6.72	9.811	8.50	20.12	126.3	2.50
TW-41	16-Feb-10	5434.77		5.34		5429.43	6.06	8.192	0.46	8.01	461.4	3.00
TW-41	12-May-10	5434.77		5.17		5429.60	7.01	5.881	1.30	12.95	229.2	3.75
TW-41	20-Aug-10	5434.77		5.70		5429.07	7.07	5.434	0.52	20.38	197.0	2.50
TW-41	16-Nov-10	5434.77		6.12		5428.65	6.93	5.792	0.69	14.43	-6.7	3.00
TW-41	17-Feb-11	5434.77		6.06		5428.71	NM	NM	NM	NM	NM	NM
TW-41	18-May-11	5434.77		5.92		5428.85	7.05	5.675	0.78	13.17	-13.9	0.50
TW-42	16-Dec-08	5433.76		6.09		5427.67	6.48	6.036	1.07	12.04	23.5	1.25
TW-42	26-Jan-09	5433.76		5.97		5427.79	NM	NM	NM	NM	NM	NM
TW-42	24-Aug-09	5433.76		6.37		5427.39	7.23	10.81	6.43	19.48	219.0	2.50
TW-42	16-Feb-10	5433.76		5.84		5427.92	6.43	7.885	2.50	7.78	456.9	3.00
TW-42	12-May-10	5433.76		5.55		5428.21	7.27	5.816	2.60	12.54	233.5	3.75
TW-42	20-Aug-10	5433.76		6.05		5427.71	7.34	6.146	1.34	19.81	266.2	2.50
TW-42	16-Nov-10	5433.76		6.21		5427.55	7.26	6.589	1.84	14.17	-25.8	3.00
TW-42	17-Feb-11	5433.76		6.07		5427.69	NM	NM	NM	NM	NM	NM
TW-42	17-May-11	5433.76		6.02		5427.74	NM	NM	NM	NM	NM	NM
TW-43	16-Dec-08	5440.42		12.19		5428.23	6.35	6.716	1.01	14.39	7.0	1.25
TW-43	26-Jan-09	5440.42		12.10		5428.32	NM	NM	NM	NM	NM	NM
TW-43	24-Aug-09	5440.42		12.44		5427.98	6.94	8.834	6.92	17.73	204.1	3.00
TW-43	16-Feb-10	5440.42		12.11		5428.31	6.79	7.655	3.56	12.46	431.3	3.00

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-43	12-May-10	5440.42		11.82		5428.60	7.01	4.736	1.60	12.89	225.4	3.75
TW-43	20-Aug-10	5440.42		12.29		5428.13	6.98	4.873	1.00	17.72	299.0	2.50
TW-43	16-Nov-10	5440.42		12.34		5428.08	6.94	5.273	0.84	16.58	-7.3	3.00
TW-43	17-Feb-11	5440.42		12.19		5428.23	NM	NM	NM	NM	NM	NM
TW-43	18-May-11	5440.42		12.15		5428.27	6.93	5.144	0.44	13.07	-7.1	0.50
TW-44	17-Dec-08	5444.08		12.66		5431.42	6.71	6.494	2.75	15.75	-43.4	1.25
TW-44	26-Jan-09	5444.08		14.93		5429.15	NM	NM	NM	NM	NM	NM
TW-44	24-Aug-09	5444.08		15.15		5428.93	6.74	9.788	6.47	16.80	248.3	1.50
TW-44	18-Feb-10	5444.08	15.02	15.04	0.02	5429.06	NM	NM	NM	NM	NM	NM
TW-44	07-May-10	5444.08	14.66	14.68	0.02	5429.42	NM	NM	NM	NM	NM	NM
TW-44	18-Aug-10	5444.08	14.98	15.00	0.02	5429.10	NM	NM	NM	NM	NM	NM
TW-44	15-Nov-10	5444.08	15.12	15.15	0.03	5428.95	NM	NM	NM	NM	NM	NM
TW-44	17-Feb-11	5444.08	15.02	15.03	0.01	5429.06	NM	NM	NM	NM	NM	NM
TW-44	17-May-11	5444.08	14.96	15.01	0.05	5429.11	Not Sampled - NAPL Present					
TW-45	13-May-10	TBS		6.58			7.01	5.204	4.93	11.52	179.0	3.75
TW-45	20-Aug-10	TBS		7.06			6.98	5.245	1.84	19.10	234.6	2.50
TW-45	17-Nov-10	TBS		7.09			6.93	5.564	0.97	14.24	-7.2	0.50
TW-45	23-Feb-11	TBS		7.01			NM	NM	NM	NM	NM	NM
TW-45	18-May-11	TBS		7.20			6.98	3.793	0.84	11.97	-9.7	2.00
TW-46	13-May-10	TBS		6.86			7.15	4.889	4.72	12.28	206.5	3.75
TW-46	20-Aug-10	TBS		7.31			7.13	5.262	1.14	19.45	241.2	0.50
TW-46	15-Nov-10	TBS		7.41			NM	NM	NM	NM	NM	NM
TW-46	23-Feb-11	TBS		7.34			NM	NM	NM	NM	NM	NM
TW-46	18-May-11	TBS		6.89			7.12	2.778	0.72	12.26	-17.7	0.50

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-47	13-May-10	TBS		6.04			7.23	11.86	3.36	12.89	214.8	3.75
TW-47	20-Aug-10	TBS		6.67			7.20	11.46	1.16	20.71	241.0	0.50
TW-47	17-Nov-10	TBS		6.93			7.08	10.79	2.09	14.87	-15.4	0.50
TW-47	23-Feb-11	TBS		6.94			NM	NM	NM	NM	NM	NM
TW-47	17-May-11	TBS		6.79			NM	NM	NM	NM	NM	NM
TW-48	12-May-10	TBS		6.90			6.95	5.924	3.43	13.25	231.8	3.75
TW-48	19-Aug-10	TBS		7.18			6.85	5.861	1.75	21.73	405.2	2.50
TW-48	15-Nov-10	TBS		7.39			NM	NM	NM	NM	NM	NM
TW-48	17-Feb-11	TBS		7.31			NM	NM	NM	NM	NM	NM
TW-48	17-May-11	TBS		7.30			NM	NM	NM	NM	NM	NM
TW-49	17-May-10	TBS		5.32			7.73	6.88	3.06	15.48	228.50	0.00
TW-49	20-Aug-10	TBS		5.84			NM	NM	NM	NM	NM	NM
TW-49	15-Nov-10	TBS		6.36			NM	NM	NM	NM	NM	NM
TW-49	23-Feb-11	TBS		6.27			NM	NM	NM	NM	NM	NM
TW-49	17-May-11	TBS		6.24			NM	NM	NM	NM	NM	NM
TW-50	12-May-10	TBS		7.30			6.92	5.815	1.25	13.27	231.5	3.75
TW-50	19-Aug-10	TBS		7.67			6.96	5.946	0.45	22.26	334.4	2.50
TW-50	15-Nov-10	TBS		8.06			NM	NM	NM	NM	NM	NM
TW-50	17-Feb-11	TBS		7.99			NM	NM	NM	NM	NM	NM
TW-50	19-May-11	TBS		7.89			7.13	5.337	0.78	12.42	-18.3	0.50
MW-5	30-Jan-02	5428.97		5.33								P
MW-5	25-Jul-02	5428.97		5.73			7.8	4.78	1.18	69		P

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
MW-5	21-Nov-02	5428.97		5.43								
MW-5	05-Jun-03	5428.97		5.02			8.0	3.07	1.44	59.4		B
MW-5	19-Jan-04	5428.97		5.25			7.7	1.14	2.61	47.6		P
MW-5	25-May-04	5428.97		5.04			7.5	3.21	0.45	60.4		3.00
MW-5	27-Jul-04	5428.97		5.43			8.1	4.07		75.5		B
MW-5	28-Dec-04	5428.97		5.26			8.0					MP
MW-5	31-Mar-05	5428.97		4.62			7.3	2.77	0.39	52.7		MP
MW-5	19-Sep-05	5428.97	DRY	DRY	DRY		NM	NM	NM	NM		
MW-5	5-Jan-06	5428.97	DRY	DRY	DRY		NM	NM	NM	NM		
MW-5	27-Jun-06	5428.97		5.43			7.2	4.197	0.37	16		3
MW-5	28-Dec-06	5428.97		4.88			7.3	7.927	0.54	10.4		3
MW-5	3-Jul-07	5428.97		5.07			7.86	4.478	2.93	16.4		1.7
MW-5	18-Dec-07	5428.97	Not Sampled - Filled with Roots									
MW-5	19-Dec-08	5428.97		5.04		5423.93	6.76	7.748	4.02	11.73		0.25
MW-5	19-Dec-08	5428.97		5.04		5423.93	6.76	7.748	4.02	11.73		0.25
MW-5	18-Feb-10	5428.97		4.73		5424.24	7.39	8.422	3.30	9.93	403.1	3.00
MW-5	12-May-10	5428.97		4.32		5424.65	7.35	6.146	2.68	11.52	225.3	3.75
MW-5	18-Aug-10	5428.97		4.99		5423.98	NM	NM	NM	NM	NM	NM
MW-5	17-Nov-10	5428.97		5.17		5423.80	7.62	6.121	1.36	14.15	-46.2	3.00
MW-5	17-Feb-11	5428.97		5.08		5423.89	NM	NM	NM	NM	NM	NM
MW-5	17-May-11	5428.97		5.03		5423.94	NM	NM	NM	NM	NM	NM
MW-7	1-Feb-02	5435.28		5.32		37288.00						No Sample
MW-7	29-Jul-02	5435.28		6.11		37466.00						No Sample

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

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
MW-7	6-Jun-03	5435.28		9.06		37778.00						No Sample
MW-7	19-Jan-04	5435.28		9.06		38005.00	7.0	2.827	0.93	49.7		P
MW-7	25-May-04	5435.28		9.14		38132.00	6.8	3.76	0.27	63.2		3
MW-7	27-Jul-04	5435.28		9.08		38195.00	7.3	5.32		72.8		B
MW-7	28-Dec-04	5435.28		9.05		38349.00	7.8					MP
MW-7	31-Mar-05	5435.28		7.67		38442.00	6.5	3.011	0.5	52		MP
MW-7	19-Sep-05	5435.28		9.20		38614.00	7.0	4.802	0.41	70.8		
MW-7	4-Jan-06	5435.28		8.14		38721.00	7.0	3.625	0.48	14.5		3
MW-7	02-Jan-07	5435.28		8.75		39084.00	NM	NM	NM	NM		No Sample
MW-7	19-Dec-07	5435.28		8.43		39435.00	NM	NM	NM	NM		No Sample
MW-7	17-May-10	5435.28		8.5		5426.78	6.95	6.66	3.08	13.83	217.6	3.75
MW-7	19-Aug-10	5435.28		8.2		5427.08	7.07	5.994	1.33	20.45	325.3	2.50
MW-7	15-Nov-10	5435.28		8.83		5426.45	NM	NM	NM	NM	NM	No Sample
MW-7	17-Feb-11	5435.28		8.76		5426.52	NM	NM	NM	NM	NM	NM
MW-7	17-May-11	5435.28		8.58		5426.70	NM	NM	NM	NM	NM	NM
MW-20	31-Jan-02	5430.45		6.04								P
MW-20	26-Jul-02	5430.45		6.31			7.2	2.95	1.22	79.6		P
MW-20	20-Nov-02	5430.45		5.85			7.1	1.9	0.30	55.0		P
MW-20	5-Jun-03	5430.45		5.89			7.1	3.43	1.58	58.1		
MW-20	20-Jan-04	5430.45		6.08			7.5	0.35	3.23	51.8		P
MW-20	25-May-04	5430.45		5.90			7.1	4.01	1.2	72.3		1.5
MW-20	27-Jul-04	5430.45		6.29			7.0	5.12		66.1		B
MW-20	29-Dec-04	5430.45		6.07								MP

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
MW-20	1-Apr-05	5430.45		5.69			6.5	2.378	0.55	54.4		
MW-20	19-Sep-05	5430.45		6.02			7.0	3.466	0.37	66.1		
MW-20	4-Jan-06	5430.45		5.85			7.0	3.47	0.6	12.3		3
MW-20	28-Jun-06	5430.45		6.18			6.7	4.979	0.34	17.8		3
MW-20	28-Dec-06	5430.45		5.50			7.0	8.505	0.51	8.9		3
MW-20	2-Jul-07	5430.45		5.75			7.0	4.841	1.32	16.09		2.6
MW-20	18-Dec-07	5430.45		5.89			7.05	5.621	2.89	12.10		1.25
MW-20	21-Jan-09	5430.45		5.86			6.73	5.996	3.58	8.34		0.5
MW-20	18-Feb-10	5430.45		5.81		5424.64	6.67	7.249	3.67	8.20	395.0	2.50
MW-20	13-May-10	5430.45		5.52		5424.93	6.96	4.948	2.09	10.89	216.9	3.75
MW-20	20-Aug-10	5430.45		6.01		5424.44	7.12	4.836	1.09	18.44	236.4	2.50
MW-20	17-Nov-10	5430.45		6.05		5424.4	6.94	5.167	0.40	13.63	-7.7	0.50
MW-20	23-Feb-11	5430.45		5.92		5424.53	NM	NM	NM	NM	NM	NM
MW-20	18-May-11	5430.45		5.88		5424.57	6.99	3.637	0.69	11.33	-10.6	2.00
MW-21	30-Jan-02	5428.62		3.41								P
MW-21	26-Jul-02	5428.62		4.15								
MW-21	22-Nov-02	5428.62		3.51			7.1	7.58	0.55	55.0		P
MW-21	5-Jun-03	5428.62		3.21			7.2	7.79	0.95	65.4		
MW-21	20-Jan-04	5428.62		3.57			7.4	0.31	3.40	46.7		P
MW-21	25-May-04	5428.62		3.49			7.2	7.56	0.49	64.5		2.5
MW-21	28-Jul-04	5428.62		4.12			7.3	11.42		67.1		B
MW-21	29-Dec-04	5428.62		3.36								MP
MW-21	1-Apr-05	5428.62		2.77			6.7	5.747	0.28	50.9		

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
MW-21	19-Sep-05	5428.62		3.84			7.2	8.598	0.39	67.8		
MW-21	4-Jan-06	5428.62		3.27			7.1	6.118	0.77	11.9		3
MW-21	28-Jun-06	5428.62		3.81			6.8	9.223	0.32	19.8		3
MW-21	02-Jan-07	5428.62		3.23			6.7	9.393	0.9	8.2		3
MW-21	02-Jul-07	5428.62		3.54			7.0	9.066	0.86	18.74		2.7
MW-21	18-Dec-07	5428.62		3.54			7.12	8.043	0.62	12.90		3.25
MW-21	19-Dec-08	5428.62		3.43			6.79	7.562	9.78	11.04		1.25
MW-21	18-Feb-10	5428.62		2.86		5425.76	6.82	9.049	8.21	7.91	367.2	3.00
MW-21	13-May-10	5428.62		2.69		5425.93	7.06	7.075	1.74	12.41	224.9	3.75
MW-21	20-Aug-10	5428.62		3.31		5425.31	7.06	6.836	1.09	21.23	234.4	NM
MW-21	17-Nov-10	5428.62		3.68		5424.94	7.02	7.817	0.56	15.42	-12.0	0.50
MW-21	23-Feb-11	5428.62		3.65		5424.97	NM	NM	NM	NM	NM	NM
MW-21	18-May-11	5428.62		3.52		5425.1	7.07	5.026	1.05	13.05	-14.8	2.00

NOTES: NM - Not Measured

* Denotes erroneous DO measurement - sensor malfunction

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	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-8	16-Dec-08	**120**	15	330	**950**	<5.0	**92**	8.9	1.4	<5.0	NA

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
TW-8	19-Aug-09	**26**	<1.0	82	130	<1.0	<2.0	1.7	<1.0	<5.0	**4,490**
TW-8	18-May-11	**32**	<5.0	150	130	<5.0	<10	NA	NA	NA	**4,140**
TW-9	16-Dec-08	<1.0	<1.0	<1.0	<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-12	15-Dec-08	6.9	33	670	**1,700**	<5.0	**317**	3.4	1.9	<5.0	NA
TW-12	20-Aug-09	<1.0	<1.0	19	25	<1.0	<2.0	0.25	<1.0	<5.0	**3,490**
TW-12	17-Feb-10	1.3	<1.0	35	48	<1.0	2.4	0.43	<1.0	<5.0	**3,470**
TW-12	11-May-10	1.7	2.0	49	72	<1.0	<2.0	0.18	1.2	<5.0	**3,340**
TW-12	19-Aug-10	1.4	<1.0	53	65	<1.0	<2.0	0.40	<1.0	<5.0	**3,300**
TW-13	17-Dec-08	**Not Sampled-NAPL present**									
TW-13	21-Aug-09	**Not Sampled-NAPL present**									
TW-13	17-Feb-10	**Not Sampled-NAPL present**									

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
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-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-15	16-Dec-08	**22**	9.2	190	10	<1.0	10	1.1	1.2	<5.0	NA
TW-15	20-Aug-09	6.2	1.7	94	<1.5	<1.0	<2.0	0.69	<1.0	<5.0	**5,240**
TW-16	16-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA
TW-16	20-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	**4,240**
TW-17	16-Dec-08	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.050	<1.0	<5.0	NA
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**

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
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-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									
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-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									

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
TW-21	7-May-10	Not Sampled-Surface Casing Damaged									
TW-21	18-Aug-10	Not Sampled-Surface Casing Damaged									
TW-21	15-Nov-10	Not Sampled-Surface Casing Damaged									
TW-21	18-May-11	Not Sampled-Surface Casing Damaged									
TW-22	17-Dec-08	Not Sampled-NAPL present									
TW-22	21-Aug-09	Not Sampled-NAPL present									
TW-22	17-Feb-10	Not Sampled-NAPL present									
TW-22	7-May-10	Not Sampled-NAPL present									
TW-22	18-Aug-10	Not Sampled-NAPL present									
TW-22	15-Nov-10	Not Sampled-NAPL present									
TW-22	18-May-11	Not Sampled-NAPL present									
TW-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									

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
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									
TW-25	18-May-11	Not Sampled-NAPL present									
TW-26	17-Dec-08	Not Sampled-NAPL present									
TW-26	21-Aug-09	Not Sampled-NAPL present									
TW-26	17-Feb-10	Not Sampled-NAPL present									
TW-26	7-May-10	Not Sampled-NAPL present									
TW-26	18-Aug-10	Not Sampled-NAPL present									
TW-26	15-Nov-10	Not Sampled-NAPL present									
TW-26	18-May-11	Not Sampled-NAPL present									
TW-28	17-Dec-08	Not Sampled-NAPL present									
TW-28	21-Aug-09	Not Sampled-NAPL present									
TW-28	17-Feb-10	Not Sampled-NAPL present									
TW-28	7-May-10	Not Sampled-NAPL present									
TW-28	18-Aug-10	Not Sampled-NAPL present									
TW-28	15-Nov-10	Not Sampled-NAPL present									

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
TW-28	18-May-11	Not Sampled-NAPL present									
TW-29	17-Dec-08	Not Sampled-NAPL present									
TW-29	21-Aug-09	Not Sampled-NAPL present									
TW-29	17-Feb-10	**34**	<1.0	16	260	7.9	**40**	2.7	13	<5.0	**3,250**
TW-29	7-May-10	Not Sampled-NAPL present									
TW-29	18-Aug-10	Not Sampled-NAPL present									
TW-29	15-Nov-10	Not Sampled-NAPL present									
TW-29	18-May-11	Not Sampled-NAPL present									
TW-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-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-32	17-Dec-08	Not Sampled-NAPL present									

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
TW-32	21-Aug-09	Not Sampled-NAPL present									
TW-32	17-Feb-10	Not Sampled-NAPL present									
TW-32	7-May-10	Not Sampled-NAPL present									
TW-32	18-Aug-10	Not Sampled-NAPL present									
TW-32	15-Nov-10	Not Sampled-NAPL present									
TW-32	18-May-11	Not Sampled-NAPL present									
TW-33	17-Dec-08	Not Sampled-NAPL present									
TW-33	21-Aug-09	Not Sampled-NAPL present									
TW-33	17-Feb-10	Not Sampled-NAPL present									
TW-33	7-May-10	Not Sampled-NAPL present									
TW-33	18-Aug-10	Not Sampled-NAPL present									
TW-33	15-Nov-10	Not Sampled-NAPL present									
TW-33	18-May-11	Not Sampled-NAPL present									
TW-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-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**

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
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-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	**Not Sampled-NAPL present**									
TW-36	17-Feb-10	**Not Sampled-NAPL present**									
TW-36	12-May-10	<1.0	<1.0	6.5	11	<1.0	<2.0	0.18	6.1	<5.0	**5,750**
TW-36	18-Aug-10	**Not Sampled-NAPL present**									
TW-36	15-Nov-10	**Not Sampled-NAPL present**									
TW-36	18-May-11	**Not Sampled-NAPL present**									
TW-37	17-Dec-08	**820**	<50	560	**1,800**	**180**	<500	8.4	19	<5.0	NA
TW-37	21-Aug-09	**250**	<5.0	51	32	**180**	<10	1.7	1.2	<5.0	**3,740**
TW-37	18-Feb-10	**290**	<5.0	53	61	**130**	<10	2.0	1.4	<5.0	**3,400**
TW-37	11-May-10	**490**	<5.0	150	140	**150**	<10	3.8	4.3	<5.0	**3,250**
TW-37	19-Aug-10	**310**	<5.0	65	53	**140**	<10	3.2	22	9.6	**3,360**
TW-37	16-Nov-10	**280**	<1.0	58	46	**120**	<2.0	1.9	2.3	<5.0	**3,380**
TW-37	18-May-11	**420**	<5.0	21	<10	**230**	<10	NA	NA	NA	**3,680**
TW-38	17-Dec-08	**140**	<5.0	36	220	**190**	<50	0.99	<1.0	<5.0	NA
TW-38	21-Aug-09	**Not Sampled-NAPL present**									
TW-38	18-Feb-10	**26**	<1.0	6.3	18	88	<2.0	0.50	<1.0	<5.0	**4,070**
TW-38	12-May-10	**63**	<1.0	15	50	**110**	3.5	0.67	<1.0	<5.0	**4,210**

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
TW-38	19-Aug-10	**140**	<1.0	30	58	95	2.2	1.20	<1.0	<5.0	**3,910**
TW-38	16-Nov-10	**140**	<1.0	41	71	83	<2.0	1.1	<1.0	<5.0	**3,930**
TW-38	18-May-11	**37**	<5.0	6.1	22	**140**	<10	NA	NA	NA	**4,010**
TW-39	17-Dec-08	**Not Sampled-NAPL present**									
TW-39	21-Aug-09	1.7	<1.0	2.8	<1.5	16	<2.0	0.47	<1.0	<5.0	**4,460**
TW-39	17-Feb-10	2.6	<1.0	2.5	3.5	9.8	<2.0	0.45	<1.0	<5.0	**3,580**
TW-39	12-May-10	**17**	<1.0	32	14	19	<2.0	0.45	<1.0	<5.0	**4,740**
TW-39	19-Aug-10	**87**	<1.0	77	100	1.5	2.9	1.2	<1.0	<5.0	**3,290**
TW-39	16-Nov-10	**92**	<1.0	110	1.8	5.9	<2.0	1.4	<1.0	<5.0	**3,070**
TW-39	19-May-11	**41**	<5.0	65	<10	<5.0	<10	NA	NA	NA	**3,980**
TW-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-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**

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
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-42	16-Dec-08	<1.0	<1.0	31	<1.5	**130**	<10	0.18	1.2	<5.0	NA
TW-42	24-Aug-09	<1.0	<1.0	<1.0	<1.5	70	<2.0	0.10	<1.0	<5.0	**4,260**
TW-42	18-Feb-10	<1.0	<1.0	<1.0	<2.0	75	<2.0	0.15	<1.0	<5.0	**4,070**
TW-42	12-May-10	<1.0	<1.0	<1.0	<2.0	39	<2.0	0.15	<1.0	<5.0	**4,510**
TW-42	20-Aug-10	<1.0	<1.0	<1.0	<2.0	57	<2.0	0.16	<1.0	<5.0	**4,920**
TW-42	16-Nov-10	<1.0	<1.0	<1.0	<1.5	53	<2.0	0.16	<1.0	<5.0	**5,040**
TW-42	18-May-11	<5.0	<5.0	<5.0	<10	**600**	<10	NA	NA	NA	**4,720**
TW-43	16-Dec-08	<1.0	<1.0	31	<1.5	**1,700**	<10	0.80	<1.0	<5.0	
TW-43	24-Aug-09	<1.0	<1.0	<1.0	<1.5	**500**	<10	0.17	<1.0	<5.0	**4,610**
TW-43	18-Feb-10	<1.0	<1.0	<1.0	<2.0	**430**	<2.0	0.37	<1.0	<5.0	**4,390**
TW-43	12-May-10	<1.0	<1.0	<1.0	<2.0	**380**	<2.0	0.31	<1.0	<5.0	**4,200**
TW-43	20-Aug-10	<1.0	<1.0	<1.0	<2.0	**380**	<2.0	0.38	<1.0	<5.0	**4,510**
TW-43	16-Nov-10	<1.0	<1.0	<1.0	<1.5	**370**	<2.0	0.48	<1.0	<5.0	**4,450**
TW-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 2
SUMMARY OF GROUNDWATER ANALYTICALS
(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		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-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-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-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**
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**

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
TW-49	17-Nov-10	<1.0	<1.0	<1.0	<1.5	28	<2.0	0.12	<1.0	<5.0	7,470
TW-50	12-May-10	72	<10	260	1,200	16	63	7.7	4.0	<5.0	4,320
TW-50	19-Aug-10	6.9	<5.0	69	100	19	<10	2.4	<1.0	<5.0	4,500
TW-50	18-May-11	13	<5.0	150	190	<5.0	<10	NA	NA	NA	4,150
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

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
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-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**

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
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-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 2
SUMMARY OF GROUNDWATER ANALYTICALS
(VOCs ,TOTAL PETROLEUM HYDROCARBONS, and TDS)
Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	GRO C6-C10	DRO C10-C22	MRO	Total Dissolved Solids
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
Sample Method		EPA Method 8260						EPA Method 8015M			2540C
NM WQCC STANDARD		10	750	750	620	100	30	NE	NE	NE	1,000
MW-21	18-May-11	<5.0	<5.0	<5.0	<1.5	160	<10	NA	NA	NA	5,500

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
ug/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 2A

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	Specifice Conductance	Hardness as ($CaCO_3$)	TDS
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	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-8	20-Aug-09	450	57	3.6	910	1.3	190	0.67	**2,600**	4,700	1,400	**4,490**
TW-8	18-May-11	NA	NA	NA	NA	NA	160	NA	**2,400**	NA	NA	**4,140**
TW-9	20-Aug-09	250	21	2.4	410	1.2	170	0.87	530	2,600	710	**2,070**
TW-10	20-Aug-09	420	36	3.6	640	1.1	160	0.72	**940**	3,700	1,200	**3,250**
TW-11	20-Aug-09	470	53	3.6	1,500	0.46	70	0.85	**4,000**	6,100	1,400	**6,290**
TW-12	20-Aug-09	470	56	2.5	500	0.28	27	0.85	**2,100**	3,500	1,400	**3,490**
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 2A

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	Specifice Conductance	Hardness as ($CaCO_3$)	TDS
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	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

TABLE 2A

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	Specifice Conductance	Hardness as ($CaCO_3$)	TDS
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	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-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-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-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-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-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**

TABLE 2A

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	Specifice Conductance	Hardness as ($CaCO_3$)	TDS
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	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-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-42	24-Aug-09	250	75	6.3	1,200	3.8	**690**	0.43	**1,400**	5,000	940	**4,260**
TW-42	16-Nov-10	370	110	6.8	1,200	0.86	**840**	0.47	**2,300**	5,900	1,400	**5,040**
TW-43	24-Aug-09	570	55	5.0	930	0.6	140	0.74	**2,500**	4,500	1,600	**4,610**
TW-43	16-Nov-10	540	53	4.8	820	0.44	150	0.98	**2,800**	4,800	1,600	**4,450**
TW-43	18-May-11	NA	NA	NA	NA	NA	95	NA	**2,700**	NA	NA	**4,720**
TW-44	24-Aug-09	610	56	8.1	1,100	3.7	81	0.38	**2,800**	5,100	1,800	**5,520**
TW-45	17-Nov-10	550	53	3.9	860	0.47	**320**	0.78	**2,600**	5,000	1,600	**4,530**
TW-45	18-May-11	NA	NA	NA	NA	NA	**280**	NA	**2,600**	NA	NA	**4,700**
TW-46	18-May-11	NA	NA	NA	NA	NA	**400**	NA	**1,400**	NA	NA	**3,640**
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-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**

TABLE 2A

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*	*Specifice Conductance*	*Hardness as ($CaCO_3$)*	*TDS*
		mg/L	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*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*
MW-5	17-Nov-10	150	29	6.1	1,200	0.77	**310**	<2.0	**3,000**	5,400	500	**4,630**

TABLE 2A

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	Specifice Conductance	Hardness as ($CaCO_3$)	TDS
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	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*
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-21	17-Nov-10	460	64	7.4	1,400	0.87	**820**	0.64	**3,500**	6,700	1,400	**6,270**
MW-21	18-May-11	NA	NA	NA	NA	NA	**750**	NA	**2,700**	NA	NA	**5,500**

Notes:

< **Analyte not detected above listed method limit**

NE **Not established**

mg/L **Milligrams per liter (ppm)**

µmhos/cm **Micromhos per centimeter**

TABLE 3

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 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)
Phase 1 Wells					
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-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-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-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-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-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	

TABLE 3

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 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-6	01-Mar-11	TBD		19.69	
MPE-6	20-May-11	TBD		19.64	
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-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-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-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-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-12	03-Mar-10	TBD		22.34	
MPE-12	10-May-10	TBD		22.20	

TABLE 3

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 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-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-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	22.9	22.96	0.06
MPE-13	01-Mar-11	TBD		22.82	
MPE-13	20-May-11	TBD		22.73	
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-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-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-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	

TABLE 3

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 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-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	
Phase 2 Wells					
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-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-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-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-24	03-Mar-10	TBD		22.69	

TABLE 3

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 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-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-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-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-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-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		
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	

TABLE 3

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 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-29	03-Mar-11	TBD		21.45	
MPE-29	19-May-11	TBD		20.49	
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-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	
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-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-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		
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	

TABLE 3

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 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-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-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-38	03-Mar-10	TBD	19.80	19.83	0.03
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	
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-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-41	18-Jun-10	TBD		18.14	

TABLE 3

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 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	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-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		19.3	
MPE-42	19-May-11	TBD		19.11	
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		20.1	
MPE-43	03-Mar-11	TBD	NM-Attached to RSI Unit		
MPE-43	19-May-11	TBD		19.95	
MPE-44	18-Jun-10	TBD		19.95	
MPE-44	17-Aug-10	TBD	NM-Attached to RSI Unit		
MPE-44	12-Nov-10	TBD		20.29	
MPE-44	03-Mar-11	TBD	NM-Attached to RSI Unit		
MPE-44	19-May-11	TBD	20.09	20.1	0.01
MPE-45	18-Jun-10	TBD		20.05	sheen
MPE-45	17-Aug-10	TBD	NM-Attached to RSI Unit		
MPE-45	12-Nov-10	TBD		20.38	
MPE-45	03-Mar-11	TBD	NM-Attached to RSI Unit		
MPE-45	19-May-11	TBD		20.22	
MPE-46	18-Jun-10	TBD		21.16	
MPE-46	17-Aug-10	TBD	NM-Attached to RSI Unit		
MPE-46	12-Nov-10	TBD		21.46	
MPE-46	03-Mar-11	TBD	NM-Attached to RSI Unit		
MPE-46	19-May-11	TBD		21.28	
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	20.8	21.29	0.49
MPE-47	19-May-11	TBD	20.73	20.75	0.02

TABLE 3

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 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-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-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-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-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-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-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-54	18-Jun-10	TBD		18.85	
MPE-54	17-Aug-10	TBD		19.02	
MPE-54	12-Nov-10	TBD		19.19	

TABLE 3

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS OF PHASE 1 , 2, and 3 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	03-Mar-11	TBD		19.15	
MPE-54	25-May-11	TBD		19.23	
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-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-57	18-Jun-10	TBD		--	
MPE-57	17-Aug-10	TBD		14.63	
MPE-57	12-Nov-10	TBD		14.75	
MPE-57	03-Mar-11	TBD		14.67	
MPE-57	19-May-11	TBD		14.68	
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	

TABLE 4

SUMMARY OF AIR LABORATORY ANALYTICAL RESULTS

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

Sample ID	*Sample Date*	*Lab Analytical Method*	*Benzene (ppmv)*	*Toluene (ppmv)*	*Ethyl-benzene (ppmv)*	*Xylene (ppmv)*	*MTBE (ppmv)*	*TPH GRO (ppmv)*
Engine #1 Pre-Engine†	16-Mar-10	8021/8015	109.10	60.850	15.84	105.6	<12.745	14,160
Engine #1 Pre-Engine†	20-Aug-10	8021/8015	7.178	8.762	<1.056	9.293	<3.3137	1,152
Engine #1 Pre-Engine†	1-Mar-11	Not Sampled-Not in Operation						
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	Not Sampled-Not in Operation						
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	Not Sampled-Not in Operation						
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-Engine†	16-Mar-10	8021/8015	2.153	5.598	0.887	8.448	<1.2745	600
Engine #2 Pre-Engine†	20-Aug-10	Not Sampled-Not in Operation						
Engine #2 Pre-Engine†	1-Mar-11	8021/8015	8.326	4.868	<1.056	3.590	<3.3137	864
Engine #2 Pre-Engine†*	2-Jun-11	8021/8015	0.402	0.119	<0.02112	<0.0634	<0.0637	2.88
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	Not Sampled-Not in Operation						
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	Not Sampled-Not in Operation						
Engine #2 Post-Cat†	1-Mar-11	8021/8015	0.287	0.093	<0.02112	<0.0634	<0.0637	2.28
Engine #2 Post-Cat†*	2-Jun-11	8021/8015	<0.0287	<0.02434	<0.02112	<0.0634	<0.0637	<1.2

TABLE 4

SUMMARY OF AIR LABORATORY ANALYTICAL RESULTS

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

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**	**97.600**

Notes:

< **Analyte not detected above listed method limit**

ppmv **Parts per million (by volume)**

† **These results were reported in µg/L, they were converted to ppmv using the following formulas**

Benzene ppmv = µg/L x 0.2871

Toluene ppmv = µg/L x 0.2434

Ethylbenzene ppmv = µg/L x 0.2112

Xylenes ppmv = µg/L x 0.2112

MTBE ppmv = µg/L x 0.2549

GRO ppmv = µg/L x 0.24 **GRO is an estimation

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

FIGURE 1

GENERAL SITE PLAN

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

AERIAL SOURCE: PICTOMETRY ONLINE FEBRUARY 2009

Animas Environmental Services, LLC

DRAWN BY: N. Willis	**DATE DRAWN:** February 2, 2009
REVISIONS BY: C. Lameman	**DATE REVISED:** August 10, 2011
CHECKED BY: D. Watson	**DATE CHECKED:** June 15, 2011
APPROVED BY: E. McNally	**DATE APPROVED:** August 10, 2011

LEGEND

MONITOR WELL LOCATIONS

N

SCALE

200 100 0 200

50

(1 INCH = 200 FEET)

S:\ANIMAS 2000\2011 PROJECTS\THRIFTWAY\810 REFINERY\MAPS AND DRAWINGS\MAY 2011 SAMPLING DRAWINGS\FIGURE 1 GENERAL SITE PLAN

FIGURE 2

GROUNDWATER ELEVATION CONTOURS MAY 2011

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

Animas Environmental Services, LLC

DRAWN BY: N. Willis	**DATE DRAWN:** February 2, 2009
REVISIONS BY: C. Lameman	**DATE REVISED:** May 31, 2011
CHECKED BY: D. Watson	**DATE CHECKED:** June 15, 2011
APPROVED BY: E. McNally	**DATE APPROVED:** August 10, 2011

LEGEND

- MONITOR WELL LOCATIONS
- 5440.26 GROUNDWATER ELEVATION IN FEET (AMSL)
- —5434— GROUNDWATER ELEVATION CONTOUR IN FEET (AMSL)

NOTE: GROUNDWATER MEASUREMENTS WERE MADE ON MAY 17 AND 18, 2011. LOCATIONS OF TW-45 THROUGH TW-50 ARE APPROXIMATE. TW-19 WAS NOT INCLUDED IN GROUNDWATER CONTOUR.

SCALE
200 100 0 200
50
(1 INCH = 200 FEET)

KUTZ WASH
ARROYO
CR 5500
GATE
REFINERY OFFICE
DISPATCH OFFICE
SHOP
PROCESS WATER EVAPORATION LAGOONS
HYDROCRACKER REFORMER (REMOVED)
FIRE WATER POND (REMOVED)
DAMAGED
GROUNDWATER GRADIENT 0.008 FT/FT BETWEEN TW-1 AND MW-5

TW-47 TBS 6.79
MW-21 5425.10
MW-22 NM
TW-49 TBS 6.24
MW-5 5423.94
MW-7 5429.70
TW-46 TBS 6.89
TW-42 5427.74
TW-41 5428.85
TW-40 5429.70
TW-39 5430.70
TW-31 5431.47
TW-30 5431.71
MW-9 NM
TW-45 TBS 7.20
MW-20 5424.57
TW-50 TBS 7.89
TW-48 TBS 7.30
MW-10 NM
TW-29 5432.44
TW-43 5428.27
TW-37 5429.09
TW-38 5430.69
TW-32 5432.10
TW-24 5433.69
TW-23 5434.65
TW-17 5436.21
TW-16 5437.13
TW-44 5429.11
TW-33 5433.05
TW-28 5433.89
TW-25 5434.68
TW-22 5435.36
TW-15 5437.35
TW-10 5437.80
TW-18 5436.43
TW-9 5438.48
TW-36 5428.94
TW-26 5434.47
TW-21 DAMAGED NM
TW-19 5440.86
TW-14 5437.25
TW-11 5438.30
TW-8 5438.70
TW-35 5434.11
TW-20 5436.33
TW-13 5437.52
TW-12 5438.14
TW-7 5439.05
TW-4 5439.71
TW-34 5436.07
TW-6 5438.93
TW-5 5439.76
TW-3 5440.26
TW-2 5440.46
TW-1 5440.96

S:\ANIMAS 2000\2011 PROJECTS\THRIFTWAY\810 REFINERY\MAPS AND DRAWINGS\MAY 2011 SAMPLING DRAWINGS\FIGURE 2 GROUNDWATER ELEVATION CONTOURS

FIGURE 3

FREE PRODUCT THICKNESS CONTOURS
MAY 2011

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

Animas Environmental Services, LLC

DRAWN BY: N. Willis	**DATE DRAWN:** February 2, 2009
REVISIONS BY: C. Lameman	**DATE REVISED:** June 8, 2011
CHECKED BY: D. Watson	**DATE CHECKED:** June 15, 2011
APPROVED BY: E. McNally	**DATE APPROVED:** August 10, 2011

LEGEND

- MONITOR WELL LOCATIONS
- MPE REMEDIATION WELL
- 0.90 FREE PRODUCT THICKNESS IN FEET
- —0.25— FREE PRODUCT THICKNESS CONTOUR IN FEET

NOTE: ALL MEASUREMENTS WERE MADE ON MAY 17 AND 18, 2011. LOCATIONS OF TW-45 THROUGH TW-50 ARE APPROXIMATE. TW-19 AND TW-20 WERE ATTACHED TO RSI UNIT.

SCALE
200 100 0 200
50
(1 INCH = 200 FEET)

KUTZ WASH
ARROYO
CR 5500
GATE
PROCESS WATER EVAPORATION LAGOONS
HYDROCRACKER (REMOVED)
FIRE WATER POND (REMOVED)
SHOP
REFINERY OFFICE
DISPATCH OFFICE
DAMAGED NM
TW-47 0.0
MW-22
MW-21 0.0
TW-49 0.0
MW-5 0.0
MW-7 0.0
TW-46 0.0
TW-42 0.0
TW-41 0.0
TW-45 0.0
MW-20 0.0
TW-40 0.47
TW-39 0.0
TW-31 0.0
TW-30 0.0
TW-50 0.0
TW-48 0.0
MW-9 NM
MW-10 NM
TW-43 0.0
TW-37 0.0
TW-38 0.0
TW-32 1.46
TW-29 0.48
TW-24 0.06
TW-23 0.0
TW-17 0.0
TW-16 0.0
TW-44 0.05
TW-33 0.02
TW-28 0.90
TW-25 0.20
TW-22 0.23
TW-15 0.0
TW-10 0.0
TW-9 0.0
TW-18 0.0
MPE-38 0.0
TW-36 0.01
TW-26 0.76
TW-21
TW-35 0.0
MPE-53 0.45
MPE-21 0.0
MPE-18 0.0
TW-19 0.0
TW-14 0.0
MPE-5 0.01
TW-11 0.0
TW-8 0.0
MPE-22 0.0
MPE-35 0.0
MPE-44 0.01
MPE-14 0.0
MPE-13 0.00
MPE-2 0.0
TW-20 0.05
TW-13 0.0
MPE-26 0.04
TW-12 0.0
TW-7 0.0
TW-4 0.0
TW-34 0.0
MPE-47 0.02
TW-6 0.0
TW-5 0.0
TW-3 0.0
TW-2 0.0
TW-1 0.0

FIGURE 4

DISSOLVED BENZENE CONCENTRATION CONTOURS MAY 2011

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

Animas Environmental Services, LLC

DRAWN BY: N. Willis	**DATE DRAWN:** February 2, 2009
REVISIONS BY: C. Lameman	**DATE REVISED:** June 16, 2011
CHECKED BY: D. Watson	**DATE CHECKED:** June 16, 2011
APPROVED BY: E. McNally	**DATE APPROVED:** August 10, 2011

LEGEND

- MONITOR WELL LOCATIONS
- 32 DISSOLVED BENZENE CONCENTRATIONS
- —10— DISSOLVED BENZENE CONCENTRATION CONTOURS

NOTE: ALL SAMPLED WERE COLLECTED ON MAY 17 AND 18, 2011. ALL SAMPLES ANALYZED PER EPA METHOD 8260B. ALL ANALYTICAL RESULTS REPORTED AS µg/L (PPB). LOCATIONS OF TW-45 THROUGH TW-50 ARE APPROXIMATE.

N

SCALE
200 100 0 200
50
(1 INCH = 200 FEET)

KUTZ WASH

ARROYO

CR 5500

GATE

FREE PRODUCT

PROCESS WATER EVAPORATION LAGOONS

HYDROCRACKER REFORMER (REMOVED)

FIRE WATER POND (REMOVED)

SHOP

REFINERY OFFICE

DISPATCH OFFICE

TW-47 TW-22 MW-21 <5.0 MW-5 TW-49 MW-7 TW-46 <5.0 TW-42 <5.0 TW-41 110 TW-40 TW-39 41 TW-31 TW-30 MW-9 TW-45 <5.0 MW-20 <5.0 TW-50 13 TW-48 MW-10 TW-43 TW-37 420 100 TW-38 37 TW-32 TW-29 TW-24 TW-23 TW-17 TW-16 TW-15 TW-10 TW-9 TW-44 TW-33 TW-28 TW-25 TW-22 TW-18 TW-36 TW-26 TW-21 TW-19 SHEEN TW-14 SHEEN TW-11 TW-8 32 10 TW-35 TW-20 TW-13 SHEEN TW-12 TW-7 <5.0 TW-4 TW-34 TW-6 TW-5 TW-3 TW-2 TW-1

FIGURE 5

DISSOLVED MTBE CONCENTRATION CONTOURS MAY 2011

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

Animas Environmental Services, LLC

DRAWN BY: N. Willis	**DATE DRAWN:** February 2, 2009
REVISIONS BY: C. Lameman	**DATE REVISED:** June 16, 2011
CHECKED BY: D. Watson	**DATE CHECKED:** June 16, 2011
APPROVED BY: E. McNally	**DATE APPROVED:** August 10, 2011

LEGEND

- MONITOR WELL LOCATIONS
- 230 DISSOLVED MTBE CONCENTRATIONS
- —10— DISSOLVED MTBE CONCENTRATION CONTOURS

NOTE: ALL SAMPLED WERE COLLECTED ON MAY 17 AND 18, 2011. ALL SAMPLES ANALYZED PER EPA METHOD 8260B. ALL ANALYTICAL RESULTS REPORTED AS µg/L (PPB). LOCATIONS OF TW-45 THROUGH TW-50 ARE APPROXIMATE.

SCALE
200 100 0 200
50
(1 INCH = 200 FEET)

KUTZ WASH

ARROYO

CR 5500

GATE

REFINERY OFFICE

DISPATCH OFFICE

SHOP

PROCESS WATER EVAPORATION LAGOONS

HYDROCRACKER (REMOVED)

FIRE WATER POND (REMOVED)

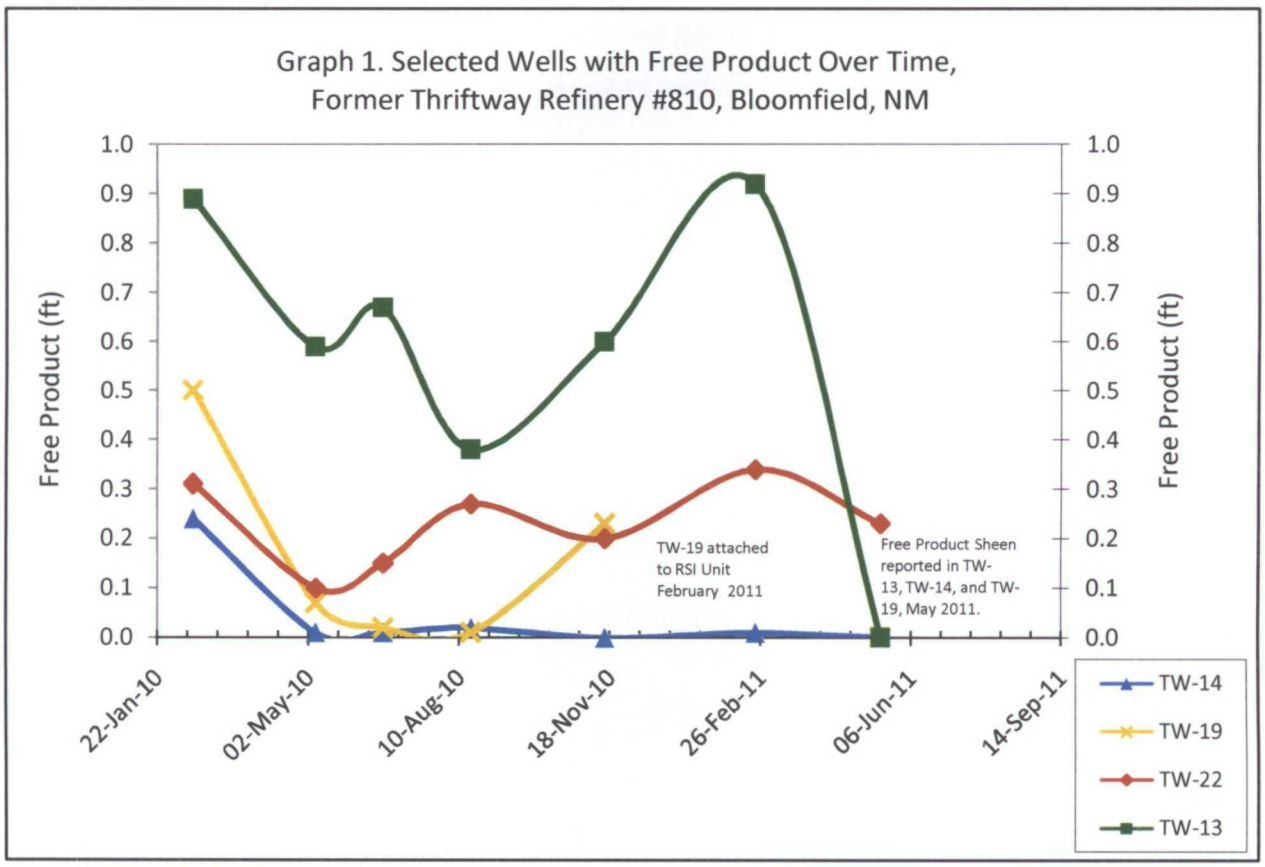
FREE PRODUCT

SHEEN

MW-5 MW-7 MW-9 MW-10 MW-20 MW-21 MW-22

TW-1 TW-2 TW-3 TW-4 TW-5 TW-6 TW-7 TW-8 TW-9 TW-10 TW-11 TW-12 TW-13 TW-14 TW-15 TW-16 TW-17 TW-18 TW-19 TW-20 TW-21 TW-22 TW-23 TW-24 TW-25 TW-26 TW-28 TW-29 TW-30 TW-31 TW-32 TW-33 TW-34 TW-35 TW-36 TW-37 TW-38 TW-39 TW-40 TW-41 TW-42 TW-43 TW-44 TW-45 TW-46 TW-47 TW-48 TW-49 TW-50

<5.0 10 22 100 140 160 230 600 630


Graph 1. Selected Wells with Free Product Over Time,
Former Thriftway Refinery #810, Bloomfield, NM
Free Product (ft)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
22-Jan-10
02-May-10
10-Aug-10
18-Nov-10
26-Feb-11
06-Jun-11
14-Sep-11
TW-19 attached to RSI Unit February 2011
Free Product Sheen reported in TW-13, TW-14, and TW-19, May 2011.
TW-14
TW-19
TW-22
TW-13

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, June 02, 2011

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

TEL: (505) 486-1776
FAX (505) 324-2022

RE: Thriftway #810 Refinery

Order No.: 1105814

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory, Inc. received 13 sample(s) on 5/20/2011 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag.

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

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Jun-11*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-7
Lab Order:	1105814	**Collection Date:**	5/18/2011 1:05:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/20/2011
Lab ID:	1105814-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	28	10		mg/L	20	5/20/2011 1:32:23 PM
Sulfate	2800	50		mg/L	100	5/23/2011 8:41:28 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	ND	5.0		µg/L	5	5/25/2011 12:50:38 AM
Toluene	23	5.0		µg/L	5	5/25/2011 12:50:38 AM
Ethylbenzene	310	5.0		µg/L	5	5/25/2011 12:50:38 AM
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	5/25/2011 12:50:38 AM
Naphthalene	49	10		µg/L	5	5/25/2011 12:50:38 AM
1-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 12:50:38 AM
2-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 12:50:38 AM
Xylenes, Total	37	10		µg/L	5	5/25/2011 12:50:38 AM
Surr: 1,2-Dichloroethane-d4	103	65.8-138		%REC	5	5/25/2011 12:50:38 AM
Surr: 4-Bromofluorobenzene	93.2	72.7-128		%REC	5	5/25/2011 12:50:38 AM
Surr: Dibromofluoromethane	103	69-135		%REC	5	5/25/2011 12:50:38 AM
Surr: Toluene-d8	100	86.1-134		%REC	5	5/25/2011 12:50:38 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4330	40.0		mg/L	1	5/25/2011 6:30:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Jun-11*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-8
Lab Order:	1105814	**Collection Date:**	5/18/2011 1:40:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/20/2011
Lab ID:	1105814-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	160	10		mg/L	20	5/20/2011 1:54:51 PM
Sulfate	2400	50		mg/L	100	5/23/2011 8:52:42 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	32	5.0		µg/L	5	5/25/2011 4:08:16 AM
Toluene	ND	5.0		µg/L	5	5/25/2011 4:08:16 AM
Ethylbenzene	150	5.0		µg/L	5	5/25/2011 4:08:16 AM
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	5/25/2011 4:08:16 AM
Naphthalene	ND	10		µg/L	5	5/25/2011 4:08:16 AM
1-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 4:08:16 AM
2-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 4:08:16 AM
Xylenes, Total	130	10		µg/L	5	5/25/2011 4:08:16 AM
Surr: 1,2-Dichloroethane-d4	100	65.8-138		%REC	5	5/25/2011 4:08:16 AM
Surr: 4-Bromofluorobenzene	92.1	72.7-128		%REC	5	5/25/2011 4:08:16 AM
Surr: Dibromofluoromethane	101	69-135		%REC	5	5/25/2011 4:08:16 AM
Surr: Toluene-d8	101	86.1-134		%REC	5	5/25/2011 4:08:16 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4140	40.0		mg/L	1	5/25/2011 6:30:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Jun-11*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-37
Lab Order:	1105814	**Collection Date:**	5/18/2011 3:00:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/20/2011
Lab ID:	1105814-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	260	10		mg/L	20	5/20/2011 6:24:23 PM
Sulfate	1700	50		mg/L	100	5/23/2011 9:03:55 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	420	5.0		µg/L	5	5/25/2011 4:36:15 AM
Toluene	ND	5.0		µg/L	5	5/25/2011 4:36:15 AM
Ethylbenzene	21	5.0		µg/L	5	5/25/2011 4:36:15 AM
Methyl tert-butyl ether (MTBE)	230	5.0		µg/L	5	5/25/2011 4:36:15 AM
Naphthalene	ND	10		µg/L	5	5/25/2011 4:36:15 AM
1-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 4:36:15 AM
2-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 4:36:15 AM
Xylenes, Total	ND	10		µg/L	5	5/25/2011 4:36:15 AM
Surr: 1,2-Dichloroethane-d4	103	65.8-138		%REC	5	5/25/2011 4:36:15 AM
Surr: 4-Bromofluorobenzene	92.5	72.7-128		%REC	5	5/25/2011 4:36:15 AM
Surr: Dibromofluoromethane	103	69-135		%REC	5	5/25/2011 4:36:15 AM
Surr: Toluene-d8	101	86.1-134		%REC	5	5/25/2011 4:36:15 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	3680	40.0		mg/L	1	5/25/2011 6:30:00 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Jun-11*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-38
Lab Order:	1105814	**Collection Date:**	5/18/2011 2:42:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/20/2011
Lab ID:	1105814-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	190	10		mg/L	20	5/20/2011 2:17:19 PM
Sulfate	2200	50		mg/L	100	5/23/2011 9:15:10 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	37	5.0		µg/L	5	5/25/2011 5:04:20 AM
Toluene	ND	5.0		µg/L	5	5/25/2011 5:04:20 AM
Ethylbenzene	6.1	5.0		µg/L	5	5/25/2011 5:04:20 AM
Methyl tert-butyl ether (MTBE)	140	5.0		µg/L	5	5/25/2011 5:04:20 AM
Naphthalene	ND	10		µg/L	5	5/25/2011 5:04:20 AM
1-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 5:04:20 AM
2-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 5:04:20 AM
Xylenes, Total	22	10		µg/L	5	5/25/2011 5:04:20 AM
Surr: 1,2-Dichloroethane-d4	101	65.8-138		%REC	5	5/25/2011 5:04:20 AM
Surr: 4-Bromofluorobenzene	90.7	72.7-128		%REC	5	5/25/2011 5:04:20 AM
Surr: Dibromofluoromethane	99.5	69-135		%REC	5	5/25/2011 5:04:20 AM
Surr: Toluene-d8	101	86.1-134		%REC	5	5/25/2011 5:04:20 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4010	40.0		mg/L	1	5/25/2011 6:30:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Jun-11*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-39
Lab Order:	1105814	**Collection Date:**	5/19/2011 6:48:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/20/2011
Lab ID:	1105814-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	550	25		mg/L	50	5/23/2011 9:26:24 PM
Sulfate	1600	25		mg/L	50	5/23/2011 9:26:24 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	41	5.0		µg/L	5	5/25/2011 5:32:19 AM
Toluene	ND	5.0		µg/L	5	5/25/2011 5:32:19 AM
Ethylbenzene	65	5.0		µg/L	5	5/25/2011 5:32:19 AM
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	5/25/2011 5:32:19 AM
Naphthalene	ND	10		µg/L	5	5/25/2011 5:32:19 AM
1-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 5:32:19 AM
2-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 5:32:19 AM
Xylenes, Total	ND	10		µg/L	5	5/25/2011 5:32:19 AM
Surr: 1,2-Dichloroethane-d4	102	65.8-138		%REC	5	5/25/2011 5:32:19 AM
Surr: 4-Bromofluorobenzene	87.2	72.7-128		%REC	5	5/25/2011 5:32:19 AM
Surr: Dibromofluoromethane	101	69-135		%REC	5	5/25/2011 5:32:19 AM
Surr: Toluene-d8	97.3	86.1-134		%REC	5	5/25/2011 5:32:19 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	3980	100		mg/L	1	5/25/2011 6:30:00 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Jun-11*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-41
Lab Order:	1105814	**Collection Date:**	5/18/2011 4:23:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/20/2011
Lab ID:	1105814-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	910	50		mg/L	100	5/23/2011 9:37:37 PM
Sulfate	980	10		mg/L	20	5/20/2011 5:17:00 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	110	5.0		µg/L	5	5/24/2011 11:53:57 PM
Toluene	8.5	5.0		µg/L	5	5/24/2011 11:53:57 PM
Ethylbenzene	500	5.0		µg/L	5	5/24/2011 11:53:57 PM
Methyl tert-butyl ether (MTBE)	22	5.0		µg/L	5	5/24/2011 11:53:57 PM
Naphthalene	70	10		µg/L	5	5/24/2011 11:53:57 PM
1-Methylnaphthalene	35	20		µg/L	5	5/24/2011 11:53:57 PM
2-Methylnaphthalene	ND	20		µg/L	5	5/24/2011 11:53:57 PM
Xylenes, Total	2700	100		µg/L	50	5/24/2011 11:25:38 PM
Surr: 1,2-Dichloroethane-d4	105	65.8-138		%REC	5	5/24/2011 11:53:57 PM
Surr: 4-Bromofluorobenzene	90.3	72.7-128		%REC	5	5/24/2011 11:53:57 PM
Surr: Dibromofluoromethane	106	69-135		%REC	5	5/24/2011 11:53:57 PM
Surr: Toluene-d8	103	86.1-134		%REC	5	5/24/2011 11:53:57 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	3940	100		mg/L	1	5/25/2011 6:30:00 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Jun-11*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-43
Lab Order:	1105814	**Collection Date:**	5/18/2011 3:13:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/20/2011
Lab ID:	1105814-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	95	10		mg/L	20	5/20/2011 8:50:25 PM
Sulfate	2700	50		mg/L	100	5/23/2011 10:11:18 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	ND	5.0		µg/L	5	5/25/2011 2:15:15 AM
Toluene	ND	5.0		µg/L	5	5/25/2011 2:15:15 AM
Ethylbenzene	ND	5.0		µg/L	5	5/25/2011 2:15:15 AM
Methyl tert-butyl ether (MTBE)	600	5.0		µg/L	5	5/25/2011 2:15:15 AM
Naphthalene	ND	10		µg/L	5	5/25/2011 2:15:15 AM
1-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 2:15:15 AM
2-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 2:15:15 AM
Xylenes, Total	ND	10		µg/L	5	5/25/2011 2:15:15 AM
Surr: 1,2-Dichloroethane-d4	100	65.8-138		%REC	5	5/25/2011 2:15:15 AM
Surr: 4-Bromofluorobenzene	92.2	72.7-128		%REC	5	5/25/2011 2:15:15 AM
Surr: Dibromofluoromethane	99.5	69-135		%REC	5	5/25/2011 2:15:15 AM
Surr: Toluene-d8	99.6	86.1-134		%REC	5	5/25/2011 2:15:15 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4720	100		mg/L	1	5/25/2011 6:30:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Jun-11*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-45
Lab Order:	1105814	**Collection Date:**	5/18/2011 9:50:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/20/2011
Lab ID:	1105814-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	280	10		mg/L	20	5/20/2011 6:01:56 PM
Sulfate	2600	50		mg/L	100	5/23/2011 10:22:32 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	ND	5.0		µg/L	5	5/25/2011 6:00:29 AM
Toluene	ND	5.0		µg/L	5	5/25/2011 6:00:29 AM
Ethylbenzene	ND	5.0		µg/L	5	5/25/2011 6:00:29 AM
Methyl tert-butyl ether (MTBE)	630	5.0		µg/L	5	5/25/2011 6:00:29 AM
Naphthalene	ND	10		µg/L	5	5/25/2011 6:00:29 AM
1-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 6:00:29 AM
2-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 6:00:29 AM
Xylenes, Total	ND	10		µg/L	5	5/25/2011 6:00:29 AM
Surr: 1,2-Dichloroethane-d4	99.5	65.8-138		%REC	5	5/25/2011 6:00:29 AM
Surr: 4-Bromofluorobenzene	92.0	72.7-128		%REC	5	5/25/2011 6:00:29 AM
Surr: Dibromofluoromethane	101	69-135		%REC	5	5/25/2011 6:00:29 AM
Surr: Toluene-d8	101	86.1-134		%REC	5	5/25/2011 6:00:29 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4700	100		mg/L	1	5/25/2011 6:30:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Jun-11*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-46
Lab Order:	1105814	**Collection Date:**	5/18/2011 10:15:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/20/2011
Lab ID:	1105814-09	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	400	25		mg/L	50	5/23/2011 10:33:46 PM
Sulfate	1400	25		mg/L	50	5/23/2011 10:33:46 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	ND	5.0		µg/L	5	5/25/2011 6:28:47 AM
Toluene	ND	5.0		µg/L	5	5/25/2011 6:28:47 AM
Ethylbenzene	ND	5.0		µg/L	5	5/25/2011 6:28:47 AM
Methyl tert-butyl ether (MTBE)	160	5.0		µg/L	5	5/25/2011 6:28:47 AM
Naphthalene	ND	10		µg/L	5	5/25/2011 6:28:47 AM
1-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 6:28:47 AM
2-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 6:28:47 AM
Xylenes, Total	ND	10		µg/L	5	5/25/2011 6:28:47 AM
Surr: 1,2-Dichloroethane-d4	100	65.8-138		%REC	5	5/25/2011 6:28:47 AM
Surr: 4-Bromofluorobenzene	93.1	72.7-128		%REC	5	5/25/2011 6:28:47 AM
Surr: Dibromofluoromethane	101	69-135		%REC	5	5/25/2011 6:28:47 AM
Surr: Toluene-d8	102	86.1-134		%REC	5	5/25/2011 6:28:47 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	3640	40.0		mg/L	1	5/25/2011 6:30:00 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Jun-11*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-50
Lab Order:	1105814	**Collection Date:**	5/19/2011 7:05:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/20/2011
Lab ID:	1105814-10	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	1100	50		mg/L	100	5/23/2011 10:56:13 PM
Sulfate	970	25		mg/L	50	5/23/2011 10:44:59 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	13	5.0		µg/L	5	5/25/2011 6:57:12 AM
Toluene	ND	5.0		µg/L	5	5/25/2011 6:57:12 AM
Ethylbenzene	150	5.0		µg/L	5	5/25/2011 6:57:12 AM
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	5/25/2011 6:57:12 AM
Naphthalene	ND	10		µg/L	5	5/25/2011 6:57:12 AM
1-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 6:57:12 AM
2-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 6:57:12 AM
Xylenes, Total	190	10		µg/L	5	5/25/2011 6:57:12 AM
Surr: 1,2-Dichloroethane-d4	99.4	65.8-138		%REC	5	5/25/2011 6:57:12 AM
Surr: 4-Bromofluorobenzene	89.0	72.7-128		%REC	5	5/25/2011 6:57:12 AM
Surr: Dibromofluoromethane	101	69-135		%REC	5	5/25/2011 6:57:12 AM
Surr: Toluene-d8	102	86.1-134		%REC	5	5/25/2011 6:57:12 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4150	100		mg/L	1	5/25/2011 6:30:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: 02-Jun-11

CLIENT:	Animas Environmental Services	**Client Sample ID:**	MW-20
Lab Order:	1105814	**Collection Date:**	5/18/2011 9:31:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/20/2011
Lab ID:	1105814-11	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	380	10		mg/L	20	5/20/2011 7:54:15 PM
Sulfate	1900	50		mg/L	100	5/23/2011 11:07:27 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	ND	5.0		µg/L	5	5/25/2011 7:25:28 AM
Toluene	ND	5.0		µg/L	5	5/25/2011 7:25:28 AM
Ethylbenzene	ND	5.0		µg/L	5	5/25/2011 7:25:28 AM
Methyl tert-butyl ether (MTBE)	250	5.0		µg/L	5	5/25/2011 7:25:28 AM
Naphthalene	ND	10		µg/L	5	5/25/2011 7:25:28 AM
1-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 7:25:28 AM
2-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 7:25:28 AM
Xylenes, Total	ND	10		µg/L	5	5/25/2011 7:25:28 AM
Surr: 1,2-Dichloroethane-d4	99.0	65.8-138		%REC	5	5/25/2011 7:25:28 AM
Surr: 4-Bromofluorobenzene	91 9	72.7-128		%REC	5	5/25/2011 7:25:28 AM
Surr: Dibromofluoromethane	100	69-135		%REC	5	5/25/2011 7:25:28 AM
Surr: Toluene-d8	104	86.1-134		%REC	5	5/25/2011 7:25:28 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4260	100		mg/L	1	5/25/2011 6:30:00 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Jun-11*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	MW-21
Lab Order:	1105814	**Collection Date:**	5/18/2011 10:40:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/20/2011
Lab ID:	1105814-12	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	750	50		mg/L	100	5/26/2011 7:55:37 PM
Sulfate	2700	50		mg/L	100	5/26/2011 7:55:37 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	ND	5.0		µg/L	5	5/25/2011 7:53:36 AM
Toluene	ND	5.0		µg/L	5	5/25/2011 7:53:36 AM
Ethylbenzene	ND	5.0		µg/L	5	5/25/2011 7:53:36 AM
Methyl tert-butyl ether (MTBE)	160	5.0		µg/L	5	5/25/2011 7:53:36 AM
Naphthalene	ND	10		µg/L	5	5/25/2011 7:53:36 AM
1-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 7:53:36 AM
2-Methylnaphthalene	ND	20		µg/L	5	5/25/2011 7:53:36 AM
Xylenes, Total	ND	10		µg/L	5	5/25/2011 7:53:36 AM
Surr: 1,2-Dichloroethane-d4	101	65.8-138		%REC	5	5/25/2011 7:53:36 AM
Surr: 4-Bromofluorobenzene	95.2	72 7-128		%REC	5	5/25/2011 7:53:36 AM
Surr: Dibromofluoromethane	101	69-135		%REC	5	5/25/2011 7:53:36 AM
Surr: Toluene-d8	101	86.1-134		%REC	5	5/25/2011 7:53:36 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	5500	100		mg/L	1	5/25/2011 6:30:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Jun-11*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Trip Blank
Lab Order:	1105814	**Collection Date:**	
Project:	Thriftway #810 Refinery	**Date Received:**	5/20/2011
Lab ID:	1105814-13	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	ND	1.0		µg/L	1	5/25/2011 3:40:13 AM
Toluene	ND	1.0		µg/L	1	5/25/2011 3:40:13 AM
Ethylbenzene	ND	1.0		µg/L	1	5/25/2011 3:40:13 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/25/2011 3:40:13 AM
Naphthalene	ND	2.0		µg/L	1	5/25/2011 3:40:13 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/25/2011 3:40:13 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/25/2011 3:40:13 AM
Xylenes, Total	ND	2.0		µg/L	1	5/25/2011 3:40:13 AM
Surr: 1,2-Dichloroethane-d4	100	65.8-138		%REC	1	5/25/2011 3:40:13 AM
Surr: 4-Bromofluorobenzene	93.7	72.7-128		%REC	1	5/25/2011 3:40:13 AM
Surr: Dibromofluoromethane	101	69-135		%REC	1	5/25/2011 3:40:13 AM
Surr: Toluene-d8	100	86.1-134		%REC	1	5/25/2011 3:40:13 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: Thriftway #810 Refinery **Work Order:** 1105814

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions											
Sample ID: MB		*MBLK*				Batch ID:	**R45503**	Analysis Date:	5/20/2011 12:36:13 PM		
Chloride	ND	mg/L	0.50								
Sulfate	ND	mg/L	0.50								
Sample ID: MB		*MBLK*				Batch ID:	**R45503**	Analysis Date:	5/20/2011 10:09:02 PM		
Chloride	ND	mg/L	0.50								
Sulfate	ND	mg/L	0.50								
Sample ID: MB		*MBLK*				Batch ID:	**R45529**	Analysis Date:	5/23/2011 10:57:34 AM		
Chloride	ND	mg/L	0.50								
Sulfate	ND	mg/L	0.50								
Sample ID: MB		*MBLK*				Batch ID:	**R45529**	Analysis Date:	5/24/2011 1:10:58 AM		
Chloride	ND	mg/L	0.50								
Sulfate	ND	mg/L	0.50								
Sample ID: MB		*MBLK*				Batch ID:	**R45604**	Analysis Date:	5/26/2011 10:20:59 AM		
Chloride	ND	mg/L	0.50								
Sulfate	ND	mg/L	0.50								
Sample ID: LCS		*LCS*				Batch ID:	**R45503**	Analysis Date:	5/20/2011 12:47:27 PM		
Chloride	5.017	mg/L	0.50	5	0	100	90	110			
Sulfate	10.13	mg/L	0.50	10	0	101	90	110			
Sample ID: LCS		*LCS*				Batch ID:	**R45503**	Analysis Date:	5/20/2011 10:20:16 PM		
Chloride	5.021	mg/L	0.50	5	0	100	90	110			
Sulfate	10.18	mg/L	0.50	10	0	102	90	110			
Sample ID: LCS		*LCS*				Batch ID:	**R45529**	Analysis Date:	5/23/2011 11:08:48 AM		
Chloride	5.024	mg/L	0.50	5	0	100	90	110			
Sulfate	10.10	mg/L	0.50	10	0	101	90	110			
Sample ID: LCS		*LCS*				Batch ID:	**R45529**	Analysis Date:	5/24/2011 1:22:12 AM		
Chloride	5.019	mg/L	0.50	5	0	100	90	110			
Sulfate	10.07	mg/L	0.50	10	0	101	90	110			
Sample ID: LCS		*LCS*				Batch ID:	**R45604**	Analysis Date:	5/26/2011 10:38:24 AM		
Chloride	4.866	mg/L	0.50	5	0	97.3	90	110			
Sulfate	9.729	mg/L	0.50	10	0	97.3	90	110			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: Thriftway #810 Refinery **Work Order:** 1105814

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260: Volatiles Short List											
Sample ID: 1105814-01a msd		*MSD*				Batch ID:	**R45559**	Analysis Date:		5/25/2011 1:47:12 AM	
Benzene	110.1	µg/L	5.0	100	4.322	106	82	118	0.236	17.1	
Toluene	123.5	µg/L	5.0	100	23.5	100	81.1	122	1.04	16.1	
Sample ID: 1105814-07a msd		*MSD*				Batch ID:	**R45559**	Analysis Date:		5/25/2011 3:12:00 AM	
Benzene	105.7	µg/L	5.0	100	0	106	82	118	2.63	17.1	
Toluene	98.88	µg/L	5.0	100	0	98.9	81.1	122	1.06	16.1	
Sample ID: 5ml rb		*MBLK*				Batch ID:	**R45559**	Analysis Date:		5/24/2011 10:15:45 AM	
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	4.0								
2-Methylnaphthalene	ND	µg/L	4.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: b7		*MBLK*				Batch ID:	**R45559**	Analysis Date:		5/24/2011 10:01:19 PM	
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	4.0								
2-Methylnaphthalene	ND	µg/L	4.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: b6		*MBLK*				Batch ID:	**R45593**	Analysis Date:		5/25/2011 11:00:49 PM	
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	4.0								
2-Methylnaphthalene	ND	µg/L	4.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100ng lcs-1		*LCS*				Batch ID:	**R45559**	Analysis Date:		5/24/2011 11:12:13 AM	
Benzene	21.02	µg/L	1.0	20	0	105	85.2	121			
Toluene	20.65	µg/L	1.0	20	0	103	88.3	121			
Sample ID: 100ng lcs-2		*LCS*				Batch ID:	**R45559**	Analysis Date:		5/24/2011 11:40:22 AM	
Benzene	21.30	µg/L	1.0	20	0	106	85.2	121			
Toluene	20.50	µg/L	1.0	20	0	103	88.3	121			
Sample ID: 100ng lcs		*LCS*				Batch ID:	**R45593**	Analysis Date:		5/25/2011 11:39:39 AM	
Benzene	20.99	µg/L	1.0	20	0	105	85.2	121			
Toluene	20.38	µg/L	1.0	20	0	102	88.3	121			
Sample ID: 1105814-01a ms		*MS*				Batch ID:	**R45559**	Analysis Date:		5/25/2011 1:18:59 AM	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: Thriftway #810 Refinery **Work Order:** 1105814

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260: Volatiles Short List											
Sample ID: 1105814-01a ms		*MS*				Batch ID:	**R45559**	Analysis Date:		5/25/2011 1:18:59 AM	
Benzene	109.9	µg/L	5.0	100	4.322	106	82	118			
Toluene	124.7	µg/L	5.0	100	23.5	101	81.1	122			
Sample ID: 1105814-07a ms		*MS*				Batch ID:	**R45559**	Analysis Date:		5/25/2011 2:43:34 AM	
Benzene	108.6	µg/L	5.0	100	0	109	82	118			
Toluene	99.93	µg/L	5.0	100	0	99.9	81.1	122			
Method: SM2540C MOD: Total Dissolved Solids											
Sample ID: MB-26942		*MBLK*				Batch ID:	**26942**	Analysis Date:		5/25/2011 6:30:00 PM	
Total Dissolved Solids	ND	mg/L	20.0								
Sample ID: LCS-26942		*LCS*				Batch ID:	**26942**	Analysis Date:		5/25/2011 6:30:00 PM	
Total Dissolved Solids	1020	mg/L	20.0	1000	0	102	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name ANIMAS ENVIRONMENTAL | Date Received: 5/20/201

Work Order Number 1105814 | Received by: LNM

Checklist completed by: Michelle Garcia 5/20/11 (Signature / Date) | Sample ID labels checked by: (Initials)

Matrix: | Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		Number of preserved bottles checked for pH:
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	<2 >12 unless noted below.
Container/Temp Blank temperature?	1.2°	<6° C Acceptable If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 624 E Comanche
Farmington NM 87401

Phone #: 505-564-2281

email or Fax#: 505-324-2022

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name:
TW #B10 Refinery

Project #:
AES 050204

Project Manager:
Ross Kennemer

Sampler: Chad Dawson

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 110-814	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) BTEX/MTBE Total Napth.	8270 (Semi-VOA)	300.0 (Chloride/Sulfate)	2540C (TDS)			Air Bubbles (Y or N)
5/18/11	1305	H_2O	TW-7	3-40mL 1 500mL	HCl non	-1										X		X	X			
5/18/11	1340		TW-8			-2										X		X	X			
5/18/11	1500		TW-37			-3										X		X	X			
5/18/11	1442		TW-38			-4										X		X	X			
5/19/11	0648		TW-39			-5										X		X	X			
5/18/11	1623		TW-41			-6										X		X	X			
5/18/11	1513		TW-43			-7										X		X	X			
5/18/11	0950		TW-45			-8										X		X	X			
5/18/11	1015		TW-46			-9										X		X	X			
5/19/11	0705		TW-50			-10										X		X	X			
5/18/11	0931		MW-20			-11										X		X	X			
5/18/11	1040		MW-21			-12										X		X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/19/11	0930	Chad D	Deborah Watson	5/19/11	0930
5-19-11	1630	Deborah Watson		5/20/11	830

Remarks: per Andy: Bill to BioTech
8260 BTEX/MTBE/Total naph $70
Discounted price for TDS

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 624 E. Comanche
Farmington NM 87401

Phone #: 505-564-2281

email or Fax#: 505-324-2022

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name:
TW #810 Refinery

Project #:
AES 050204

Project Manager:
Ross Kennemer

Sampler: C. Dawson

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1110[illegible]	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) BTEX/MTBE/Total Naph.	8270 (Semi-VOA)	300.0 (Chloride/Sulfate)	2540C (TDS)			Air Bubbles (Y or N)
		H_2O	Trip Blank	2-40mL glass	HCl	-13										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/19/11	0930	Chad P	Deborah Watts	5/19/11	0930
5-19-11	1630	Deborah Watts		5/20/11	830

Remarks:
Bill to Bio-Tech
per Andy:
8260 BTEX/MTBE/total naph $70
Discounted price for TDS.

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

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, June 08, 2011

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

TEL: (505) 486-1776
FAX (505) 324-2022

RE: TW 810 Refinery

Order No.: 1106136

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 6/3/2011 for the analyses presented in the following report.

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

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

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682

Hall Environmental Analysis Laboratory, Inc.

Date: *08-Jun-11*
Analytical Report

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Pre- Engine
Lab Order:	1106136	**Collection Date:**	6/2/2011 11:15:00 AM
Project:	TW 810 Refinery	**Date Received:**	6/3/2011
Lab ID:	1106136-01	**Matrix:**	AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		µg/L	1	6/6/2011 3:07:51 PM
Surr: BFB	97.8	79.4-132		%REC	1	6/6/2011 3:07:51 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.25		µg/L	1	6/6/2011 3:07:51 PM
Benzene	ND	0.10		µg/L	1	6/6/2011 3:07:51 PM
Toluene	ND	0.10		µg/L	1	6/6/2011 3:07:51 PM
Ethylbenzene	ND	0.10		µg/L	1	6/6/2011 3:07:51 PM
Xylenes, Total	ND	0.30		µg/L	1	6/6/2011 3:07:51 PM
Surr: 4-Bromofluorobenzene	115	96.8-145		%REC	1	6/6/2011 3:07:51 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
J	Analyte detected below quantitation limits
NC	Non-Chlorinated
PQL	Practical Quantitation Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *08-Jun-11*
Analytical Report

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Pre-Cat
Lab Order:	1106136	**Collection Date:**	6/2/2011 11:20:00 AM
Project:	TW 810 Refinery	**Date Received:**	6/3/2011
Lab ID:	1106136-02	**Matrix:**	AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	11	5.0		µg/L	1	6/6/2011 1:45:34 PM
Surr. BFB	99.2	79.4-132		%REC	1	6/6/2011 1:45:34 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0 25		µg/L	1	6/6/2011 1:45:34 PM
Benzene	0.94	0.10		µg/L	1	6/6/2011 1:45:34 PM
Toluene	0.29	0.10		µg/L	1	6/6/2011 1:45:34 PM
Ethylbenzene	ND	0.10		µg/L	1	6/6/2011 1:45:34 PM
Xylenes, Total	ND	0.30		µg/L	1	6/6/2011 1:45:34 PM
Surr: 4-Bromofluorobenzene	117	96.8-145		%REC	1	6/6/2011 1:45:34 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
J	Analyte detected below quantitation limits
NC	Non-Chlorinated
PQL	Practical Quantitation Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *08-Jun-11*
Analytical Report

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Post-Cat
Lab Order:	1106136	**Collection Date:**	6/2/2011 11:25:00 AM
Project:	TW 810 Refinery	**Date Received:**	6/3/2011
Lab ID:	1106136-03	**Matrix:**	AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	12	5.0		µg/L	1	6/6/2011 2:40:25 PM
Surr: BFB	99.3	79.4-132		%REC	1	6/6/2011 2:40:25 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.25		µg/L	1	6/6/2011 2:40:25 PM
Benzene	1.4	0.10		µg/L	1	6/6/2011 2:40:25 PM
Toluene	0.49	0.10		µg/L	1	6/6/2011 2:40:25 PM
Ethylbenzene	ND	0.10		µg/L	1	6/6/2011 2:40:25 PM
Xylenes, Total	ND	0.30		µg/L	1	6/6/2011 2:40:25 PM
Surr: 4-Bromofluorobenzene	119	96.8-145		%REC	1	6/6/2011 2:40:25 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: TW 810 Refinery **Work Order:** 1106136

Analyte	Result	Units	PQL	SPK Val	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Gasoline Range											
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R45779**	Analysis Date:	6/6/2011 9:49:14 AM		
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0								
Sample ID: 2.5UG GRO LCS		*LCS*				Batch ID:	**R45779**	Analysis Date:	6/6/2011 11:50:08 AM		
Gasoline Range Organics (GRO)	25.17	mg/Kg	5.0	25	0	101	88.8	124			
Method: EPA Method 8015B: Gasoline Range											
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R45779**	Analysis Date:	6/6/2011 9:49:14 AM		
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: 2.5UG GRO LCS		*LCS*				Batch ID:	**R45779**	Analysis Date:	6/6/2011 11:50:08 AM		
Gasoline Range Organics (GRO)	0.5034	mg/L	0.050	0.5	0	101	81.8	120			
Method: EPA Method 8021B: Volatiles											
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R45779**	Analysis Date:	6/6/2011 9:49:14 AM		
Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5								
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100NG BTEX LCS		*LCS*				Batch ID:	**R45779**	Analysis Date:	6/6/2011 12:20:15 PM		
Methyl tert-butyl ether (MTBE)	22.05	µg/L	2.5	20	0	110	97.6	132			
Benzene	22.75	µg/L	1.0	20	0	114	93.4	120			
Toluene	23.00	µg/L	1.0	20	0	115	96.2	122			
Ethylbenzene	21.81	µg/L	1.0	20	0	109	95	121			
Xylenes, Total	66.76	µg/L	2.0	60	0	111	97.6	122			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name ANIMAS ENVIRONMENTAL | Date Received: 6/3/2011

Work Order Number 1106136 | Received by: AMG

Checklist completed by: Signature 6/3/11 Date | Sample ID labels checked by: dam Initials

Matrix: | Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ✔	No	Not Present		
Custody seals intact on shipping container/cooler?	Yes ✔	No	Not Present		Not Shipped
Custody seals intact on sample bottles?	Yes	No	N/A ✔		
Chain of custody present?	Yes ✔	No			
Chain of custody signed when relinquished and received?	Yes ✔	No			
Chain of custody agrees with sample labels?	Yes ✔	No			
Samples in proper container/bottle?	Yes ✔	No			
Sample containers intact?	Yes ✔	No			
Sufficient sample volume for indicated test?	Yes ✔	No			
All samples received within holding time?	Yes ✔	No			Number of preserved bottles checked for pH:
Water - VOA vials have zero headspace?	No VOA vials submitted ✔	Yes	No		
Water - Preservation labels on bottle and cap match?	Yes	No	N/A ✔		
Water - pH acceptable upon receipt?	Yes	No	N/A ✔		*<2 >12 unless noted below.*
Container/Temp Blank temperature?		*<6° C Acceptable* If given sufficient time to cool.			

COMMENTS:

Client contacted | Date contacted: | Person contacted

Contacted by: | Regarding:

Comments:

Corrective Action

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 624 E Comanche Farmington NM 87401

Phone #: 505-564-2281

email or Fax#: 505-324-2022

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: TW 810 Refinery

Project #:

Project Manager: Ross Kennemer

Sampler: Chad Dawson

On Ice: ☒ Yes ☐ No

Sample Temperature: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1106154	BTEX + MTBE + [redacted] (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
6-2-11	1115	Air	Pre-Engine	2 Tedlar Bags	—	1	X		X									
6-2-11	1120	Air	Pre-Cat	↓	—	2	X		X									
6-2-11	1125	Air	Post-Cat	↓	—	3	X		X									

Analysis Request

Date	Time	Relinquished by:	Received by:	Date	Time
6-2-11	1242	Chad Dawson	[signature]	6-2-11	1242
6-2-11	1530	[signature]	[signature]	6/6/11	9:40

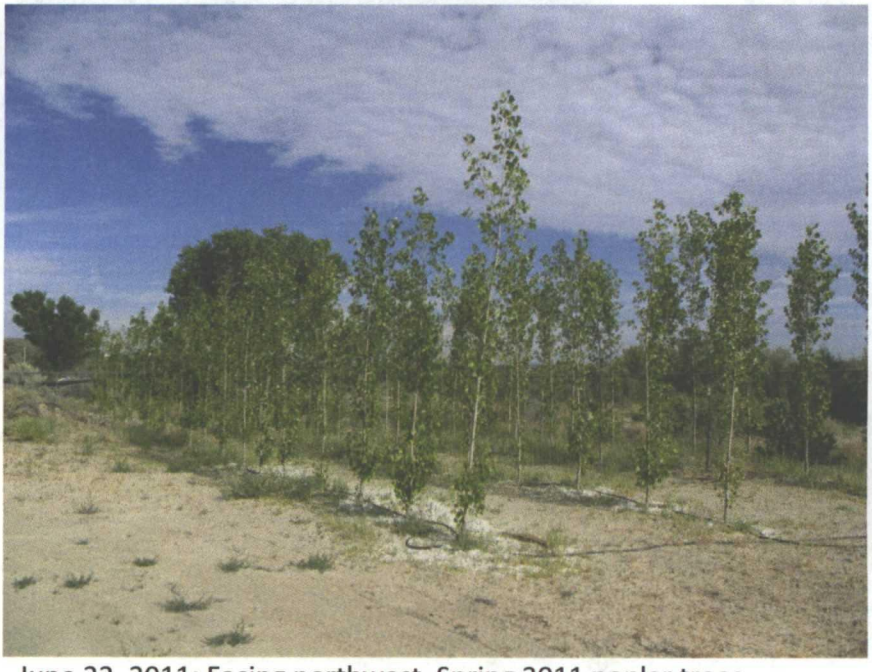
Remarks: Bill to BioTech

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

March 23, 2011: Facing east, looking at recently planted poplar trees, March 2011. (for reference)

March 23, 2011: Facing east between two rows newly planted poplar trees. (for reference)

June 22, 2011: Facing west, looking at Spring 2011 planted trees showing healthy foliage.



June 22, 2011: Facing northwest, Spring 2011 poplar trees.

June 22, 2011: Facing north, poplar trees planted in May 2010, showing healthy flush.

June 22, 2011: May 2010 planted fourwing saltbrush.

June 22, 2011: Facing northwest, May 2010 planted poplar.

June 22, 2011: Facing west, another view of May 2010 plants.

Preliminary Update - Poplar Phytoremediation Project on an Abandoned Oil Refinery Site in Northwestern New Mexico

Mick O'Neill, Sam Allen, and Robert Heyduck

An abandoned oil refinery that had been in operation from 1973 to 1991 was targeted for a phytoremediation project in spring 2010. The refinery site, situated along the Kutx Wash north of Bloomfield, NM, had been monitored for several years prior to the present study, for various petrochemical contaminants in soil and groundwater, as part of a long-term monitoring and remediation contract managed by BioTech Remediation (Farmington, NM), a subsidiary of Thriftway Oil Company. The site was selected for the current study due to the high quality of existing groundwater monitoring data, proximity to NSMU Agricultural Science Center, and high levels of soil and groundwater contamination with free product floating on the water table above the site selected for remediation and a significant but lower level of groundwater contamination at the remediation site. The water table at the site is 5-6 feet below the soil surface.

The site had undergone preliminary phytoremediation evaluations in 2010 using local and hybrid poplars (*Populus* sp.) as well as the xeric species, four-wing saltbush (*Atriplex canescens*). Whips of poplar and bare-rooted specimens of saltbush were planted during April 2010. A drip irrigation system (Fig. 1) was established that supplies moderately to severely saline water (TDS 1000 to 2,700 mg/L) from a 1,500-ft well approximately 200 feet from the irrigated area. In March 2011, 240 dormant poplar poles, 15-20 feet in length with a 4- to 6-inch diameter at breast height (DBH), were planted at an adjacent site along a fence bordering the north boundary (Fig. 2). Poles were inserted into groundwater 5 feet apart with 10-ft alleys between rows. Visual observations in April 2011 revealed leaf sprouting, and significant foliar coverage was noted by June 2011 on both the 2010-planted material (Fig. 3) and the 2011-planted poplar poles (Fig. 4). Of the 240 poplar poles planted, only one failed to develop foliage and could be considered dead by the June 2011 evaluation, representing a 99% survival rate.

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Analysis of the groundwater into which the poles were planted indicated high levels of total dissolved solids (TDS) greater than 4,500 mg/L and concentrations of methyl tertiary butyl ether

(MTBE)—a common and pervasive residual contaminant— at nearly 55 µg/L. Gasoline Range Organics (GRO C6-C10) were 0.11 mg/L .

Given the level of salt and iron in the irrigation water and the groundwater plus the elevated levels of MTBE and GRO C6-C10, it's a wonder there is a single leaf on the trees and bushes, let alone the excellent foliage produced to date. Initial observations suggest hybrid poplar and four-wing saltbush are capable of substantial initial growth at a petroleum contaminated site with elevated salt loads in the soil and irrigation water. Further work is required to determine the degree of phytoremediation these species are capable of delivering.

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Remediation Service Int'l
4835 Colt Unit D
Ventura CA 93003
805.644 8382
805.644 8378 FAX
www.rsi-save.com

528922

Report Generator Version 1 4

Date of Report	7/27/2011
Project Name·	Thriftway #810
May	June 2011 Report
Unit ID	0
Controller S/N:	182
Software version.	844

Date Range From	4/1/2011 0.43
Date Range To :	6/23/2011 20 13
Lbs. Removed/Period.	2681 83
Gal Removed/Period	432 67
SCF Processed/Period	1998509

Assumptions.

20000	Btu/lb
6.2	lb/gallon of gasoline
120	Mole Weight of Extracted VOC
2520	Btu/Cubic Foot of Propane
1000	Btu/Cubic Foot of Natural Gas

Parts/Million by Volume (PPMV) Conversion to Micrograms/Liter (ug/L)
(PPMV/24 055)*AVG Mole Weight=ug/L

Mass Transfer Equation to Convert to Pounds/Hour
(ug/L)*(Flow SCFM)*28 3 L/SCF*60 Minutes/Hour*2 2 lbs/Kg*(1/10^9)

There are no express or implied warranties for fitness of use or any other purpose of the data contained herein
See report footnotes for disclaimer details and other technical information relating to calculation procedures
Footnotes

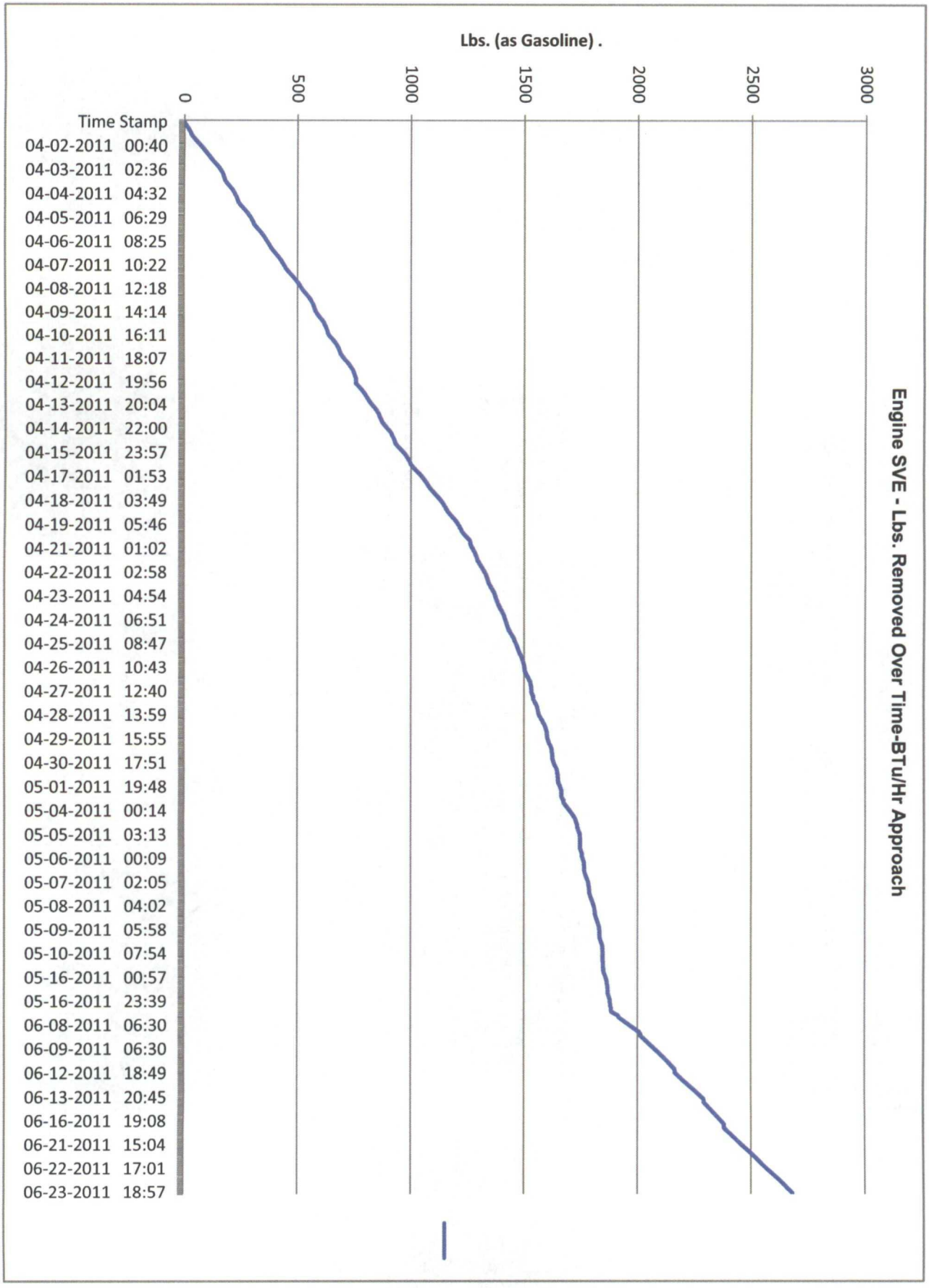
RSIs Innovative Approach to Estimating Btu/Hr.
1. Measure alternate fuel usage of engine prior to introduction of process flow
2. Multiply the SCFM flow rate of the alternate fuel (propane or natural gas) by the Btu value to determine energy demand on the engine at static conditions
3. The controller records a "snapshot" of the energy demand at a given RPM and engine manifold vacuum just prior to allowing the process flow to begin
4. The controller adjusts the initial baseline based on engine load or oxygen deficiency as necessary
5. Any drop in energy demand is assumed to be caused by the introduction of the process flow and is displayed as Estimated Btu/hr and recorded accordingly

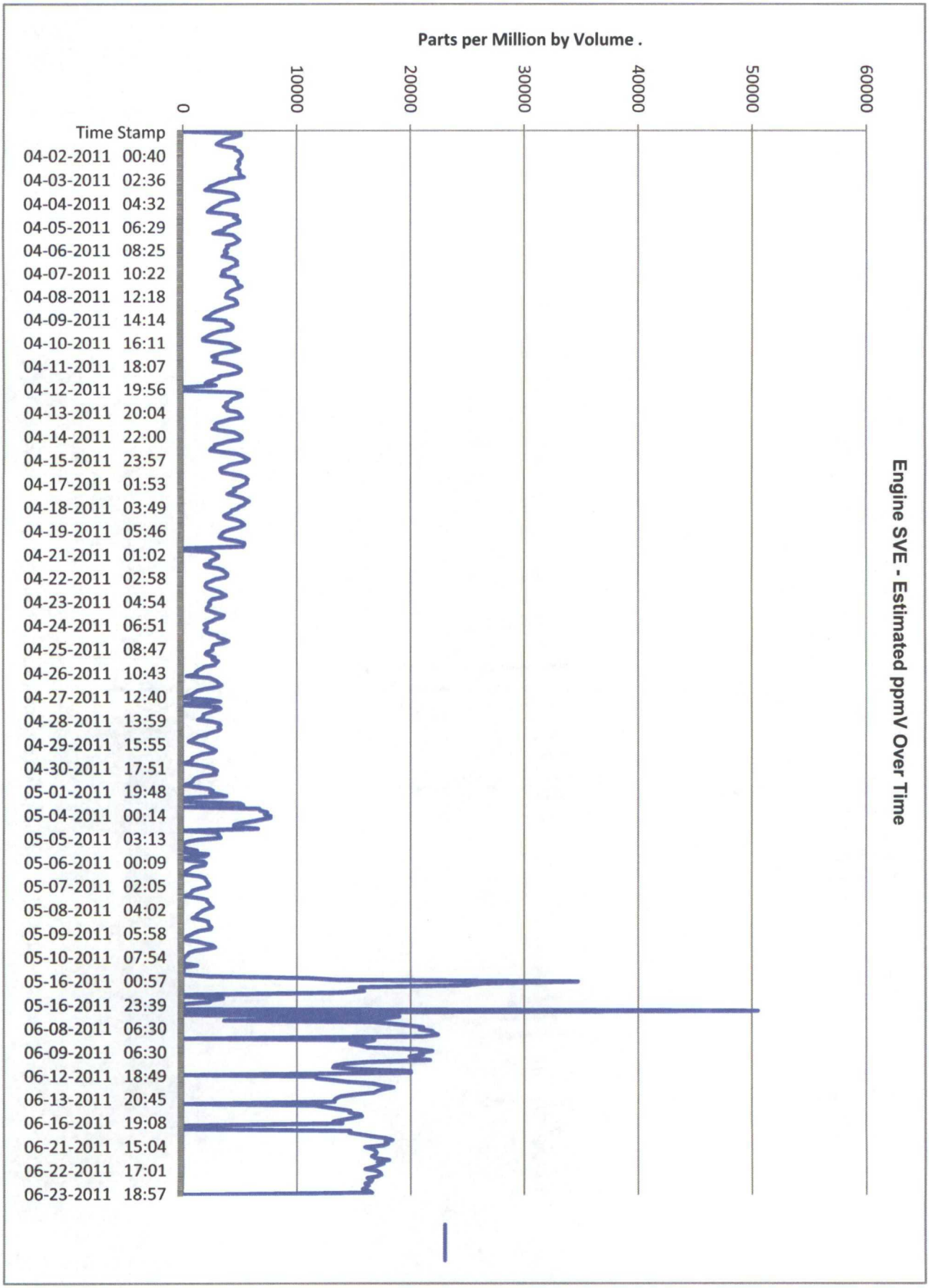
RSIs Innovative Approach to Estimating PPMV
1. The controller completes the Btu/hr calculation as explained above
2 The controller looks at the well flow rate (estimated or measured in SCFM)
3 The controller then computes the average PPMV using the mass transfer equation to solve for PPMV
4 If the flow rate is estimated then PPMV is subject to accuracy of estimated flow and accuracy of the Btu/hr calculation
5 If the flow rate is measured then this PPMV estimate will be relative to actual lab data assuming the flow measurement and the Btu calculations are correct

There are many advantages to using RSIs innovative approach in calculating how much mass was removed from a project in a given time period.
Our method eliminates human calculation error and prevents incorrect or non-calibrated use of field instrumentation and it is a consistent
periodic measurement over time which when used properly will reduces costly laboratory analysis

Our estimates of VOC removal have proven to be reasonable when compared to independent lab data Because the process flow rate
and the alternate fuel flow rate measurements are dependent upon proper system operation there are no expressed or implied warrantees
of fitness of use for any purpose when using this report or the data contained herein

Please do not hesitate to contact RSI 1-800-368-8685 if you should have any questions or require further information


Lbs. (as Gasoline) .
0
500
1000
1500
2000
2500
3000
Time Stamp
04-02-2011 00:40
04-03-2011 02:36
04-04-2011 04:32
04-05-2011 06:29
04-06-2011 08:25
04-07-2011 10:22
04-08-2011 12:18
04-09-2011 14:14
04-10-2011 16:11
04-11-2011 18:07
04-12-2011 19:56
04-13-2011 20:04
04-14-2011 22:00
04-15-2011 23:57
04-17-2011 01:53
04-18-2011 03:49
04-19-2011 05:46
04-21-2011 01:02
04-22-2011 02:58
04-23-2011 04:54
04-24-2011 06:51
04-25-2011 08:47
04-26-2011 10:43
04-27-2011 12:40
04-28-2011 13:59
04-29-2011 15:55
04-30-2011 17:51
05-01-2011 19:48
05-04-2011 00:14
05-05-2011 03:13
05-06-2011 00:09
05-07-2011 02:05
05-08-2011 04:02
05-09-2011 05:58
05-10-2011 07:54
05-16-2011 00:57
05-16-2011 23:39
06-08-2011 06:30
06-09-2011 06:30
06-12-2011 18:49
06-13-2011 20:45
06-16-2011 19:08
06-21-2011 15:04
06-22-2011 17:01
06-23-2011 18:57
Engine SVE - Lbs. Removed Over Time-BTu/Hr Approach


Engine SVE - Estimated ppmV Over Time
Parts per Million by Volume .
0
10000
20000
30000
40000
50000
60000
Time Stamp
04-02-2011 00:40
04-03-2011 02:36
04-04-2011 04:32
04-05-2011 06:29
04-06-2011 08:25
04-07-2011 10:22
04-08-2011 12:18
04-09-2011 14:14
04-10-2011 16:11
04-11-2011 18:07
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04-13-2011 20:04
04-14-2011 22:00
04-15-2011 23:57
04-17-2011 01:53
04-18-2011 03:49
04-19-2011 05:46
04-21-2011 01:02
04-22-2011 02:58
04-23-2011 04:54
04-24-2011 06:51
04-25-2011 08:47
04-26-2011 10:43
04-27-2011 12:40
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05-08-2011 04:02
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06-08-2011 06:30
06-09-2011 06:30
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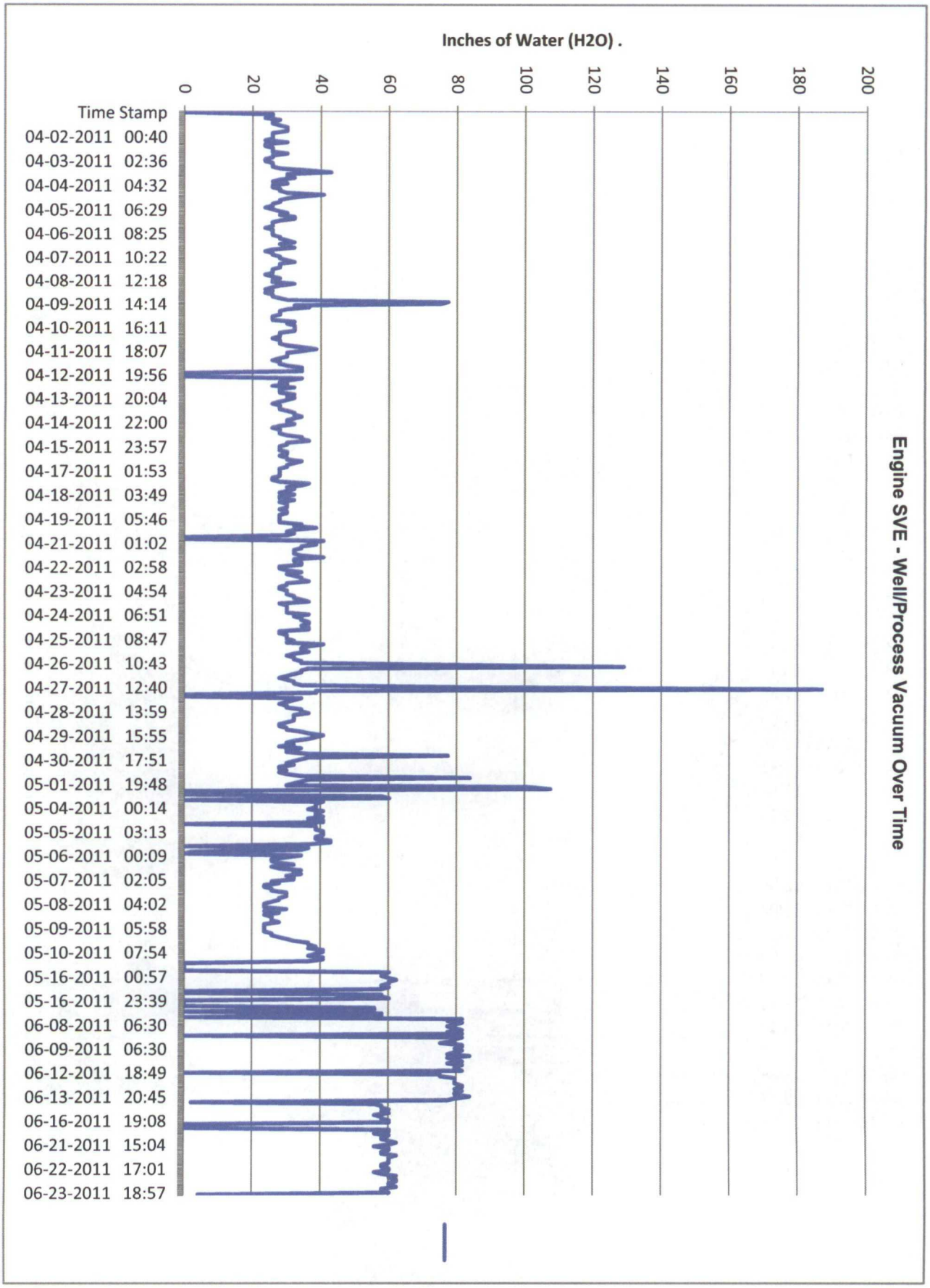
06-22-2011 17:01
06-23-2011 18:57


Engine SVE - Well/Process Vacuum Over Time
Inches of Water (H2O) .
0
20
40
60
80
100
120
140
160
180
200
Time Stamp
04-02-2011 00:40
04-03-2011 02:36
04-04-2011 04:32
04-05-2011 06:29
04-06-2011 08:25
04-07-2011 10:22
04-08-2011 12:18
04-09-2011 14:14
04-10-2011 16:11
04-11-2011 18:07
04-12-2011 19:56
04-13-2011 20:04
04-14-2011 22:00
04-15-2011 23:57
04-17-2011 01:53
04-18-2011 03:49
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04-28-2011 13:59
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04-30-2011 17:51
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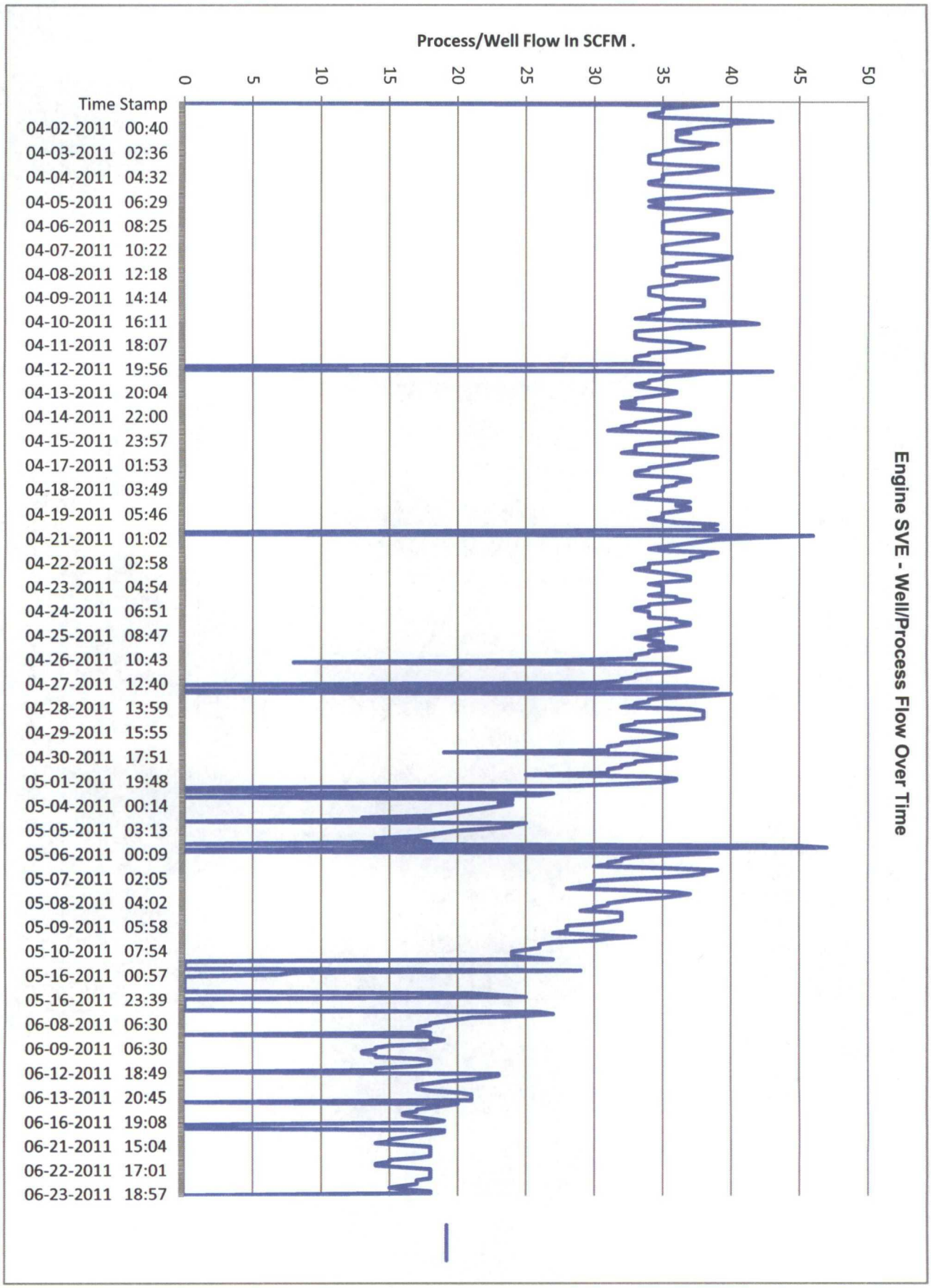
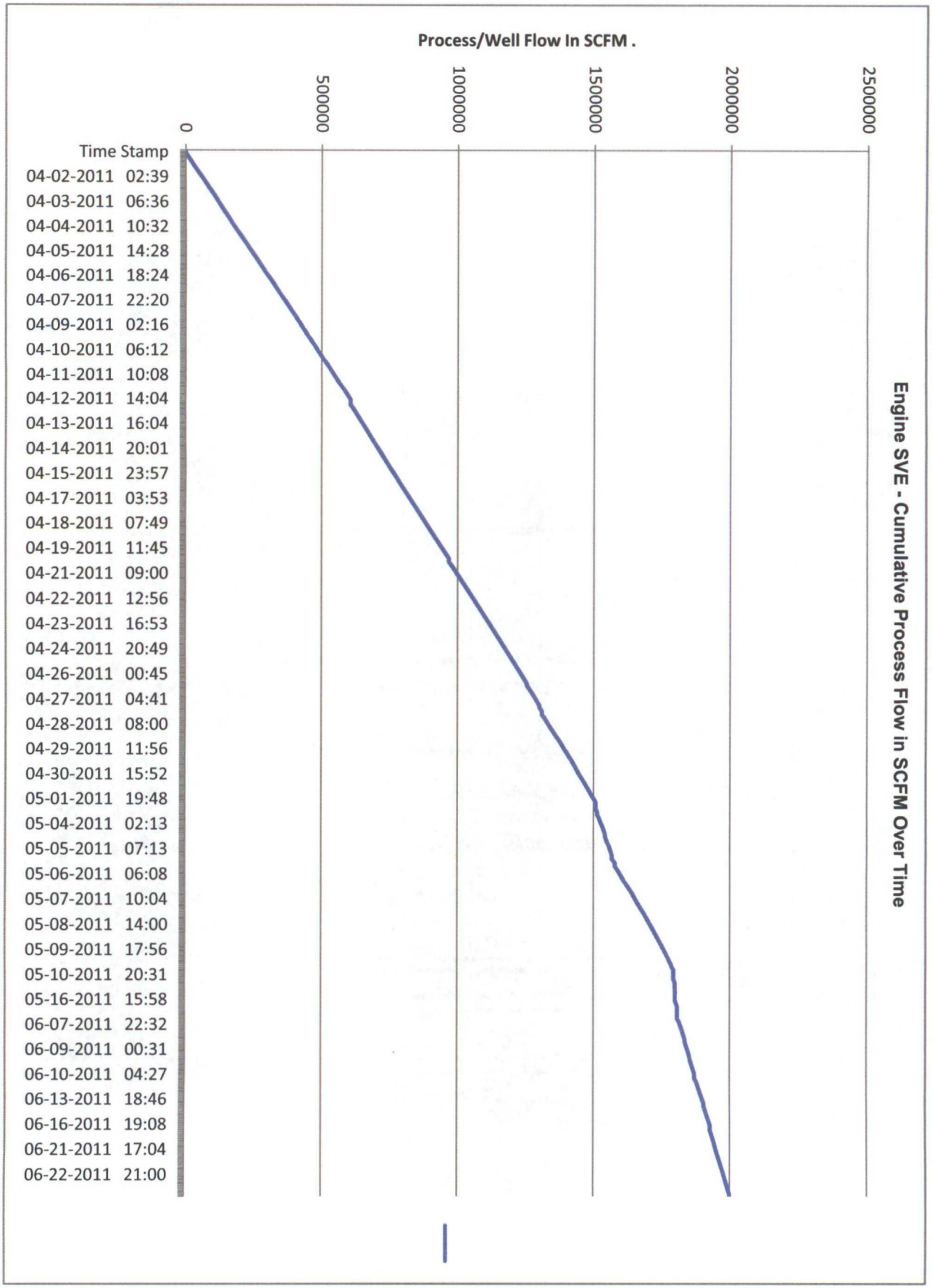
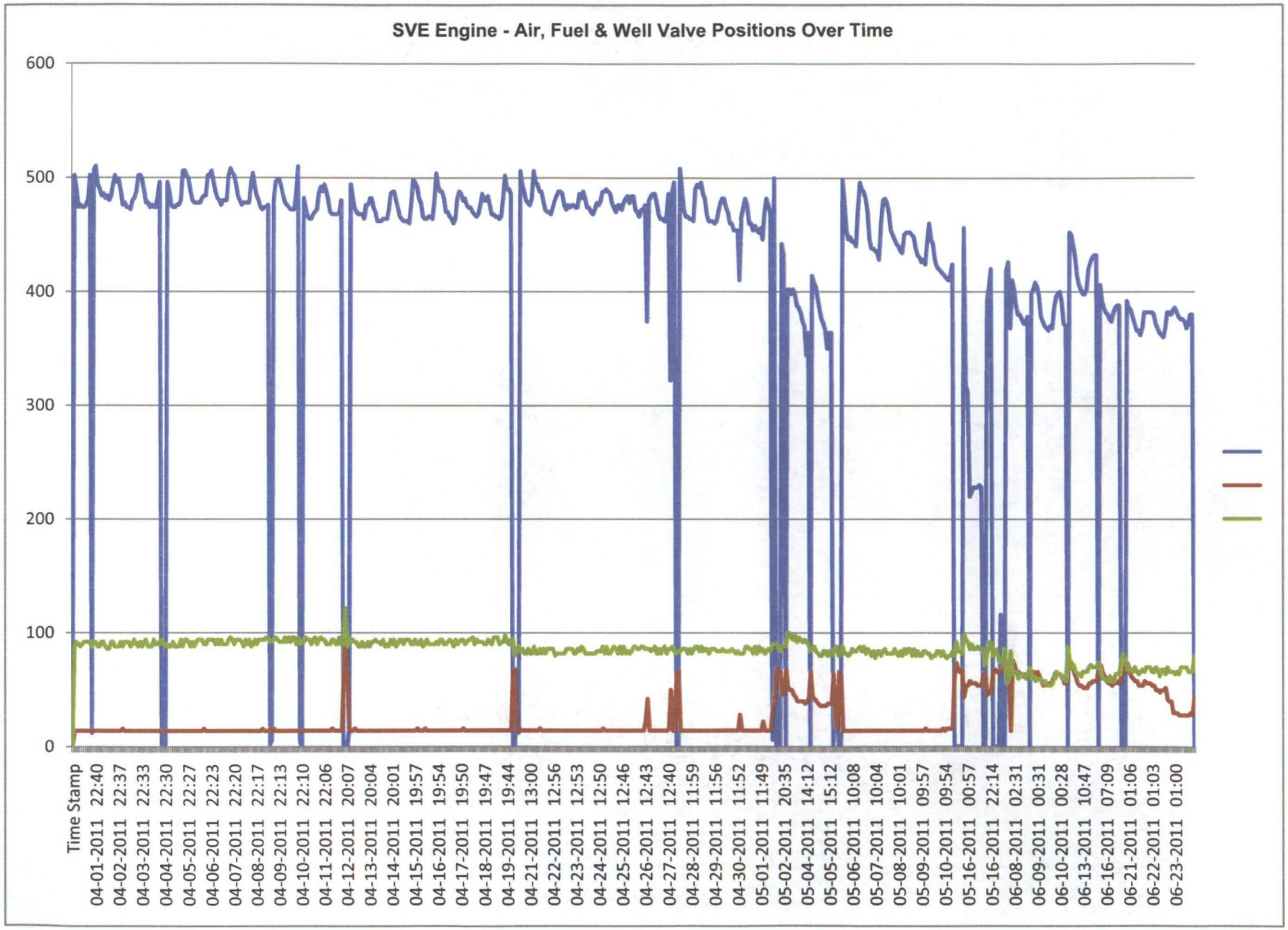
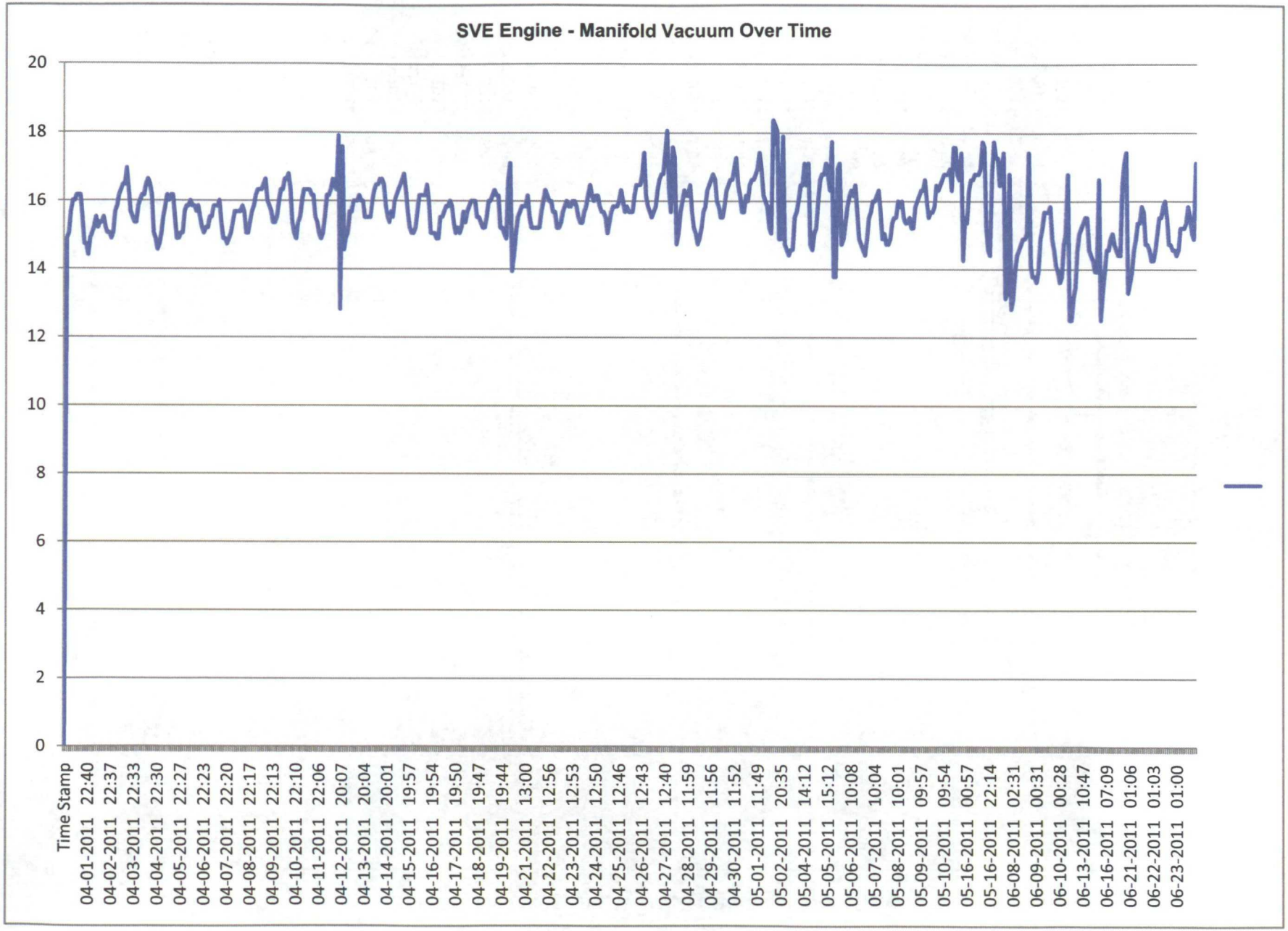
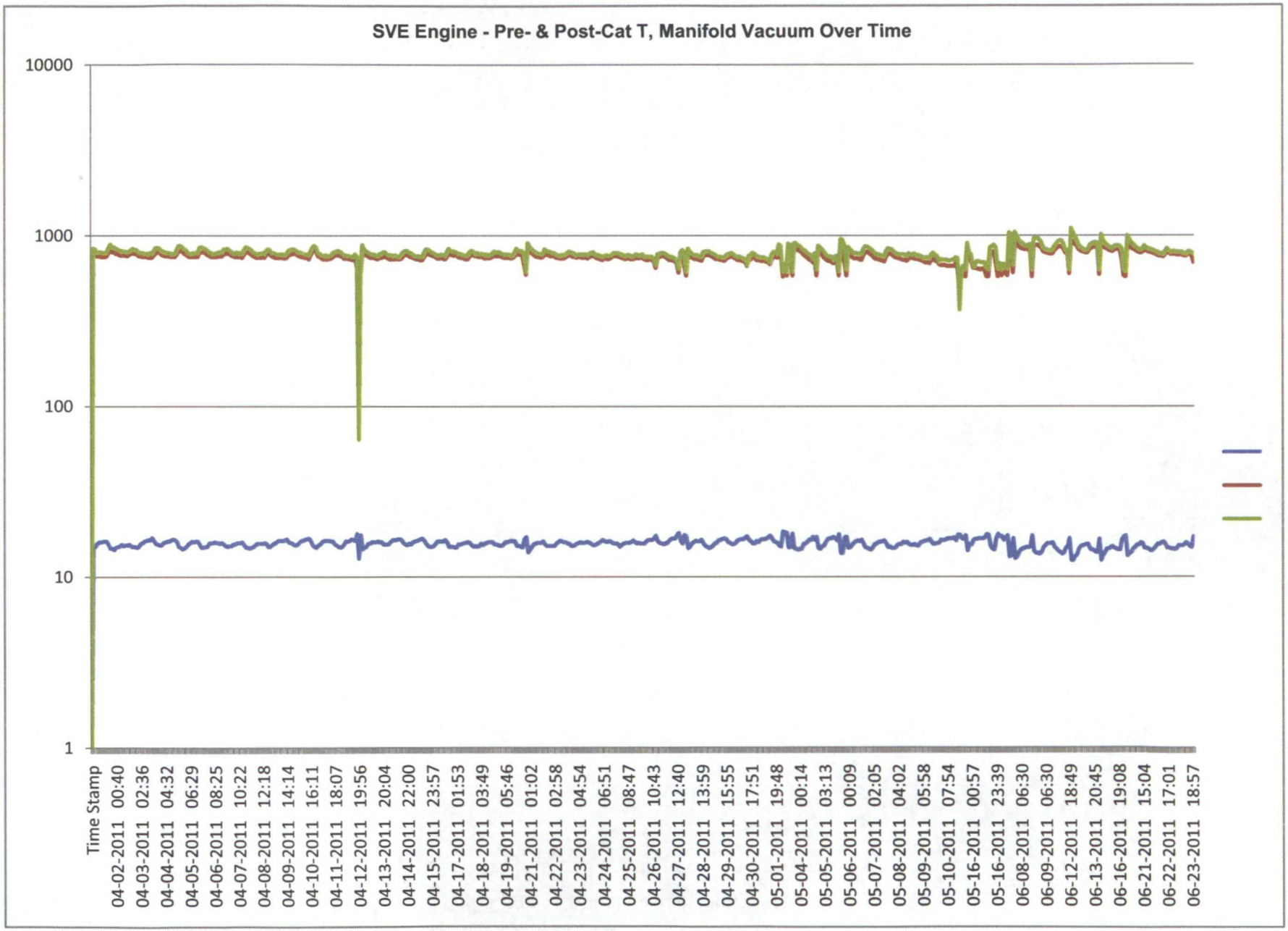
05-06-2011 00:09
05-07-2011 02:05
05-08-2011 04:02
05-09-2011 05:58
05-10-2011 07:54
05-16-2011 00:57
05-16-2011 23:39
06-08-2011 06:30
06-09-2011 06:30
06-12-2011 18:49
06-13-2011 20:45
06-16-2011 19:08
06-21-2011 15:04
06-22-2011 17:01
06-23-2011 18:57

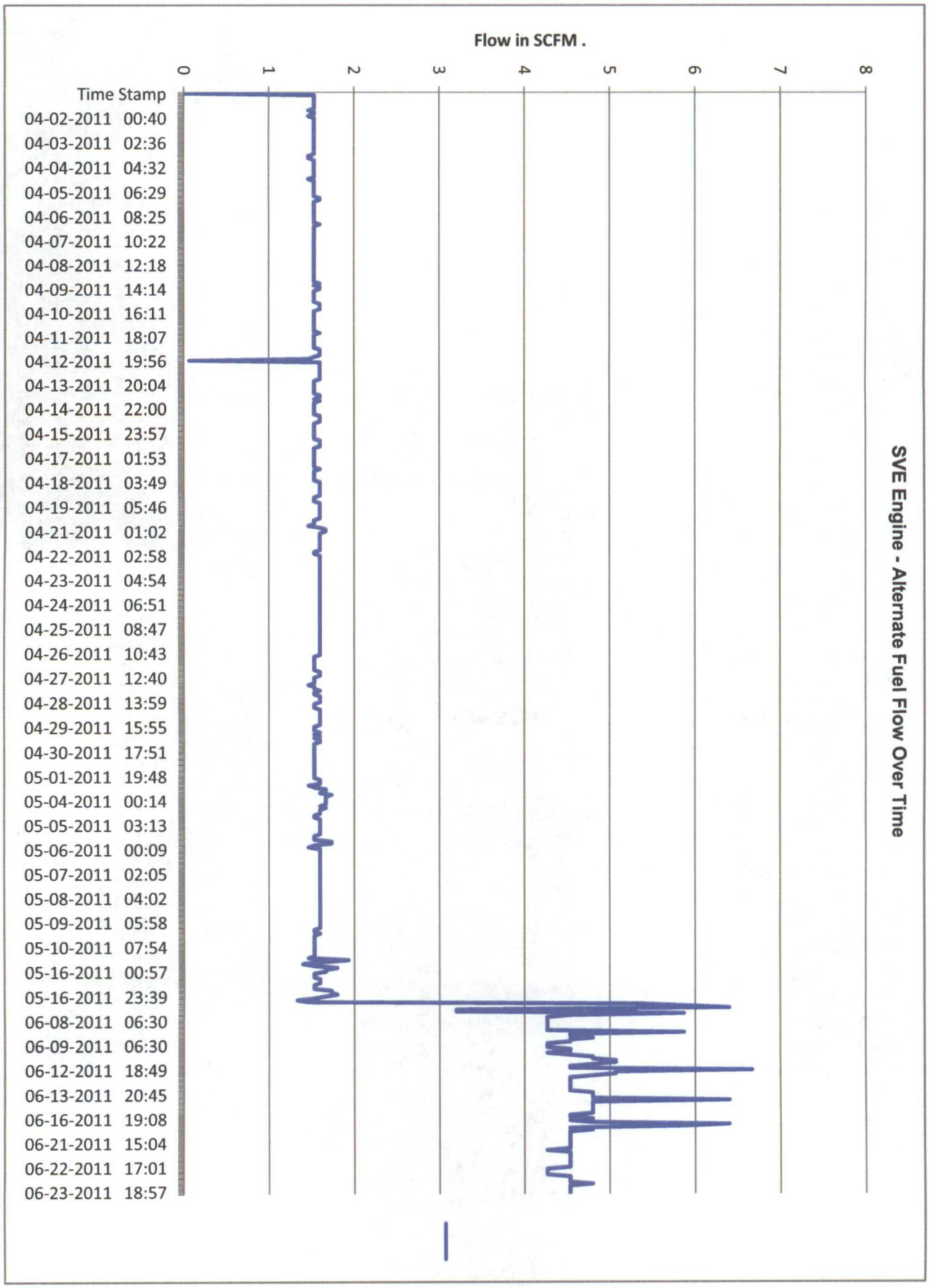

Engine SVE - Well/Process Flow Over Time
Process/Well Flow In SCFM .
0
5
10
15
20
25
30
35
40
45
50
Time Stamp
04-02-2011 00:40
04-03-2011 02:36
04-04-2011 04:32
04-05-2011 06:29
04-06-2011 08:25
04-07-2011 10:22
04-08-2011 12:18
04-09-2011 14:14
04-10-2011 16:11
04-11-2011 18:07
04-12-2011 19:56
04-13-2011 20:04
04-14-2011 22:00
04-15-2011 23:57
04-17-2011 01:53
04-18-2011 03:49
04-19-2011 05:46
04-21-2011 01:02
04-22-2011 02:58
04-23-2011 04:54
04-24-2011 06:51
04-25-2011 08:47
04-26-2011 10:43
04-27-2011 12:40
04-28-2011 13:59
04-29-2011 15:55
04-30-2011 17:51
05-01-2011 19:48
05-04-2011 00:14
05-05-2011 03:13
05-06-2011 00:09
05-07-2011 02:05
05-08-2011 04:02
05-09-2011 05:58
05-10-2011 07:54
05-16-2011 00:57
05-16-2011 23:39
06-08-2011 06:30
06-09-2011 06:30
06-12-2011 18:49
06-13-2011 20:45
06-16-2011 19:08
06-21-2011 15:04
06-22-2011 17:01
06-23-2011 18:57

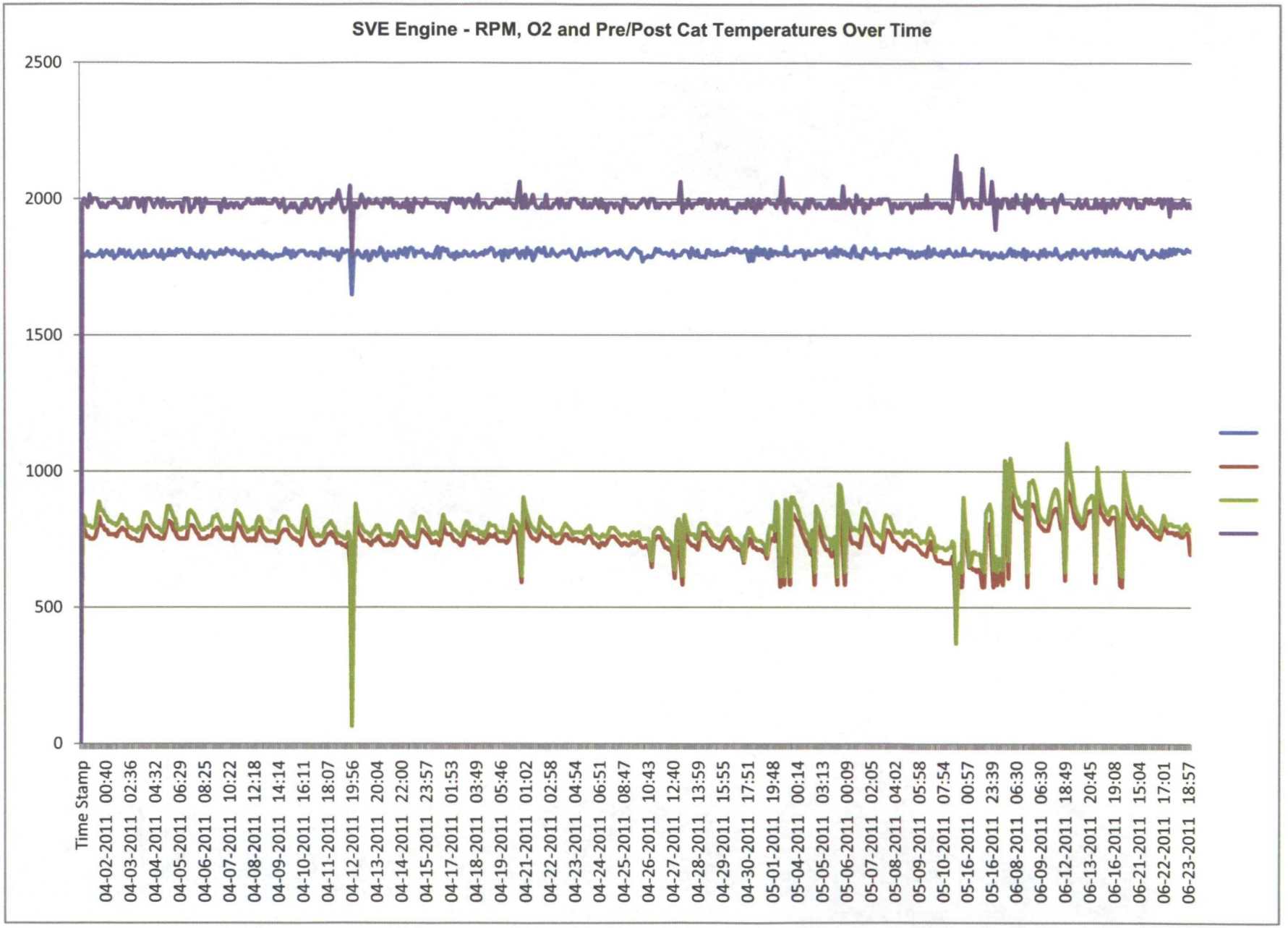

Process/Well Flow In SCFM .
0
500000
1000000
1500000
2000000
2500000
Time Stamp
04-02-2011 02:39
04-03-2011 06:36
04-04-2011 10:32
04-05-2011 14:28
04-06-2011 18:24
04-07-2011 22:20
04-09-2011 02:16
04-10-2011 06:12
04-11-2011 10:08
04-12-2011 14:04
04-13-2011 16:04
04-14-2011 20:01
04-15-2011 23:57
04-17-2011 03:53
04-18-2011 07:49
04-19-2011 11:45
04-21-2011 09:00
04-22-2011 12:56
04-23-2011 16:53
04-24-2011 20:49
04-26-2011 00:45
04-27-2011 04:41
04-28-2011 08:00
04-29-2011 11:56
04-30-2011 15:52
05-01-2011 19:48
05-04-2011 02:13
05-05-2011 07:13
05-06-2011 06:08
05-07-2011 10:04
05-08-2011 14:00
05-09-2011 17:56
05-10-2011 20:31
05-16-2011 15:58
06-07-2011 22:32
06-09-2011 00:31
06-10-2011 04:27
06-13-2011 18:46
06-16-2011 19:08
06-21-2011 17:04
06-22-2011 21:00
Engine SVE - Cumulative Process Flow in SCFM Over Time


SVE Engine - Air, Fuel & Well Valve Positions Over Time
600
500
400
300
200
100
0
Time Stamp
04-01-2011 22:40
04-02-2011 22:37
04-03-2011 22:33
04-04-2011 22:30
04-05-2011 22:27
04-06-2011 22:23
04-07-2011 22:20
04-08-2011 22:17
04-09-2011 22:13
04-10-2011 22:10
04-11-2011 22:06
04-12-2011 20:07
04-13-2011 20:04
04-14-2011 20:01
04-15-2011 19:57
04-16-2011 19:54
04-17-2011 19:50
04-18-2011 19:47
04-19-2011 19:44
04-21-2011 13:00
04-22-2011 12:56
04-23-2011 12:53
04-24-2011 12:50
04-25-2011 12:46
04-26-2011 12:43
04-27-2011 12:40
04-28-2011 11:59
04-29-2011 11:56
04-30-2011 11:52
05-01-2011 11:49
05-02-2011 20:35
05-04-2011 14:12
05-05-2011 15:12
05-06-2011 10:08
05-07-2011 10:04
05-08-2011 10:01
05-09-2011 09:57
05-10-2011 09:54
05-16-2011 00:57
05-16-2011 22:14
06-08-2011 02:31
06-09-2011 00:31
06-10-2011 00:28
06-13-2011 10:47
06-16-2011 07:09
06-21-2011 01:06
06-22-2011 01:03
06-23-2011 01:00


SVE Engine - Manifold Vacuum Over Time
20
18
16
14
12
10
8
6
4
2
0
Time Stamp
04-01-2011 22:40
04-02-2011 22:37
04-03-2011 22:33
04-04-2011 22:30
04-05-2011 22:27
04-06-2011 22:23
04-07-2011 22:20
04-08-2011 22:17
04-09-2011 22:13
04-10-2011 22:10
04-11-2011 22:06
04-12-2011 20:07
04-13-2011 20:04
04-14-2011 20:01
04-15-2011 19:57
04-16-2011 19:54
04-17-2011 19:50
04-18-2011 19:47
04-19-2011 19:44
04-21-2011 13:00
04-22-2011 12:56
04-23-2011 12:53
04-24-2011 12:50
04-25-2011 12:46
04-26-2011 12:43
04-27-2011 12:40
04-28-2011 11:59
04-29-2011 11:56
04-30-2011 11:52
05-01-2011 11:49
05-02-2011 20:35
05-04-2011 14:12
05-05-2011 15:12
05-06-2011 10:08
05-07-2011 10:04
05-08-2011 10:01
05-09-2011 09:57
05-10-2011 09:54
05-16-2011 00:57
05-16-2011 22:14
06-08-2011 02:31
06-09-2011 00:31
06-10-2011 00:28
06-13-2011 10:47
06-16-2011 07:09
06-21-2011 01:06
06-22-2011 01:03
06-23-2011 01:00


SVE Engine - Pre- & Post-Cat T, Manifold Vacuum Over Time
10000
1000
100
10
1
Time Stamp
04-02-2011 00:40
04-03-2011 02:36
04-04-2011 04:32
04-05-2011 06:29
04-06-2011 08:25
04-07-2011 10:22
04-08-2011 12:18
04-09-2011 14:14
04-10-2011 16:11
04-11-2011 18:07
04-12-2011 19:56
04-13-2011 20:04
04-14-2011 22:00
04-15-2011 23:57
04-17-2011 01:53
04-18-2011 03:49
04-19-2011 05:46
04-21-2011 01:02
04-22-2011 02:58
04-23-2011 04:54
04-24-2011 06:51
04-25-2011 08:47
04-26-2011 10:43
04-27-2011 12:40
04-28-2011 13:59
04-29-2011 15:55
04-30-2011 17:51
05-01-2011 19:48
05-04-2011 00:14
05-05-2011 03:13
05-06-2011 00:09
05-07-2011 02:05
05-08-2011 04:02
05-09-2011 05:58
05-10-2011 07:54
05-16-2011 00:57
05-16-2011 23:39
06-08-2011 06:30
06-09-2011 06:30
06-12-2011 18:49
06-13-2011 20:45
06-16-2011 19:08
06-21-2011 15:04
06-22-2011 17:01
06-23-2011 18:57


SVE Engine - Alternate Fuel Flow Over Time
Flow in SCFM .
0
1
2
3
4
5
6
7
8
Time Stamp
04-02-2011 00:40
04-03-2011 02:36
04-04-2011 04:32
04-05-2011 06:29
04-06-2011 08:25
04-07-2011 10:22
04-08-2011 12:18
04-09-2011 14:14
04-10-2011 16:11
04-11-2011 18:07
04-12-2011 19:56
04-13-2011 20:04
04-14-2011 22:00
04-15-2011 23:57
04-17-2011 01:53
04-18-2011 03:49
04-19-2011 05:46
04-21-2011 01:02
04-22-2011 02:58
04-23-2011 04:54
04-24-2011 06:51
04-25-2011 08:47
04-26-2011 10:43
04-27-2011 12:40
04-28-2011 13:59
04-29-2011 15:55
04-30-2011 17:51
05-01-2011 19:48
05-04-2011 00:14
05-05-2011 03:13
05-06-2011 00:09
05-07-2011 02:05
05-08-2011 04:02
05-09-2011 05:58
05-10-2011 07:54
05-16-2011 00:57
05-16-2011 23:39
06-08-2011 06:30
06-09-2011 06:30
06-12-2011 18:49
06-13-2011 20:45
06-16-2011 19:08
06-21-2011 15:04
06-22-2011 17:01
06-23-2011 18:57


SVE Engine - RPM, O2 and Pre/Post Cat Temperatures Over Time
2500
2000
1500
1000
500
0
Time Stamp
04-02-2011 00:40
04-03-2011 02:36
04-04-2011 04:32
04-05-2011 06:29
04-06-2011 08:25
04-07-2011 10:22
04-08-2011 12:18
04-09-2011 14:14
04-10-2011 16:11
04-11-2011 18:07
04-12-2011 19:56
04-13-2011 20:04
04-14-2011 22:00
04-15-2011 23:57
04-17-2011 01:53
04-18-2011 03:49
04-19-2011 05:46
04-21-2011 01:02
04-22-2011 02:58
04-23-2011 04:54
04-24-2011 06:51
04-25-2011 08:47
04-26-2011 10:43
04-27-2011 12:40
04-28-2011 13:59
04-29-2011 15:55
04-30-2011 17:51
05-01-2011 19:48
05-04-2011 00:14
05-05-2011 03:13
05-06-2011 00:09
05-07-2011 02:05
05-08-2011 04:02
05-09-2011 05:58
05-10-2011 07:54
05-16-2011 00:57
05-16-2011 23:39
06-08-2011 06:30
06-09-2011 06:30
06-12-2011 18:49
06-13-2011 20:45
06-16-2011 19:08
06-21-2011 15:04
06-22-2011 17:01
06-23-2011 18:57

DEPTH TO GROUNDWATER MEASUREMENT FORM

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

Project: Groundwater Monitoring
Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Tech: Chad Dawson

Project No.: AES 050204
Date: 5-17-11
Time: 0930 - 1805
Form: 1 of 2

Well I.D.	Time	Depth to NAPL (ft.)	Depth to Water (ft.)	NAPL Thickness (ft.)	Notes / Observations
TW-1	1025		30.62		
TW-2	1029		28.85		
TW-3	1033		27.88		
TW-4	1038		19.01		
TW-5	1042		25.42		
TW-6	1045		24.64		
TW-7	1057		22.10		slight odor
TW-8	1057		19.59		
TW-9	1102		12.13		
TW-10	1107		12.56		
TW-11	1119		18.01		
TW-12	1124		22.30		
TW-13	1445		20.66		thick film on probe.
TW-14	1629		16.99		
TW-15	1432		13.09		
TW-16	1111		11.52		
TW-17	1435		10.03		
TW-18	1436		16.30		
TW-19	1445		17.65		Very Strong odor
TW-20	1700	17.40	17.45	0.05	
TW-21	1449				Well Damaged. History of NAPL
TW-22	1740	14.79	15.02	0.23	
TW-23	1442		8.99		
TW-24	1746	11.09	11.15	0.06	
TW-25	1733	14.09	14.29	0.20	
TW-26	~~1807~~ 1707	~~15.74~~ 15.74	16.50	0.76	
TW-28	1715	15.19	16.09	0.90	
TW-29	1750	9.35	9.83	0.48	
TW-30	1452		6.22		
TW-31	1455		7.07		
TW-32	1803	9.26	10.72	1.46	
TW-33	1727	12.80	12.82	0.02	
TW-34	1521		19.73		

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

DEPTH TO GROUNDWATER MEASUREMENT FORM

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

Project: Groundwater Monitoring
Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Tech: Chad Dawson

Project No.: AES 050204
Date: 5-17-11
Time: 0930-1803
Form: 2 of 2

Well I.D	Time	Depth to NAPL (ft.)	Depth to Water (ft.)	NAPL Thickness (ft.)	Notes / Observations
TW-35	1618		15.03		
TW-36	1615	12.97	12.98	0.01	
TW-37	1530		10.51		
TW-38	1533		11.42		
TW-39	1501		7.73		
TW-40	1796	7.72	8.19	0.47	
TW-41	1511		5.92		
TW-42	1518		6.02		
TW-43	1525		12.15		
TW-44	1725	14.96	15.01	0.05	
TW-45	1540		7.20		
TW-46	1542		6.89		
TW-47	1604		6.79		
TW-48	1453		7.30		
TW-49	1552		6.24		
TW-50	1458		7.89		
MW-5	1521		5.03		
MW-7	1506		8.58		
MW-20	1545		5.88		
MW-21	1409		3.52		

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

Ambient Air Monitoring Form	Animas Environmental Services 624 E. Comanche. Farmington NM 87401 Tel. (505) 564-2281 Fax (505) 324-2022

Project:	Groundwater Monitoring	Project No:	AES 050204
Site:	Thriftway #810 Refinery	Date:	
Location:	Bloomfield, New Mexico	Time:	
Tech:		Form:	1 of 2

Time	Air Temp (°F)	Oxygen (%)	LEL (%)	Carbon Monoxide (ppm)	OVM-PID (ppm)	Sample Location / Notes / Observations

List Equipment Used and Date of Last Calibration:

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-7

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: Chad Dawson
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 22.10 Time: 1051 (5-17-11) *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 22.12 Time: 1242 *(taken prior to purging well)*
Final D.T.W. (ft): Time: *(taken after sample collection)*
If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Project No.: AES 050204
Date: 5-15-11
Arrival Time: 1240
Air Temp: 50°
T.O.C. Elev. (ft): 5461.17
Total Well Depth (ft): 28.08

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1250	15.23	3.837	0.49	7.21	-229	0.50	
1258	14.65	3.455	0.49	7.19	-21.8	2.50	
1305	---					SC	

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-8

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: Chad Dawson
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 19.59 Time: 1057 (5-17-11) (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 19.62 Time: 1320 (taken prior to purging well)
Final D.T.W. (ft): Time: (taken after sample collection)
If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Project No.: AES 050201
Date: 5-18-11
Arrival Time: 1318
Air Temp: 60°
T.O.C. Elev. (ft): 5458.29
Total Well Depth (ft): 27.61

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1329	13.06	3.875	0.39	7.08	-15.7	0.50	
1335	13.05	4.364	0.25	7.13	-18.3	2.00	
1340	—	—	—	—	—	SC	—

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-13

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: Chad Dawson
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 20.66 Time: 1445 (5-12-11) (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 20.65 Time: 1550 (taken prior to purging well)
Final D.T.W. (ft): Time: (taken after sample collection)
If NAPL Present: D.T.P.: D.T.W.: Thickness. Time:

Project No.: AES 050204
Date: 5-15-11
Arrival Time: 1347
Air Temp: 62°
T.O.C. Elev. (ft): 5458.17
Total Well Depth (ft):

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
		Sample					
	430						
		Sheen Present					

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Bailer had a good layer of Sheen on water

revised: 08/10/09

MONITORING WELL SAMPLING RECORD	Animas Environmental Services
Monitor Well No: TW-14	624 E. Comanche, Farmington NM 87401 Tel. (505) 564-2281 Fax (505) 324-2022

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: Chad Dawson
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 16.99 Time: 1602 (5-17-11) *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 17.02 Time: 1909 *(taken prior to purging well)*
Final D.T.W. (ft): Time: *(taken after sample collection)*
If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Project No.: AES 050204
Date: 5-18-11
Arrival Time: 1405
Air Temp: 62°
T.O.C. Elev. (ft): 5454.24
Total Well Depth (ft): [redacted]

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
		Sample					
	NO	Present					
	Sheen						

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Could see a thin layer of Sheen on cord in Bailer

revised: 08/10/09

MONITORING WELL SAMPLING RECORD	Animas Environmental Services
Monitor Well No: TW-19	624 E. Comanche, Farmington NM 87401 Tel. (505) 564-2281 Fax (505) 324-2022

Site: Thriftway #810 Refinery — Project No.: AES 050204
Location: Bloomfield, New Mexico — Date: 5-18-11
Project: Groundwater Monitoring and Sampling — Arrival Time: 1415
Sampling Technician: CD — Air Temp: 64°
Purge / No Purge: Purge — T.O.C. Elev. (ft): 5458.49
Well Diameter (in): 2 — Total Well Depth (ft): [illegible]
Initial D.T.W. (ft): 17.03 — Time: 1445 (5-17-11) *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 17.06 — Time: 1419 *(taken prior to purging well)*
Final D.T.W. (ft): — Time: *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time:

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
	No	Sample	Present				
		Sheen					

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C (1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Kenk Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Bailer was coated with a Sheen from well.

revised, 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-20

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: Chad Dawson
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): ~~5.86~~ Time: ~~1345~~ (taken at initial gauging of all wells)
Confirm D.T.W. (ft): Time: (taken prior to purging well)
Final D.T.W. (ft): Time: 1345 (taken after sample collection)
If NAPL Present: D.T.P.: 12.40 D.T.W.: ~~12.45~~ Thickness: ~~0.59~~ 0.05 Time: 1700

Project No.: AES 050204
Date: 5-8-11
Arrival Time: ~~1345~~ 1700
Air Temp: 54°
T.O.C. Elev. (ft): 5453.74
Total Well Depth (ft):

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
		Sample					
	ND						
		NAPL Present					

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-22

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CD
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): ____ Time: ____ (taken at initial gauging of all wells)
Confirm D.T.W. (ft): ____ Time: ____ (taken prior to purging well)
Final D.T.W. (ft): ____ Time: ____ (taken after sample collection)
If NAPL Present: D.T.P.: 14.79 D.T.W.: 15.02 Thickness: 0.23 Time: 1740

Project No.: AES 050204
Date: 5-17-11
Arrival Time: 1740
Air Temp: ____
T.O.C. Elev. (ft): 5450.19
Total Well Depth (ft): [illegible]

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
		Sample					
	100						
		NAPL Present					

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water: ____
Collected Samples Stored on Ice in Cooler: ____
Chain of Custody Record Complete: ____
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD	Animas Environmental Services
Monitor Well No: TW-24	624 E. Comanche, Farmington NM 87401 Tel. (505) 564-2281 Fax (505) 324-2022

Site:	Thriftway #810 Refinery	Project No.:	AES 050204
Location:	Bloomfield, New Mexico	Date:	5-17-11
Project:	Groundwater Monitoring and Sampling	Arrival Time:	1746
Sampling Technician:	CD	Air Temp:	
Purge / No Purge:	Purge	T.O.C. Elev. (ft):	5444.79
Well Diameter (in):	2	Total Well Depth (ft):	17.45
Initial D.T.W. (ft):		Time:	(taken at initial gauging of all wells)
Confirm D.T.W. (ft):		Time:	(taken prior to purging well)
Final D.T.W. (ft):		Time:	(taken after sample collection)
If NAPL Present:	D.T.P.: 11.07	D.T.W.: 11.45	Thickness: 0.08 Time: 1746

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
			Sample				
	NO		Present				
		NAPL					

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:	
Collected Samples Stored on Ice in Cooler:	
Chain of Custody Record Complete:	
Analytical Laboratory:	Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling:	Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-25

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): _____ Time: _____ *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): _____ Time: _____ *(taken prior to purging well)*
Final D.T.W. (ft): _____ Time: _____ *(taken after sample collection)*
If NAPL Present: D.T.P.: 14.09 D.T.W.: 14.29 Thickness: 0.20 Time: 1733

Project No.: AES 050204
Date: 5-12-11
Arrival Time: 1733
Air Temp: _____
T.O.C. Elev. (ft): 5448.8
Total Well Depth (ft): [illegible]

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations

NO Sample NAPL Present

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Napthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water: _____
Collected Samples Stored on Ice in Cooler: _____
Chain of Custody Record Complete: _____
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD	Animas Environmental Services
Monitor Well No: TW-26	624 E Comanche, Farmington NM 87401 Tel. (505) 564-2281 Fax (505) 324-2022

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CD
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W (ft): ____ Time: ____ (taken at initial gauging of all wells)
Confirm D.T.W. (ft): ____ Time: ____ (taken prior to purging well)
Final D.T.W (ft): ____ Time: ____ (taken after sample collection)
If NAPL Present: D.T.P.: 15.99 D.T.W.: 16.50 Thickness: 0.96 Time: 1707

Project No.: AES 050204
Date: 5-17-11
Arrival Time: 1707
Air Temp: ____
T.O.C. Elev. (ft): 5450.34
Total Well Depth (ft): [illegible]

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
			-				
		Sample					
	ND						
		NAPL present					

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water: ____
Collected Samples Stored on Ice in Cooler: ____
Chain of Custody Record Complete: ____
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-28

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CD
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): ____ Time: ____ *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): ____ Time: ____ *(taken prior to purging well)*
Final D.T.W. (ft): ____ Time: ____ *(taken after sample collection)*
If NAPL Present: D.T.P.: 15.19 D.T.W.: 16.09 Thickness: 0.90 Time: 1715

Project No.: AES 050204
Date: 5-17-11
Arrival Time: 1715
Air Temp: ____
T.O.C. Elev. (ft): 5449.24
Total Well Depth (ft): [illegible]

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations

No Sample - NAPL Present

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water: ____
Collected Samples Stored on Ice in Cooler: ____
Chain of Custody Record Complete: ____
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-29

Animas Environmental Services

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CD
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): _____ **Time:** _____ *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): _____ **Time:** _____ *(taken prior to purging well)*
Final D.T.W. (ft): _____ **Time:** _____ *(taken after sample collection)*
If NAPL Present: D.T.P.: 9.55 D.T.W.: 9.93 Thickness: 0.48 Time: 17:50

Project No.: AES 050204
Date: 5-17-11
Arrival Time: 17:50
Air Temp: _____
T.O.C. Elev. (ft): 5441.87
Total Well Depth (ft): _____

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations

No sample NAPL Present

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water: _____
Collected Samples Stored on Ice in Cooler: _____
Chain of Custody Record Complete: _____
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 03/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-32

Animas Environmental Services

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): _____ **Time:** _____ *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): _____ **Time:** _____ *(taken prior to purging well)*
Final D.T.W. (ft): _____ **Time:** _____ *(taken after sample collection)*
If NAPL Present: D.T.P.: 9.26 D.T.W.: 10.72 Thickness: 1.46 Time: 1803

Project No.: AES 050204
Date: 5-17-11
Arrival Time: 1803
Air Temp: _____
T.O.C. Elev. (ft): 5441.61
Total Well Depth (ft): _____

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
		No Sample					
		NAPL	Present				

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water. _____
Collected Samples Stored on Ice in Cooler: _____
Chain of Custody Record Complete: _____
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-33

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CD
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): ____ Time: ____ (taken at initial gauging of all wells)
Confirm D.T.W. (ft): ____ Time: ____ (taken prior to purging well)
Final D.T.W. (ft): ____ Time: ____ (taken after sample collection)
If NAPL Present: D.T.P.: 12.80 D.T.W.: 12.82 Thickness: 0.02 Time: 1722

Project No.: AES 050204
Date: 5-17-11
Arrival Time: 1722
Air Temp: ____
T.O.C. Elev. (ft): 5445.85
Total Well Depth (ft): ____

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
		No Sample					
		Present					
		NAPL					

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water: ____
Collected Samples Stored on Ice in Cooler: ____
Chain of Custody Record Complete: ____
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-36

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CS
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): ____ Time: ____ (taken at initial gauging of all wells)
Confirm D.T.W. (ft): ____ Time: ____ (taken prior to purging well)
Final D.T.W. (ft): ____ Time: ____ (taken after sample collection)
If NAPL Present: D.T.P.: 12.97 D.T.W.: 12.98 Thickness: 0.01 Time: 11:15

Project No.: AES 050204
Date: 5-17-11
Arrival Time: 11:15
Air Temp: ____
T.O.C. Elev. (ft): 5441.91
Total Well Depth (ft): 20.35

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
	NO	Sample					
	NAPL	Present					

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water: ____
Collected Samples Stored on Ice in Cooler: ____
Chain of Custody Record Complete: ____
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-37

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CD
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 10.51 Time: 1530 (5-18-11) (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 10.50 Time: 1448 (taken prior to purging well)
Final D.T.W. (ft): Time: (taken after sample collection)
If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Project No.: AES 050204
Date: 5-18-11
Arrival Time: 1445
Air Temp: 57°
T.O.C. Elev. (ft): 5439.59
Total Well Depth (ft): 16.5

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1454	13.42	4.162	0.77	7.05	-13.9	0.50	
1500						3 C	

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No. **TW-38**

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CD
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 11.42 Time: 1533 (5-17-11) *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 11.40 Time: 1427 *(taken prior to purging well)*
Final D.T.W. (ft): Time: *(taken after sample collection)*
If NAPL Present: D.T.P.: D.T.W.: Thickness Time:

Project No.: AES 050204
Date: 5-18-11
Arrival Time: 1425
Air Temp: 60
T.O.C. Elev. (ft): 5442.11
Total Well Depth (ft): 15.5

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1435	13.91	3.756	0.97	7.06	-14.3	0.50	
1442						SC	

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-39

Animas Environmental Services

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: C.D
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 7.23 **Time:** 1501 (5-17-11) *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 7.22 **Time:** 0635 *(taken prior to purging well)*
Final D.T.W. (ft): **Time:** *(taken after sample collection)*
If NAPL Present: D.T.P.: D.T.W. **Thickness:** Time:

Project No.: AES 050204
Date: 5-19-11
Arrival Time: 0630
Air Temp: 36°
T.O.C. Elev. (ft): 5438.43
Total Well Depth (ft):

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
0642	11.84	4.654	1.00	9.13	-18.2	0.50	
0648	—	—	—	—	—	SC	—

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-40

Animas Environmental Services

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CD
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): _____ Time: _____ *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): _____ Time: _____ *(taken prior to purging well)*
Final D.T.W. (ft): _____ Time: _____ *(taken after sample collection)*
If NAPL Present: D.T.P.: 7.72 D.T.W.: 8.19 Thickness: 0.47 Time: 12:50

Project No.: AES 050204
Date: 5-19-11
Arrival Time: 12:50
Air Temp: _____
T.O.C. Elev. (ft): 5437.5
Total Well Depth (ft): _____

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
		Sample					
	ND		Present				
		NAPL					

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water: _____
Collected Samples Stored on Ice in Cooler: _____
Chain of Custody Record Complete: _____
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

MONITORING WELL SAMPLING RECORD

Monitor Well No: **TW-41**

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 5.92 Time: 1511 (5-19-11) (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 5.90 Time: 1612 (taken prior to purging well)
Final D.T.W. (ft): Time: (taken after sample collection)
If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Project No.: AES 050204
Date: 5-18-11
Arrival Time: 1600
Air Temp: 48°
T.O.C. Elev. (ft): 5434.77
Total Well Depth (ft):

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1608	13.17	5.1675	0.78	7.05	-13.9	0-50	
1623						5 C	

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-43

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 12.15 Time: 1525 (5-17-11) (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 12.15 Time: 1505 (taken prior to purging well)
Final D.T.W. (ft): Time: (taken after sample collection)
If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Project No.: AES 050204
Date: 5-18-11
Arrival Time: 1503
Air Temp: 52°
T.O.C. Elev. (ft): 5440.42
Total Well Depth (ft): 18.86

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1510	13.07	5.144	0.44	6.93	-7.1	0.50	
1513	---	---	---	---	---	5C	---

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments

revised: 08/10/09

MONITORING WELL SAMPLING RECORD	Animas Environmental Services
Monitor Well No: TW-44	624 E. Comanche, Farmington NM 87401 Tel. (505) 564-2281 Fax (505) 324-2022

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CD
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): _____ Time: _____ *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): _____ Time: _____ *(taken prior to purging well)*
Final D.T.W. (ft): _____ Time: _____ *(taken after sample collection)*
If NAPL Present: D.T.P.: 14.96 D.T.W.: 15.01 Thickness: 0.05 Time: 1725

Project No.: AES 050204
Date: 5-17-11
Arrival Time: 1725
Air Temp: _____
T.O.C. Elev. (ft): 5444.08
Total Well Depth (ft): 20.45

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
	No	Sample					
		Present					
	NAPL						

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water: _____
Collected Samples Stored on Ice in Cooler: _____
Chain of Custody Record Complete: _____
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised, 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-45

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: Chad Dawson
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 7.20 Time: 1540 (5-17-11) *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 7.21 Time: 0935 *(taken prior to purging well)*
Final D.T.W. (ft): Time: *(taken after sample collection)*
If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Project No.: AES 050204
Date: 5-18-11
Arrival Time: 0935
Air Temp: 56°
T.O.C. Elev. (ft):
Total Well Depth (ft):

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
0944	12.18	3.754	0.89	7.81	-11.5	0.50	Red in Color
0950/0952	11.97	3.793	0.84	6.98	-9.7	2.00	
0950						SC	

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0 TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-46

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: Chad Dawson
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W (ft): 6.89 Time: 1542 (5-17-11) (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 6.90 Time: 0957 (taken prior to purging well)
Final D.T.W. (ft): Time: (taken after sample collection)
If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Project No.: AES 050204
Date: 5-18-11
Arrival Time: 0957
Air Temp: 57°
T.O.C. Elev. (ft):
Total Well Depth (ft):

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1010	12.26	2.778	0.92	7.12	-17.7	2.5	
1015						5C	

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: TW-50

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CD
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): ~~7.89~~ 7.89 Time: 1458 (5-17-11) (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 7.89 Time: 0653 (taken prior to purging well)
Final D.T.W. (ft): Time: (taken after sample collection)
If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Project No.: AES 050204
Date: 5-19-11
Arrival Time: 0650
Air Temp.: 41°
T.O.C. Elev. (ft):
Total Well Depth (ft):

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
0659	12.42	5.337	0.78	7.13	-18.3	0.50	
0705	———	———	———	———	———	SC ———	———

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-20

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: Chad Dawson
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 5.88 Time: 1545 (5-17-11) *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 5.88 Time: 0911 *(taken prior to purging well)*
Final D.T.W. (ft): Time: *(taken after sample collection)*
If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Project No.: AES 050204
Date: 5-18-11
Arrival Time: 0900
Air Temp: 54°
T.O.C. Elev. (ft): 5430.45
Total Well Depth (ft):

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
0920	12.30	4.066	0.85	7.05	-73.9	0.5	
0925	11.33	3.637	0.69	6.99	-60.6	2.0	
0931						SC	

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 ml, Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: **MW-21**

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 3.52 Time: 1409 (5-18-11) *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 3.52 Time: 1019 *(taken prior to purging well)*
Final D.T.W. (ft): Time: *(taken after sample collection)*
If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Project No.: AES 050204
Date: 5-18-11
Arrival Time: 1017
Air Temp: 55
T.O.C. Elev. (ft): 5428.62
Total Well Depth (ft):

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1024	13.38	5.024	0.75	7.07	-15.1	0.50	
1031	13.05	5.026	1.05	7.07	-14.8	2.00	
1040						SC	

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: _____

Animas Environmental Services

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: _____
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): _____ **Time:** _____ *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): _____ **Time:** _____ *(taken prior to purging well)*
Final D.T.W. (ft): _____ **Time:** _____ *(taken after sample collection)*
If NAPL Present: **D.T.P.:** _____ **D.T.W.:** _____ **Thickness:** _____ **Time:** _____

Project No.: AES 050204
Date: _____
Arrival Time: _____
Air Temp: _____
T.O.C. Elev. (ft): _____
Total Well Depth (ft): _____

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water: _____
Collected Samples Stored on Ice in Cooler: _____
Chain of Custody Record Complete: _____
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keuk Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 05/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: _____

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

Site: Thriftway #810 Refinery
Location: Bloomfield, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: _____
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): _____ Time: _____ *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): _____ Time: _____ *(taken prior to purging well)*
Final D.T.W (ft): _____ Time: _____ *(taken after sample collection)*
If NAPL Present: D.T.P.: _____ D.T.W.: _____ Thickness: _____ Time: _____

Project No.: AES 050204
Date: _____
Arrival Time: _____
Air Temp: _____
T.O.C. Elev. (ft): _____
Total Well Depth (ft): _____

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX, MTBE and Total Naphthalene per EPA Methods 8260 (3-40 mL Vials w/ HCl preserve)
Chloride/Sulfate per EPA Method 300.0, TDS per 2540C(1-500 mL plastic w/ no preserve)

Disposal of Purged Water: _____
Collected Samples Stored on Ice in Cooler: _____
Chain of Custody Record Complete: _____
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

revised: 08/10/09