GW - 55

REPORTS

Date:

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AES Animas Environmental Services, LLC

624 E. Comanche . Farmington, NM 87401 . TEL 505-564-2281 . FAX 505-324-2022 . www.animasenvironmental.com

GW-55

August 9, 2010

Glen 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 2010 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 Remedial Progress Report 2010 detailing remedial activities during the second quarter on behalf of Thriftway Company (Thriftway) for the Thriftway Refinery, located at 626 County Road 5500, Bloomfield, San Juan County, New Mexico, in accordance with New Mexico Oil Conservation Division (NMOCD) and New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) regulations.

This report details groundwater monitoring and sampling activities conducted at the site during May 2010. Also included within this report are summaries of recent site activities including monitor well installation, multi-phase extraction (MPE) well installation and MPE system operations from April 1 to June 30, 2010. A General Site Plan is included as Figure 1.

1.0 Installation of Monitor Wells TW-45 through TW-50

BioTech Remediation, Inc. (BioTech) installed six on- and off-site 2-inch diameter monitor wells (TW-45 through TW-50) in May 2010. TW-45 through TW-47 and TW-50 were installed to delineate the down-gradient extent of the contamination, while TW-48 and TW-49 were installed to monitor the effect the poplar trees are having on groundwater contaminant concentrations. Note that TW-49 was not installed in the planned location due to inaccessibility by the drill rig or backhoe. Boring/well completion depths were to approximately 10 feet below ground surface (bgs). Monitor wells were installed with a hollow-stem auger drill rig by BioTech Remediation, Inc. (BioTech), with the exception of monitor well TW-49 which was installed by a backhoe due to the close proximity of Kutz

Wash. The locations of the groundwater monitor wells are shown on Figure 1. Site lithology and monitor well construction details are presented on the soil boring logs located in Appendix A (electronic).

1.1.1 Monitor Well Development

The newly installed monitor wells were developed by BioTech personnel using a combination of bailing and a pneumatic well development pump in order to remove sand and fine sediments. Approximately 15 to 20 gallons were removed from each of the wells. Groundwater pumped from the wells was placed in the two lined ponds for evaporation. The monitor wells were developed in general accordance with the AES Well Installation and Development Standard Operating Procedure (SOP) and applicable ASTM standards. Well development forms are presented in Appendix A (electronic).

2.0 Groundwater Monitoring and Sampling

BioTech conducted groundwater monitoring and sampling at the site between May 7 and 17, 2010. Note that the surface completions of monitor wells TW-19 and TW-21 were damaged during refinery dismantling activities in late 2009. BioTech repaired the surface casing of TW-19 during the second quarter of 2010, but the damage to TW-21 was beyond repair. The table below, taken from the Interim Groundwater Sampling Plan submitted to NMOCD on January 25, 2010, lists wells that were gauged and/or sampled during the May 2010 sampling event.

Year 1 Quarterly Gauging/Sampling Monitor Well List

Well Name	***Gauging Only***	***Gauging and Sampling***
TW-1 through TW-10	X	
TW-11 through TW-12		X
TW-13 through TW-14		X*
TW-15 through TW-17	X	
TW-18		X
TW-19 through TW-22 *(TW-21 damaged beyond repair)*		X*
TW-23	X	
TW-24		X
TW-25 through TW-29		X*
TW-30 through TW-31		X
TW-32 through TW-33		X*
TW-34 through TW-35		X
TW-36 through TW-39		X

Well Name	***Gauging Only***	***Gauging and Sampling***
TW-40		X*
TW-41 through TW-43		X
TW-44		X*
**TW- 45 through TW-50		X
MW-5, MW-20, MW-21		X
**MW-7		X
* Well currently has measurable NAPL, but will be added to the sampling list during the first quarter in which NAPL is not observed. ** Wells added to the monitor well list during the second quarter 2010.		

2.1 Well Development of MW-7

Monitor well MW-7 was included within the sampling list to assist in monitoring the effect the poplar trees are having on dissolved phase contaminant concentrations. Because MW-7 had not been sampled since 2006, it was evaluated by BioTech prior to sampling. The evaluation consisted of 1) measuring the depth to groundwater in the well; 2) measuring the total depth of the well; and 3) bailing the well to ensure that water would recharge into the well during sample purging. Following well evaluation, Biotech re-developed the well following standard development procedures.

2.2 Measurement of Groundwater Elevations

Before collection of groundwater samples, 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.

2.3 Measurement of Free Product

Each of the wells 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 2010 in a total of 13 wells, including TW-13, TW-14, TW-19, TW-20, TW-22, TW-25, TW-26, TW-28, TW-29, TW-32, TW-33, TW-40, and TW-44. Monitor wells containing free product were not sampled during May 2010.

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)

2.4 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 to the extent possible, 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.

2.5 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

2.6 Laboratory Analyses

Samples collected from 25 wells, including TW-11, TW-12, TW-18, TW-24, TW-30, TW-31, TW-34 through TW-39, TW-41 through TW-43, TW-45 through TW-50, MW-5, MW-7, MW-20, and MW-21, were analyzed for the following:

- Total Petroleum Hydrocarbons (TPH) for Gasoline Range Organics (GRO), Motor Oil Range Organics (MRO), and Diesel Range Organics (DRO) per EPA Method 8015B;
- BTEX, MTBE, and naphthalene per EPA Method 8260;
- Total Dissolved Solids (TDS) per Standard Method 2540C.

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

3.0 Groundwater Monitoring and Sampling Results

3.1 Hydraulic Gradient and Water Quality Data

3.1.1 Hydraulic Gradient

Using surveyed 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 2010 ranged from 5,424.65 feet above mean sea level (AMSL) in MW-5 to 5,441.15 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 2010. Groundwater gradient was calculated between TW-1 and MW-5 with a magnitude of 0.008 ft/ft to the northwest for May 2010. The groundwater flow direction has remained stable, in a northwesterly direction, which is consistent with historical site data.

Table 1 includes depth to groundwater measurements and final water table elevations. Groundwater elevation contours for May 2010 are included on Figure 2. Electronic copies of the Water Sample Collection Forms are included in Appendix A.

3.1.2 Water Quality Data

During the purging of each well prior to sampling, water quality data was recorded for all wells being sampled until temperature, pH, conductivity, and dissolved oxygen (DO) measurements stabilized. Recorded temperatures during the May 2010 sampling event ranged from 10.89 °C in MW-20 to 16.95 °C in TW-14. Groundwater pH ranged between 6.77 in TW-30 and 7.73 in TW-49, and conductivity readings were between 3.295 mS in

TW-12 and 11.86 mS in TW-47. Dissolved oxygen concentrations ranged from 0.75 mg/L in TW-18 to 4.93 mg/L in TW-45.

3.2 Free Product

Free product (LNAPL) was measured in 13 monitor wells:, including TW-13, TW-14, TW-19, TW-20, TW-22, TW-25, TW-26, TW-28, TW-29, TW-32, TW-33, TW-40, and TW-44. Measured LNAPL thicknesses ranged from a sheen (TW-14) to 1.12 feet (TW-40). Free product thickness contours for May 2010 are presented in Figure 3.

3.3 Dissolved Phase Contaminant Concentrations

3.3.1 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 18 wells sampled, including TW-37 (490 µg/L), TW-38 (63 µg/L), TW-39 (17 µg/L), TW-41 (180 µg/L), TW-50 (72 µg/L), and MW-7 (17 µg/L). Dissolved phase benzene concentration contours for May 2010 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 (2,300 µg/L) and TW-50 (1,200 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 2010, including TW-37 (150 µg/L), TW-38 (110 µg/L), TW-43 (380 µg/L), TW-45 (160 µg/L), TW-46 (110 µg/L), and MW-20 (180 µg/L). All other wells were either below the laboratory detection limit of 1.0 µg/L or below applicable WQCC standards. MTBE concentration contours for May 2010 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, including TW-41 (41 µg/L) and TW-50 (63 µg/L). The remaining wells sampled were either below laboratory detection limits or below the applicable WQCC standard.

Dissolved phase TPH-GRO concentrations outside the area of free product ranged from below laboratory detection limits of 0.050 mg/L to 7.7 mg/L (TW-50). TPH-MRO concentrations were below laboratory detection limits of 5.0 mg/L in all sampled wells, except TW-41, which was below the laboratory detection limit of 15 µg/L. TPH-DRO

concentrations ranged from below laboratory detection limits of 1.0 mg/L to 8.7 mg/L (TW-24).

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

3.3.3 Geochemical Parameters

TDS concentrations were above the WQCC standard of 1,000 mg/L in all wells sampled, with the highest TDS concentrations detected in TW-47 (10,000 mg/L). Laboratory data have been summarized in Table 2. Electronic copies of laboratory analytical reports are included in Appendix A.

4.0 MPE System Installation and Free Product Measurement

4.1 Installation of MPE Wells

BioTech installed 20 multi-phase extraction (MPE) wells at the site as part of Phase 3 (June 2010). The MPE wells were installed on 60-foot centers in order to provide a full radius of influence of up to 40 feet from each well, as presented in the Corrective Action Plan (CAP). All MPE wells were completed to 3 feet above grade and were manifolded together with 2-inch diameter vacuum hose. Soil boring logs for MPE-39 through MPE-58, along with remediation well construction schematics, are included in Appendix A, along with ambient air monitoring results recorded during MPE well installation.

4.2 Development of MPE Wells

MPE wells were developed by BioTech personnel using a combination of surge and pump techniques. Approximately 15 to 30 gallons of water from Phase 3 wells (MPE-39 through MPE-58). Groundwater pumped from the wells was placed in the two lined ponds for evaporation. The MPE wells were developed in general accordance with AES' Well Installation and Development SOP and applicable ASTM standards. Well development forms are presented in Appendix A.

4.3 Measurement of Groundwater in MPE Wells

BioTech personnel measured depth to groundwater in the Phase 1 and 2 MPE wells on May 10 and 18, 2010. Depth to water ranged from 18.58 feet below TOC in MPE-20 to 23.46 feet below TOC in MPE-1. On May 18, 2010, free product was reported in MPE-26 (0.80 feet), MPE-35 (0.33 feet), and MPE-38 (0.91 feet). Additionally, MPE-22, MPE-26, MPE-35, MPE-36, and MPE-37 were measured on again on June 9, 2010. On June 9, 2010, free product was observed within MPE-22 (0.50 feet), MPE-26 (1.17 feet), and MPE-35

(0.53 feet). However, MPE-22 and MPE-35 did not contain any measurable free product when depth to water measurements were taken a third time on June 16, 2010.

BioTech personnel measured the depth to groundwater in the Phase 3 MPE wells on June 18, 2010. Depth to groundwater ranged from 13.80 feet below TOC in MPE-56 to 21.16 feet below TOC in MPE-46. A sheen of free product was observed in MPE-45. No other Phase 3 MPE wells had measurable free product as of June 18, 2010. MPE well data is included in Table 3.

5.0 MPE Remediation System

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. Based on operations from April 1 to June 30, 2010, the following MPE active well summary is presented:

Engine #1 Active MPE Well Summary, Thriftway Refinery, Bloomfield, New Mexico

Date of MPE Adjustments	Engine #1-(operating within the following MPE Wells)
April 1, 2010	MPE-21, MPE-22, MPE-35, MPE-36, MPE-37, and MPE-38
April 13, 2010	MPE-25, MPE-26, MPE-31, MPE-33, and MPE-34
April 19, 2010	MPE-22, MPE-37, and MPE-38
April 26, 2010	MPE-22, MPE-36, MPE-37, and MPE-38
May 6, 2010	Unit Down-Carburetor (May 6-20)
May 20, 2010	MPE-2, MPE-6, MPE-7, MPE-13, MPE-16, MPE-26
May 27, 2010	MPE-2, MPE-6, MPE-7, MPE-16, MPE-26
May 28, 20100	MPE-23, MPE-24, MPE-26, MPE-34
May 31, 2010	Unit Down-V Lim Fault (May 31- June 30)

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

Date of MPE Adjustments	Engine #2-(operating within the following MPE and monitor wells)
April 1, 2010	MPE-2, MPE-5, MPE-19
April 1, 2010	Shut down unit-LP Meter Leak (April 1-7)
April 7, 2010	MPE-2, MPE-5, MPE-19, and MPE-23
April 13, 2010	MPE-16, MPE-17, MPE-18, MPE-19, MPE-20, and MPE-23
April 19, 2010	MPE-2, MPE-5, MPE-6, MPE-7, MPE-18, and MPE-21
April 23, 2010	MPE-2, MPE-5, MPE-6, MPE-7, MPE-10, MPE-21, and MPE-35
May 13, 2010	MPE-2, MPE-5, MPE-6, MPE-7, MPE-18, MPE-21, MPE-22, MPE-35, MPE-36, MPE-37, and MPE-38
May 17, 2010	MPE-2, MPE-5, MPE-6, MPE-7, MPE-10, MPE-21, MPE-22, MPE-35, MPE-36, MPE-37,and MPE-38
May 20, 2010	MPE-22, MPE-35, MPE-36, MPE-37, and MPE-38
June 7, 2010	MPE-22, MPE-26, MPE-35, MPE-36, MPE-37, and MPE-38
June 16, 2010	MPE-26, MPE-35, MPE-37, and MPE-38
June 21, 2010	TW-13, MPE-22, MPE-35, MPE-36, MPE-37, and MPE-38
June 29, 2010	TW-13, MPE-35, MPE-38, MPE-41, MPE-42, MPE-43, and MPE-44

Figure 6 includes the MPE well locations.

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 has remained off-line since June 1, 2010, due to a mechanical issue. It is anticipated that Engine #1 will remain off-line during the third quarter of 2010.

In Engine #1, well vacuums for the reporting period from April 1 through June 30, 2010, ranged from approximately 10 to 60 in-H_2O during MPE operations, with total process flow typically ranging between 10 and 70 standard cubic feet per minute (scfm). Well flow dilution air is estimated to be approximately 10 percent at each well (as needed to lift product).

In Engine #2, well vacuums for the reporting period from April 1 through June 30, 2010, ranged from approximately 5 to 60 in-H_2O during MPE operations, with total process flow typically ranging between 10 and 50 scfm. Well flow dilution air is estimated to be approximately 10 percent at each well (as needed to lift product).

5.1 System Operations

Based on system operations from April 1 to June 30, 2010, the following remedial summary is presented:

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

Parameters	*Engine #1 Reporting Period (4/1/10—6/30/10)*	*Engine #2 Reporting Period (4/1/10 – 6/30/10)*	*Total Cumulative to Date*
Estimated Petroleum Hydrocarbons Removed (lbs)*	2,320.49	4,901.17	10,184.16
Equivalent Gallons Gasoline Removed (gal)*	374.33	790.6	1,642.66
Total Cubic Feet Processed (scf)	1,529,241	4,089,207	7,261,456

*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 2010	1004.5	46%	1903.0	87%

An operations report (electronic) from April 1 through June 30, 2010, is presented in Appendix A.

5.2 Air Emissions Sampling

Influent and effluent total volatile hydrocarbon (TVH) samples were not collected from the pre-cat and post-cat sample ports during the second quarter. Air emissions is scheduled for August 2010.

6.0 Site Phytoremediation Project

BioTech completed installation of the phytoremediation irrigation system during in April 2010. Hybrid poplar tree planting was initiated during the week of April 12, 2010. The work included the planting of approximately 500 trees along the western half of the north fence line of the property (an area approximately 500 feet long). Trees were planted in

rows 10 feet apart (to provide adequate access into the stand for maintenance and monitoring), and plants were spaced 5 feet along rows as described within the phytoremediation plan. Additional plantings of four wing saltbush were completed by BioTech personnel and New Mexico State University (NMSU) Farmington Agricultural Experiment Center staff in August 2010. Planting of the remaining proposed phytoremediation area, located along the western north fence line and along the west fence line, is tentatively scheduled to occur in the spring of 2011. The phytoremediation area is included on Figure 1.

Based on field observations made during a site visit in May 2010, NMSU Agriculture representatives requested that BioTech collect a composite soil sample from the tree farm testing for calcium, iron, magnesium, sodium, and specific conductance. BioTech collected four equal samples from four random locations within the tree farm on May 13, 2010. The four equal samples were mixed, and the composited sample was placed into two 4 ounce glass jars. The sample was analyzed at Hall for calcium, iron, magnesium, and sodium per EPA Method 8010B and for specific conductance. The following soil concentrations were reported in the analytical report:

- Calcium at 3,400 mg/kg;
- Iron at 4,900 mg/kg;
- Magnesium at 660 mg/kg;
- Sodium at 470 mg/kg; and
- Specific Conductance at 800 µmhos/cm.

A copy of the laboratory analytical reports are included within Appendix A.

7.0 Summary and Conclusions

BioTech personnel installed six groundwater monitor wells, MW-45 through MW-50, in May 2010 in an effort to fully define the downgradient edge of the dissolved phase plume. Newly installed wells were included within the May 2010 groundwater monitoring and sampling event. BioTech personnel conducted groundwater sampling at the site in May 2010 according to the Interim Groundwater Sampling Plan approved by the OCD in correspondence dated February 1, 2010.

Groundwater elevations in May 2010 increased by an average of 0.16 feet since February 2010, but this increase is 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 consistent with historical site data.

In May 2010, free product was observed and measured in 13 monitor wells, including TW-13, TW-14, TW-19, TW-20, TW-22, TW-25, TW-26, TW-28, TW-29, TW-32, TW-33, TW-40, and TW-44. Measured thicknesses ranged from a sheen (TW-14) to 1.12 feet (TW-40). In May and June 2010, free product was also observed in wells MPE-22, MPE-26, MPE-35, MPE-38, and MPE-45. No measurable free product was found within Phase 1 MPE wells this quarter.

Based upon the analytical results for the May 2010 sampling event, dissolved phase contaminant concentrations of benzene, ethylbenzene, MTBE, and TDS exceeded the New Mexico WQCC standards in several wells. The highest benzene concentration was reported at 490 µg/L in TW-37. Xylene concentrations were above the applicable WQCC standard of 620 µg/, in TW-41 (2,300 µg/L) and TW-50 (1,200 µg/L). The highest MTBE concentration was detected in TW-43 (380 µg/L). Wells TW-41 and TW-50 exceeded the WQCC standard for naphthalene. TDS concentrations were reported above the WQCC standard of 1,000 mg/L in all sampled wells, ranging from 3,250 mg/L (TW-37) to 10,000 mg/L (TW-47), which is consistent with historical site data

Twenty new MPE wells were installed as part of Phase 3 of free product recovery efforts at the site. The MPE remediation unit has been operating since March 10, 2010, when both engines (Engine #1 and Engine #2) were started. Based on system data and field monitoring measurements, AES estimates that approximately **7,222 lbs** of petroleum hydrocarbons have been removed as vapor and utilized as supplementary fuel for the RSI unit during the reporting period of April 1 through June 30, 2010. A total of 10,184 lbs of petroleum hydrocarbons have been mechanically removed from the site since system startup on March 10, 2010.

8.0 Recommendations and Scheduled Site Activities

The following items are scheduled to occur during the 3rd Quarter 2010:

Phase 4 site grading and MPE well installations are scheduled to occur during the third quarter 2010. Approximately 21 MPE wells (MPE-59 through MPE-80) are planned for Phase 4. Following installation, BioTech will develop the MPE wells according to standard development procedures as outlined within the CAP.

In accordance with the conditions of the Interim Groundwater Sampling Plan approval by NMOCD, the next quarterly sampling event will begin on about August 15, 2010. AES recommends that seven monitor wells, including TW-11, TW-18, TW-30, TW-31, TW-34,

TW-35, and MW-5, be removed from quarterly sampling and started on annual sampling, based on analytical results which show these wells have remained below laboratory detection limits for several quarters. The August sampling event will include the previously selected wells and additional monitor wells TW-45 through TW-50 and MW-7. Wells found to contain NAPL will not be sampled.

It is anticipated that Engine #1 of the MPE Remediation Unit will continue to remain off-line during the third quarter of 2010, while the unit undergoes a major engine re-build. BioTech will collect air emission samples from the well gas influent and from the pre-cat and post-cat sample ports from Engine #2. These air samples will be analyzed for volatile organic compounds 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

Figures

Appendices

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

TABLE 1

SUMMARY OF RECENT GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Thriftway Refinery, 626 CR 5500, Bloomfield, New Mexico

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-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-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-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

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-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-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
TW-6	10-May-10	5463.57		24.54		5439.03	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-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

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-8	10-May-10	5458.29		19.73		5438.56	NM	NM	NM	NM	NM	NM
TW-9	16-Dec-08	5450.61		12.20		5438.41	6.90	3.473	2.27	14.53	15.6	1.25
TW-9	26-Jan-09	5450.61		12.05		5438.56	NM	NM	NM	NM	NM	NM
TW-9	20-Aug-09	5450.61		12.49		5438.12	7.57	2.397	1.33	16.93	269.2	2.50
TW-9	19-Feb-10	5450.61		11.99		5438.62	NM	NM	NM	NM	NM	NM
TW-9	10-May-10	5450.61		11.89		5438.72	NM	NM	NM	NM	NM	NM
TW-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-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-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

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-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-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-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					
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-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

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-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-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-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-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									

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	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
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-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-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

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-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-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
TW-24	11-May-10	5444.79		10.63		5434.16	7.05	4.70	0.33	14.39	229	3.75
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-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

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-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-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	16.31	1.04	5433.79	Not Sampled - NAPL present					
TW-28	12-Nov-09	5449.24	15.35	16.74	1.39	5433.65	NM	NM	NM	NM	NM	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-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-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-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-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-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-34	18-Dec-08	5455.80		19.82		5435.98	7.48	6.744	3.97	14.29	-183.8	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-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-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-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-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

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	17-Dec-08	5442.11		9.55		5432.56	6.95	5.466	4.06	12.82	-179.3	1.25
TW-38	26-Jan-09	5442.11		11.36		5430.75	NM	NM	NM	NM	NM	NM
TW-38	21-Aug-09	5442.11	11.57	11.58	0.01	5430.54	Not Sampled - NAPL Present					
TW-38	12-Nov-09	5442.11	11.64	11.70	0.06	5430.46	NM	NM	NM	NM	NM	NM
TW-38	18-Feb-10	5442.11		11.28		5430.83	6.73	7.314	0.57	12.54	549.0	2.10
TW-38	12-May-10	5442.11		11.09		5431.02	7.06	4.741	2.37	12.83	205.3	3.75
TW-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-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-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

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-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-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-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
TW-43	12-May-10	5440.42		11.82		5428.60	7.01	4.736	1.60	12.89	225.4	3.75
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-45	13-May-10	TBS		6.58			7.01	5.204	4.93	11.52	179.0	3.75

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

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Corrected GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	Purge Volume (gallons)
TW-46	13-May-10	TBS		6.86			7.15	4.889	4.72	12.28	206.5	3.75
TW-47	13-May-10	TBS		6.04			7.23	11.86	3.36	12.89	214.8	3.75
TW-48	12-May-10	TBS		6.90			6.95	5.924	3.43	13.25	231.8	3.75
TW-49	17-May-10	TBS		5.32			7.73	6.88	3.06	15.48	228.50	0.00
TW-50	12-May-10	TBS		7.30			6.92	5.815	1.25	13.27	231.5	3.75
MW-5	19-Dec-08	5428.97		5.04			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-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
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		

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	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-20	31-Jan-02	5430.45		6.04								P
MW-20	26-Jul-02	5430.45		6.31			7.2	2.95	1.22	79.6		P
MW-20	20-Nov-02	5430.45		5.85			7.1	1.9	0.30	55.0		P
MW-20	5-Jun-03	5430.45		5.89			7.1	3.43	1.58	58.1		
MW-20	20-Jan-04	5430.45		6.08			7.5	0.35	3.23	51.8		P
MW-20	25-May-04	5430.45		5.90			7.1	4.01	1.2	72.3		1.5
MW-20	27-Jul-04	5430.45		6.29			7.0	5.12		66.1		B
MW-20	29-Dec-04	5430.45		6.07								MP
MW-20	1-Apr-05	5430.45		5.69			6.5	2.378	0.55	54.4		
MW-20	19-Sep-05	5430.45		6.02			7.0	3.466	0.37	66.1		
MW-20	4-Jan-06	5430.45		5.85			7.0	3.47	0.6	12.3		3
MW-20	28-Jun-06	5430.45		6.18			6.7	4.979	0.34	17.8		3
MW-20	28-Dec-06	5430.45		5.50			7.0	8.505	0.51	8.9		3
MW-20	2-Jul-07	5430.45		5.75			7.0	4.841	1.32	16.09		2.6
MW-20	18-Dec-07	5430.45		5.89			7.05	5.621	2.89	12.10		1.25
MW-20	21-Jan-09	5430.45		5.86			6.73	5.996	3.58	8.34		0.5
MW-20	18-Feb-10	5430.45		5.81		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

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	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		
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

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-8	16-Dec-08	**120**	15	330	**950**	<5.0	**92**	8.9	1.4	<5.0	NA
TW-8	19-Aug-09	**26**	<1.0	82	130	<1.0	<2.0	1.7	<1.0	<5.0	**4,490**

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-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-13	17-Dec-08	**Not Sampled-NAPL present**									
TW-13	21-Aug-09	**Not Sampled-NAPL present**									
TW-13	17-Feb-10	**Not Sampled-NAPL present**									
TW-13	7-May-10	**Not Sampled-NAPL present**									
TW-14	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-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-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**
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-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									

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-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-21	17-Dec-08	Not Sampled-NAPL present									
TW-21	21-Aug-09	Not Sampled-NAPL present									
TW-21	17-Feb-10	Not Sampled-Surface Casing Damaged									
TW-21	7-May-10	Not Sampled-Surface Casing Damaged									
TW-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-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**

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-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-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-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-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**

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-30	11-May-10	<1.0	<1.0	<1.0	<2.0	21	<2.0	0.071	<1.0	<5.0	**4,310**
TW-31	16-Dec-08	<1.0	<1.0	<1.0	<1.5	12	<10	<0.050	<1.0	<5.0	NA
TW-31	21-Aug-09	<1.0	<1.0	<1.0	<1.5	16	<2.0	<0.050	<1.0	<5.0	**4,790**
TW-31	17-Feb-10	<1.0	<1.0	<1.0	<2.0	10	<2.0	<0.050	<1.0	<5.0	**4,690**
TW-31	11-May-10	<1.0	<1.0	<1.0	<2.0	9.2	<2.0	<0.050	<1.0	<5.0	**5,280**
TW-32	17-Dec-08	**Not Sampled-NAPL present**									
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-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-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

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	24-Aug-09	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<0.050	<1.0	<5.0	**6,700**
TW-35	18-Feb-10	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<0.050	<1.0	<5.0	**6,870**
TW-35	12-May-10	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<0.050	<1.0	<5.0	**6,250**
TW-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-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-38	17-Dec-08	**140**	<5.0	36	220	**190**	<50	0.99	<1.0	<5.0	NA
TW-38	21-Aug-09	**Not Sampled-NAPL present**									
TW-38	18-Feb-10	**26**	<1.0	6.3	18	88	<2.0	0.50	<1.0	<5.0	**4,070**
TW-38	12-May-10	**63**	<1.0	15	50	**110**	3.5	0.67	<1.0	<5.0	**4,210**
TW-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**

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-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-41	18-Dec-08	**480**	<50	570	**4,000**	<50	<500	8.4	2.0	<5.0	NA
TW-41	24-Aug-09	**170**	6.6	400	**2,000**	24	**49**	7.0	1.1	<5.0	**3,510**
TW-41	18-Feb-10	**140**	<10	400	**2,500**	24	**49**	7.7	1.5	<5.0	**4,230**
TW-41	12-May-10	**180**	<10	530	**2,300**	20	**41**	6.9	<3.0	<15	**4,590**
TW-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-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-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**

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	18-Feb-10	Not Sampled-NAPL present									
TW-44	7-May-10	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-46	13-May-10	<1.0	<1.0	<1.0	<2.0	**110**	<2.0	0.14	<1.0	<5.0	**4,080**
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-48	12-May-10	<1.0	<1.0	<1.0	<2.0	13	<2.0	0.061	<1.0	<5.0	**4,560**
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-50	12-May-10	**72**	<10	260	**1,200**	16	**63**	7.7	4.0	<5.0	**4,320**
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-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**

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	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-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**

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 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-2	03-Mar-10	TBD	21.51	21.54	0.03
MPE-2	18-May-10	TBD		21.29	
MPE-3	03-Mar-10	TBD		20.79	
MPE-3	10-May-10	TBD		20.63	
MPE-4	03-Mar-10	TBD		19.95	
MPE-4	10-May-10	TBD		19.80	
MPE-5	03-Mar-10	TBD	19.30	19.41	0.11
MPE-5	18-May-10	TBD		19.00	
MPE-6	03-Mar-10	TBD		19.66	
MPE-6	10-May-10	TBD		NM	
MPE-7	03-Mar-10	TBD		20.46	
MPE-7	10-May-10	TBD		NM	
MPE-8	03-Mar-10	TBD		21.74	
MPE-8	10-May-10	TBD		21.60	
MPE-9	03-Mar-10	TBD		23.44	
MPE-9	10-May-10	TBD		23.29	
MPE-10	03-Mar-10	TBD		23.28	
MPE-10	10-May-10	TBD		23.10	
MPE-11	03-Mar-10	TBD		21.83	
MPE-11	10-May-10	TBD		21.68	

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	03-Mar-10	TBD		22.34	
MPE-12	10-May-10	TBD		22.20	
MPE-13	03-Mar-10	TBD		22.70	
MPE-13	10-May-10	TBD		22.57	
MPE-14	03-Mar-10	TBD		21.80	
MPE-14	10-May-10	TBD		21.65	
MPE-16	03-Mar-10	TBD		19.92	
MPE-16	10-May-10	TBD		19.78	
MPE-17	03-Mar-10	TBD		20.11	
MPE-17	10-May-10	TBD		19.98	
MPE-18	03-Mar-10	TBD		19.23	
MPE-18	10-May-10	TBD		NM	
MPE-19	03-Mar-10	TBD		19.02	
MPE-19	10-May-10	TBD		18.86	
Phase 2 Wells					
MPE-20	03-Mar-10	TBD		18.72	
MPE-20	10-May-10	TBD		18.58	
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-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

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-22	16-Jun-10	TBD		20.53	
MPE-23	03-Mar-10	TBD		21.10	
MPE-23	10-May-10	TBD		20.97	
MPE-24	03-Mar-10	TBD		22.69	
MPE-24	10-May-10	TBD		22.53	
MPE-25	03-Mar-10	TBD		23.02	
MPE-25	10-May-10	TBD		22.87	
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-27	03-Mar-10	TBD		21.92	
MPE-27	10-May-10	TBD		21.76	
MPE-28	03-Mar-10	TBD		21.54	
MPE-28	10-May-10	TBD		21.39	
MPE-29	03-Mar-10	TBD		20.54	
MPE-29	10-May-10	TBD		20.39	
MPE-30	03-Mar-10	TBD		21.19	
MPE-30	10-May-10	TBD		20.03	
MPE-31	03-Mar-10	TBD		22.46	
MPE-31	10-May-10	TBD		22.30	
MPE-33	03-Mar-10	TBD		22.34	
MPE-33	10-May-10	TBD		22.19	

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-34	03-Mar-10	TBD		22.16	
MPE-34	10-May-10	TBD		22.01	
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-36	03-Mar-10	TBD		19.91	
MPE-36	10-May-10	TBD		NM	
MPE-36	16-Jun-10	TBD		19.72	
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-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
Phase 3 Wells					
MPE-39	18-Jun-10	TBD		17.29	
MPE-40	18-Jun-10	TBD		17.46	
MPE-41	18-Jun-10	TBD		18.14	
MPE-42	18-Jun-10	TBD		18.90	
MPE-43	18-Jun-10	TBD		19.75	

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-44	18-Jun-10	TBD		19.95	
MPE-45	18-Jun-10	TBD		20.05	sheen
MPE-46	18-Jun-10	TBD		21.16	
MPE-47	18-Jun-10	TBD		20.68	
MPE-48	18-Jun-10	TBD		19.94	
MPE-49	18-Jun-10	TBD		19.13	
MPE-50	18-Jun-10	TBD		20.24	
MPE-51	18-Jun-10	TBD		20.70	
MPE-52	18-Jun-10	TBD		20.49	
MPE-53	18-Jun-10	TBD		19.23	
MPE-54	18-Jun-10	TBD		18.85	
MPE-55	18-Jun-10	TBD		18.36	
MPE-56	18-Jun-10	TBD		13.80	
MPE-57	18-Jun-10	TBD		--	
MPE-58	18-Jun-10	TBD		--	

FIGURE 1

GENERAL SITE PLAN

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

Animas Environmental Services, LLC

DRAWN BY: N. Willis	**DATE DRAWN:** February 2, 2009
REVISIONS BY: R. Kennemer	**DATE REVISED:** August 9, 2010
CHECKED BY: E. McNally	**DATE CHECKED:** August 9, 2010
APPROVED BY: E. McNally	**DATE APPROVED:** August 9, 2010

LEGEND

MONITOR WELL LOCATIONS

N

SCALE

200 100 0 200

50
(1 INCH = 200 FEET)

S:\ANIMAS 2000\2010 PROJECTS\THRIFTWAY\810 REFINERY\MAPS AND DRAWINGS\MAY 2010 QMR DRAWINGS\FIGURE 1 GENERAL SITE PLAN

FIGURE 2

GROUNDWATER ELEVATION CONTOURS MAY 2010

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

Animas Environmental Services, LLC

DRAWN BY: N. Willis	**DATE DRAWN:** February 2, 2009
REVISIONS BY: N. Willis	**DATE REVISED:** June 3, 2010
CHECKED BY: D. Watson	**DATE CHECKED:** June 14, 2010
APPROVED BY: E. McNally	**DATE APPROVED:** August 9, 2010

LEGEND

MONITOR WELL LOCATIONS

5441.15 GROUNDWATER ELEVATION IN FEET (AMSL)

—5439— GROUNDWATER ELEVATION CONTOUR IN FEET (AMSL)

NOTE: GROUNDWATER MEASUREMENTS WERE MADE ON MAY 7 - 17, 2010. LOCATIONSOF TW-45 THRU TW-50 ARE APPROXIMATE.

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

KUTZ WASH

ARROYO

PROCESS WATER EVAPORATION LAGOONS

HYDROCRACKER REFORMER

SHOP

FIRE WATER POND

REFINERY OFFICE

DISPATCH OFFICE

GATE

CR 5500

GROUNDWATER GRADIENT 0.008 FT/FT BETWEEN TW-1 AND MW-5

TW-47 TBS 6.04
MW-21 5425.93
MW-22 NM
TW-49 TBS 5.32
MW-5 5424.65
MW-7 5426.78
TW-46 TBS 6.86
TW-42 5428.21
TW-45 TBS 6.58
MW-20 5424.93
TW-41 5429.60
TW-40 5430.53
TW-39 5431.45
TW-31 5431.76
TW-30 5432.26
TW-50 TBS 7.30
TW-48 TBS 6.90
MW-9 NM
MW-10 NM
TW-29 5432.95
TW-43 5428.60
TW-37 5429.43
TW-38 5431.02
TW-32 5432.62
TW-24 5434.16
TW-23 5435.00
TW-17 5436.41
TW-16 5437.20
TW-44 5429.42
TW-33 5433.17
TW-28 5434.09
TW-25 5434.87
TW-22 5435.54
TW-18 5436.62
TW-15 5437.58
TW-10 5438.01
TW-9 5438.72
TW-36 5429.21
TW-26 5434.57
TW-21 DAMAGED NM
TW-19 5441.03
TW-14 5437.39
TW-11 5438.42
TW-8 5438.56
TW-35 5434.23
TW-20 5436.29
TW-13 5437.63
TW-12 5438.23
TW-7 5439.20
TW-4 5439.86
TW-34 5436.20
TW-6 5439.03
TW-5 5439.87
TW-3 5440.41
TW-2 5440.60
TW-1 5441.15

S:\ANIMAS 2000\2010 PROJECTS\THRIFTWAY\810 REFINERY\MAPS AND DRAWINGS\MAY 2010 QMR DRAWINGS\FIGURE 2 GROUNDWATER ELEVATION CONTOURS

FIGURE 3

FREE PRODUCT THICKNESS CONTOURS MAY 2010

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 14, 2010
CHECKED BY: D. Watson	**DATE CHECKED:** June 14, 2010
APPROVED BY: E. McNally	**DATE APPROVED:** August 9, 2010

LEGEND

- MONITOR WELL LOCATIONS
- 0.59 FREE PRODUCT THICKNESS IN FEET
- 0.75 FREE PRODUCT THICKNESS CONTOUR IN FEET

NOTE: ALL MEASUREMENTS WERE MADE ON MAY 7 - 17, 2010. LOCATIONS OF TW-45 THRU TW-50 ARE APPROXIMATE.

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

S:\ANIMAS 2000\2010 PROJECTS\THRIFTWAY\810 REFINERY\MAPS AND DRAWINGS\MAY 2010 QMR DRAWINGS\FIGURE 3 FREE PRODUCT THICKNESS CONTOURS

FIGURE 4

DISSOLVED BENZENE CONCENTRATION CONTOURS MAY 2010

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

Animas Environmental Services, LLC

DRAWN BY: N. Willis	**DATE DRAWN:** February 2, 2009
REVISIONS BY: N. Willis	**DATE REVISED:** June 3, 2010
CHECKED BY: D. Watson	**DATE CHECKED:** June 14, 2010
APPROVED BY: E. McNally	**DATE APPROVED:** August 9, 2010

LEGEND

- MONITOR WELL LOCATIONS
- FREE PRODUCT PLUME
- 1.7 BENZENE CONCENTRATIONS IN µg/L
- —200— BENZENE CONCENTRATION CONTOUR IN µg/L
- NS NOT SAMPLED

NOTE: ALL SAMPLES WERE COLLECTED ON MAY 7 - 17, 2010. LOCATIONS OF TW-45 THRU TW-50 ARE APPROXIMATE.

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

S:\ANIMAS 2000\2010 PROJECTS\THRIFTWAY\810 REFINERY\MAPS AND DRAWINGS\MAY 2010 QMR DRAWINGS\FIGURE 4 DISSOLVED BEZENE CONCENTRATION CONTOURS

FIGURE 5

DISSOLVED MTBE CONCENTRATION CONTOURS MAY 2010

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

Animas Environmental Services, LLC

DRAWN BY: N. Willis	**DATE DRAWN:** February 2, 2009
REVISIONS BY: N. Willis	**DATE REVISED:** June 3, 2010
CHECKED BY: D. Watson	**DATE CHECKED:** June 14, 2010
APPROVED BY: E. McNally	**DATE APPROVED:** August 9, 2010

LEGEND

- MONITOR WELL LOCATIONS
- FREE PRODUCT PLUME
- 2.5 MTBE CONCENTRATIONS IN µg/L
- —100— MTBE CONCENTRATION CONTOUR IN µg/L
- NS NOT SAMPLED

NOTE: ALL SAMPLES WERE MADE ON MAY 7 - 17, 2010. LOCATIONS OF TW-45 THRU 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
HYDROCRACKER REFORMER
FIRE WATER POND
PROCESS WATER EVAPORATION LAGOONS
DAMAGED

TW-47 9.4
MW-22 NS
MW-21 82
TW-49 17
MW-5 63
MW-7 23
TW-46 110
TW-42 39
TW-45 160
MW-20 180
TW-41 20
TW-40 NS
TW-39 19
TW-31 9.2
TW-30 21
MW-9 NS
TW-50 16
TW-48 13
MW-10 NS
TW-29 NS
TW-43 380
TW-37 150
TW-38 110
TW-32 NS
TW-24 3.8
TW-23 NS
TW-17 NS
TW-16 NS
TW-44 NS
TW-33 NS
TW-28 NS
TW-25 NS
TW-22 NS
TW-18 2.5
TW-15 NS
TW-10 NS
TW-9 NS
TW-36 <1.0
TW-26 NS
TW-21 NS
TW-19 NS
TW-14 NS
TW-11 <1.0
TW-8 NS
TW-35 <1.0
TW-20 NS
TW-13 NS
TW-12 <1.0
TW-7 NS
TW-4 NS
TW-34 <1.0
TW-6 NS
TW-5 NS
TW-3 NS
TW-2 NS
TW-1 NS

S:\ANIMAS 2000\2010 PROJECTS\THRIFTWAY\810 REFINERY\MAPS AND DRAWINGS\MAY 2010 QMR DRAWINGS\FIGURE 5 DISSOLVED MTBE CONCENTRATION CONTOURS

TANK #21
MPE-55
MPE-56
TANK #29
FIRE WATER POND
MPE-57
TANK #28
MPE-39
TANK #19
MPE-58
MPE-38
MPE-40
MPE-54
MPE-20
MPE-37
MPE-41
MPE-19
MPE-53
MPE-21
MPE-36
TANK #18
MPE-42
MPE-18
1,000 GALLON HOLDING TANK
MPE-52
MPE-22
RSI UNIT #294
MPE-35
MPE-5
MPE-43
1,000 GALLON PROPANE TANK
MPE-17
MPE-4
MPE-51
MPE-23
FENCE
MPE-34
MPE-6
TANK #13
TANK #20
MPE-44
MPE-16
MPE-50
MPE-24
MPE-3
MPE-33
MPE-7
MPE-45
TANK #17
MPE-14
MPE-49
MPE-2
MPE-31
MPE-25
MPE-8
MPE-46
MPE-13
MPE-48
TW-13
MPE-26
MPE-1
MPE-30
MPE-9
MPE-47
MPE-12
MPE-27
CR 5500
MPE-29
MPE-10
MPE-11
MPE-28
DISPATCH OFFICE
GATE

LEGEND

- FENCE
- PROPANE LINE
- UNIT #1 MPE EXTRACTION LINE
- UNIT #2 MPE EXTRACTION LINE
- MPE WELL LOCATIONS

NOTES:
UNIT #1 IS DOWN AS OF MAY 28, 2010.
UNIT #2: ACTIVE MPE WELLS AS OF JUNE 29, 2010; MPE-35, 38, 41, 42, 44, AND TW-13.

N

SCALE
60 40 0 60
20
(1 INCH = 60 FEET)

Animas Environmental Services, LLC

DRAWN BY: N. Willis	**DATE DRAWN:** April 27, 2010
REVISIONS BY: C. Lameman	**DATE REVISED:** July 15, 2010
CHECKED BY: R. Kennemer	**DATE CHECKED:** August 9, 2010
APPROVED BY: E. McNally	**DATE APPROVED:** August 9, 2010

FIGURE 6

REMEDIATION SYSTEM LAYOUT

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

S:\ANIMAS 2000\2010 PROJECTS\THRIFTWAY\810 REFINERY\MAPS AND DRAWINGS\MAY 2010 QMR DRAWINGS\FIGURE 6 CURRENT REMEDIATION SYSTEM LAYOUT

Ambient Air Monitoring Form

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

Project: Remediation Well Installation
Site: Former Tanktway Refinery
Location: 626 CR 5500, Bloomfield, NM
Proj. Mgr.

Project No.: EID - MPE Drilling
Date: 6-9-10
Time:
Form:

Time	Air Temp. (°F)	Oxygen (%)	LEL (%)	Carbon Monoxide (ppm)	OVM-PID (ppm)	Sample Location/Notes / Observations
1045	80°+	20.9	0	0	0	10' MPE #45
1050	"	20.9	0	0	152	15'
1100	"	20.9	0	0	160	20'
1200		20.9	0	0	85	10 MPE #46
1220		20.0	0	0	115	15'
1230	90°	20.9	0	0	71.5	20
1040	90°	20.9	0	0	0	10 MPE #47 (6-10-10)
1047	"	20.9	0	0	6.8	15
1057	"	20.9	0	0	>2,000	20 (= Cellar) NO @ Drillers Snow
1217	90°	20.9	0	0	0	10 MPE #48
1250		20.9	0	0	0	15
1300	"	20.9	0	0	0	20
1410	90°	20.9	0	0	0	10 MPE #49
1424	"	20.9	0	0	0	15
1435	"	20.9	0	0	0	20
1023	80°	20.9	0	0	0	13' MPE #50
1036	80°	20.9	0	0	3.4	17'
1039	80°	20.9	0	0	0.1	19'
1222	95°	20.9	0	0	0.0	15' MPE - #51
1231	85°	20.9	0	0	0.2	17'
1239	85°	20.9	0	0	0.0	20'
1056	72°	20.9	0	0	0.0	10 MPE #52 - 6-14-10
1058	72°	20.9	0	0	0.0	15
1103	72°	20.9	0	0	0.0	20
1306	75°	20.9	0	0	0.0	10 MPE #53 6-14-10
1317	75°	20.9	0	0	0.0	15
1315	75°	20.9	0	0	0.0	20
1425	75°	20.9	0	0	0.0	13 MPE #54 6-14-10
1428	75°	20.9	0	0	0.0	17
1431	75°	20.9	0	0	0.0	20
1054	72°	20.9	0	0	0.0	15 MPE #55 6-15-10
1101	71°	20.9	0	0	0.0	20
1254	80°	20.9	0	0	0.0	11 MPE #56
1258	80	20.9	0	0	0.0	16

List Equipment Used and Date of Last Calibration:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, June 02, 2010

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.: 1005380

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory, Inc. received 25 sample(s) on 5/14/2010 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.

Reporting limits are determined by EPA methodology.

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

Sincerely,

Andy Freeman, Laboratory Manager

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

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

CLIENT: Animas Environmental Services
Project: Thriftway #810 Refinery
Lab Order: 1005380

CASE NARRATIVE

"S" flags denote that the surrogate was elevated due to sample dilution or matrix interferences.

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Jun-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-11
Lab Order:	1005380	**Collection Date:**	5/11/2010 10:40:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/20/2010 12:47:15 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 12:47:15 PM
Surr: DNOP	111	86.9-151		%REC	1	5/20/2010 12:47:15 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/14/2010 11:51:25 AM
Surr: BFB	83.3	55.2-107		%REC	1	5/14/2010 11:51:25 AM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/17/2010 12:52:20 PM
Toluene	ND	1.0		µg/L	1	5/17/2010 12:52:20 PM
Ethylbenzene	ND	1.0		µg/L	1	5/17/2010 12:52:20 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/17/2010 12:52:20 PM
Naphthalene	ND	2.0		µg/L	1	5/17/2010 12:52:20 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 12:52:20 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 12:52:20 PM
Xylenes, Total	ND	2.0		µg/L	1	5/17/2010 12:52:20 PM
Surr: 1,2-Dichloroethane-d4	97.8	54.6-141		%REC	1	5/17/2010 12:52:20 PM
Surr: 4-Bromofluorobenzene	111	60.1-133		%REC	1	5/17/2010 12:52:20 PM
Surr: Dibromofluoromethane	103	78.5-130		%REC	1	5/17/2010 12:52:20 PM
Surr: Toluene-d8	106	79.5-126		%REC	1	5/17/2010 12:52:20 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	6400	40.0		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-12
Lab Order:	1005380	**Collection Date:**	5/11/2010 11:25:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	1.2	1.0		mg/L	1	5/20/2010 1:23:29 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 1:23:29 PM
Surr: DNOP	112	86.9-151		%REC	1	5/20/2010 1:23:29 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.18	0.050		mg/L	1	5/14/2010 12:49:06 PM
Surr: BFB	94.7	55.2-107		%REC	1	5/14/2010 12:49:06 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	1.7	1.0		µg/L	1	5/19/2010 10:08:55 AM
Toluene	2.0	1.0		µg/L	1	5/19/2010 10:08:55 AM
Ethylbenzene	49	1.0		µg/L	1	5/19/2010 10:08:55 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/19/2010 10:08:55 AM
Naphthalene	ND	2.0		µg/L	1	5/19/2010 10:08:55 AM
1-Methylnaphthalene	8.7	4.0		µg/L	1	5/19/2010 10:08:55 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/19/2010 10:08:55 AM
Xylenes, Total	72	2.0		µg/L	1	5/19/2010 10:08:55 AM
Surr: 1,2-Dichloroethane-d4	89.0	54.6-141		%REC	1	5/19/2010 10:08:55 AM
Surr: 4-Bromofluorobenzene	87.1	60.1-133		%REC	1	5/19/2010 10:08:55 AM
Surr: Dibromofluoromethane	93.3	78.5-130		%REC	1	5/19/2010 10:08:55 AM
Surr: Toluene-d8	99.3	79.5-126		%REC	1	5/19/2010 10:08:55 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	3340	20.0		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-18
Lab Order:	1005380	**Collection Date:**	5/11/2010 2:11:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/20/2010 2:00:13 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 2:00:13 PM
Surr: DNOP	110	86.9-151		%REC	1	5/20/2010 2:00:13 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.21	0.050		mg/L	1	5/14/2010 1:17:59 PM
Surr: BFB	103	55.2-107		%REC	1	5/14/2010 1:17:59 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	3.1	1.0		µg/L	1	5/17/2010 1:47:29 PM
Toluene	ND	1.0		µg/L	1	5/17/2010 1:47:29 PM
Ethylbenzene	21	1.0		µg/L	1	5/17/2010 1:47:29 PM
Methyl tert-butyl ether (MTBE)	2.5	1.0		µg/L	1	5/17/2010 1:47:29 PM
Naphthalene	ND	2.0		µg/L	1	5/17/2010 1:47:29 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 1:47:29 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 1:47:29 PM
Xylenes, Total	ND	2.0		µg/L	1	5/17/2010 1:47:29 PM
Surr: 1,2-Dichloroethane-d4	96.7	54.6-141		%REC	1	5/17/2010 1:47:29 PM
Surr: 4-Bromofluorobenzene	105	60.1-133		%REC	1	5/17/2010 1:47:29 PM
Surr: Dibromofluoromethane	102	78.5-130		%REC	1	5/17/2010 1:47:29 PM
Surr: Toluene-d8	102	79.5-126		%REC	1	5/17/2010 1:47:29 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4860	20.0		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-24
Lab Order:	1005380	**Collection Date:**	5/11/2010 2:52:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	8.7	1.0		mg/L	1	5/20/2010 2:36:27 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 2:36:27 PM
Surr: DNOP	115	86.9-151		%REC	1	5/20/2010 2:36:27 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.92	0.050		mg/L	1	5/14/2010 1:46:48 PM
Surr: BFB	157	55.2-107	S	%REC	1	5/14/2010 1:46:48 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	9.1	1.0		µg/L	1	5/17/2010 2:15:00 PM
Toluene	ND	1.0		µg/L	1	5/17/2010 2:15:00 PM
Ethylbenzene	25	1.0		µg/L	1	5/17/2010 2:15:00 PM
Methyl tert-butyl ether (MTBE)	3.8	1.0		µg/L	1	5/17/2010 2:15:00 PM
Naphthalene	3.0	2.0		µg/L	1	5/17/2010 2:15:00 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 2:15:00 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 2:15:00 PM
Xylenes, Total	ND	2.0		µg/L	1	5/17/2010 2:15:00 PM
Surr: 1,2-Dichloroethane-d4	95.3	54.6-141		%REC	1	5/17/2010 2:15:00 PM
Surr: 4-Bromofluorobenzene	98.6	60.1-133		%REC	1	5/17/2010 2:15:00 PM
Surr: Dibromofluoromethane	100	78.5-130		%REC	1	5/17/2010 2:15:00 PM
Surr: Toluene-d8	100	79.5-126		%REC	1	5/17/2010 2:15:00 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4280	40.0		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-30
Lab Order:	1005380	**Collection Date:**	5/11/2010 3:27:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/20/2010 3:13:12 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 3:13:12 PM
Surr: DNOP	111	86.9-151		%REC	1	5/20/2010 3:13:12 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.071	0.050		mg/L	1	5/14/2010 2:15:39 PM
Surr: BFB	88.1	55.2-107		%REC	1	5/14/2010 2:15:39 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/17/2010 2:42:29 PM
Toluene	ND	1.0		µg/L	1	5/17/2010 2:42:29 PM
Ethylbenzene	ND	1.0		µg/L	1	5/17/2010 2:42:29 PM
Methyl tert-butyl ether (MTBE)	21	1.0		µg/L	1	5/17/2010 2:42:29 PM
Naphthalene	ND	2.0		µg/L	1	5/17/2010 2:42:29 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 2:42:29 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 2:42:29 PM
Xylenes, Total	ND	2.0		µg/L	1	5/17/2010 2:42:29 PM
Surr: 1,2-Dichloroethane-d4	99.1	54.6-141		%REC	1	5/17/2010 2:42:29 PM
Surr: 4-Bromofluorobenzene	110	60.1-133		%REC	1	5/17/2010 2:42:29 PM
Surr: Dibromofluoromethane	103	78.5-130		%REC	1	5/17/2010 2:42:29 PM
Surr: Toluene-d8	104	79.5-126		%REC	1	5/17/2010 2:42:29 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4310	100		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-31
Lab Order:	1005380	**Collection Date:**	5/11/2010 4:00:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/20/2010 3:50:27 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 3:50:27 PM
Surr: DNOP	108	86.9-151		%REC	1	5/20/2010 3:50:27 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/14/2010 2:44:25 PM
Surr: BFB	86.8	55.2-107		%REC	1	5/14/2010 2:44:25 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/17/2010 3:10:02 PM
Toluene	ND	1.0		µg/L	1	5/17/2010 3:10:02 PM
Ethylbenzene	ND	1.0		µg/L	1	5/17/2010 3:10:02 PM
Methyl tert-butyl ether (MTBE)	9.2	1.0		µg/L	1	5/17/2010 3:10:02 PM
Naphthalene	ND	2.0		µg/L	1	5/17/2010 3:10:02 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 3:10:02 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 3:10:02 PM
Xylenes, Total	ND	2.0		µg/L	1	5/17/2010 3:10:02 PM
Surr: 1,2-Dichloroethane-d4	102	54.6-141		%REC	1	5/17/2010 3:10:02 PM
Surr: 4-Bromofluorobenzene	107	60.1-133		%REC	1	5/17/2010 3:10:02 PM
Surr: Dibromofluoromethane	107	78.5-130		%REC	1	5/17/2010 3:10:02 PM
Surr: Toluene-d8	99.4	79.5-126		%REC	1	5/17/2010 3:10:02 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	5280	100		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-37
Lab Order:	1005380	**Collection Date:**	5/11/2010 4:45:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	4.3	1.0		mg/L	1	5/20/2010 5:04:31 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 5:04:31 PM
Surr: DNOP	104	86.9-151		%REC	1	5/20/2010 5:04:31 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	3.8	0.25		mg/L	5	5/14/2010 3:13:20 PM
Surr: BFB	130	55.2-107	S	%REC	5	5/14/2010 3:13:20 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	490	20		µg/L	20	5/19/2010 12:27:42 AM
Toluene	ND	5.0		µg/L	5	5/17/2010 3:37:39 PM
Ethylbenzene	150	5.0		µg/L	5	5/17/2010 3:37:39 PM
Methyl tert-butyl ether (MTBE)	150	5.0		µg/L	5	5/17/2010 3:37:39 PM
Naphthalene	ND	10		µg/L	5	5/17/2010 3:37:39 PM
1-Methylnaphthalene	ND	20		µg/L	5	5/17/2010 3:37:39 PM
2-Methylnaphthalene	ND	20		µg/L	5	5/17/2010 3:37:39 PM
Xylenes, Total	140	10		µg/L	5	5/17/2010 3:37:39 PM
Surr: 1,2-Dichloroethane-d4	96.2	54.6-141		%REC	5	5/17/2010 3:37:39 PM
Surr: 4-Bromofluorobenzene	102	60.1-133		%REC	5	5/17/2010 3:37:39 PM
Surr: Dibromofluoromethane	100	78.5-130		%REC	5	5/17/2010 3:37:39 PM
Surr: Toluene-d8	97.8	79.5-126		%REC	5	5/17/2010 3:37:39 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	3250	40.0		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-36
Lab Order:	1005380	**Collection Date:**	5/12/2010 8:43:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	6.1	1.0		mg/L	1	5/20/2010 5:42:03 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 5:42:03 PM
Surr: DNOP	101	86.9-151		%REC	1	5/20/2010 5:42:03 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.18	0.050		mg/L	1	5/17/2010 4:31:41 PM
Surr: BFB	111	55.2-107	S	%REC	1	5/17/2010 4:31:41 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/19/2010 2:45:39 AM
Toluene	ND	1.0		µg/L	1	5/19/2010 2:45:39 AM
Ethylbenzene	6.5	1.0		µg/L	1	5/19/2010 2:45:39 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/19/2010 2:45:39 AM
Naphthalene	ND	2.0		µg/L	1	5/19/2010 2:45:39 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/19/2010 2:45:39 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/19/2010 2:45:39 AM
Xylenes, Total	11	2.0		µg/L	1	5/19/2010 2:45:39 AM
Surr: 1,2-Dichloroethane-d4	90.0	54.6-141		%REC	1	5/19/2010 2:45:39 AM
Surr: 4-Bromofluorobenzene	88.9	60.1-133		%REC	1	5/19/2010 2:45:39 AM
Surr: Dibromofluoromethane	91.9	78.5-130		%REC	1	5/19/2010 2:45:39 AM
Surr: Toluene-d8	101	79.5-126		%REC	1	5/19/2010 2:45:39 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	5750	100		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-35
Lab Order:	1005380	**Collection Date:**	5/12/2010 9:19:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-09	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/20/2010 6:19:35 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 6:19:35 PM
Surr: DNOP	106	86.9-151		%REC	1	5/20/2010 6:19:35 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/14/2010 4:39:56 PM
Surr: BFB	86.7	55.2-107		%REC	1	5/14/2010 4:39:56 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/17/2010 4:32:52 PM
Toluene	ND	1.0		µg/L	1	5/17/2010 4:32:52 PM
Ethylbenzene	ND	1.0		µg/L	1	5/17/2010 4:32:52 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/17/2010 4:32:52 PM
Naphthalene	ND	2.0		µg/L	1	5/17/2010 4:32:52 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 4:32:52 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 4:32:52 PM
Xylenes, Total	ND	2.0		µg/L	1	5/17/2010 4:32:52 PM
Surr: 1,2-Dichloroethane-d4	99.5	54.6-141		%REC	1	5/17/2010 4:32:52 PM
Surr: 4-Bromofluorobenzene	110	60.1-133		%REC	1	5/17/2010 4:32:52 PM
Surr: Dibromofluoromethane	104	78.5-130		%REC	1	5/17/2010 4:32:52 PM
Surr: Toluene-d8	101	79.5-126		%REC	1	5/17/2010 4:32:52 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	6250	100		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-34
Lab Order:	1005380	**Collection Date:**	5/12/2010 10:00:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-10	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/20/2010 6:56:50 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 6:56:50 PM
Surr: DNOP	109	86.9-151		%REC	1	5/20/2010 6:56:50 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/14/2010 5:08:47 PM
Surr: BFB	99.8	55.2-107		%REC	1	5/14/2010 5:08:47 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/17/2010 5:55:40 PM
Toluene	ND	1.0		µg/L	1	5/17/2010 5:55:40 PM
Ethylbenzene	ND	1.0		µg/L	1	5/17/2010 5:55:40 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/17/2010 5:55:40 PM
Naphthalene	ND	2.0		µg/L	1	5/17/2010 5:55:40 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 5:55:40 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 5:55:40 PM
Xylenes, Total	ND	2.0		µg/L	1	5/17/2010 5:55:40 PM
Surr: 1,2-Dichloroethane-d4	99.0	54.6-141		%REC	1	5/17/2010 5:55:40 PM
Surr: 4-Bromofluorobenzene	111	60.1-133		%REC	1	5/17/2010 5:55:40 PM
Surr: Dibromofluoromethane	103	78.5-130		%REC	1	5/17/2010 5:55:40 PM
Surr: Toluene-d8	103	79.5-126		%REC	1	5/17/2010 5:55:40 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	5470	40.0		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-38
Lab Order:	1005380	**Collection Date:**	5/12/2010 10:47:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-11	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/20/2010 7:33:51 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 7:33:51 PM
Surr: DNOP	106	86.9-151		%REC	1	5/20/2010 7:33:51 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.67	0.050		mg/L	1	5/14/2010 5:37:34 PM
Surr: BFB	108	55.2-107	S	%REC	1	5/14/2010 5:37:34 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	63	1.0		µg/L	1	5/17/2010 6:23:23 PM
Toluene	ND	1.0		µg/L	1	5/17/2010 6:23:23 PM
Ethylbenzene	15	1.0		µg/L	1	5/17/2010 6:23:23 PM
Methyl tert-butyl ether (MTBE)	110	1.0		µg/L	1	5/17/2010 6:23:23 PM
Naphthalene	3.5	2.0		µg/L	1	5/17/2010 6:23:23 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 6:23:23 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 6:23:23 PM
Xylenes, Total	50	2.0		µg/L	1	5/17/2010 6:23:23 PM
Surr: 1,2-Dichloroethane-d4	96.2	54.6-141		%REC	1	5/17/2010 6:23:23 PM
Surr: 4-Bromofluorobenzene	103	60.1-133		%REC	1	5/17/2010 6:23:23 PM
Surr: Dibromofluoromethane	106	78.5-130		%REC	1	5/17/2010 6:23:23 PM
Surr: Toluene-d8	104	79.5-126		%REC	1	5/17/2010 6:23:23 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4210	40.0		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-39
Lab Order:	1005380	**Collection Date:**	5/12/2010 11:23:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-12	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/20/2010 8:10:36 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 8:10:36 PM
Surr: DNOP	108	86.9-151		%REC	1	5/20/2010 8:10:36 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.45	0.050		mg/L	1	5/14/2010 6:06:20 PM
Surr: BFB	115	55.2-107	S	%REC	1	5/14/2010 6:06:20 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	17	1.0		µg/L	1	5/17/2010 6:50:55 PM
Toluene	ND	1.0		µg/L	1	5/17/2010 6:50:55 PM
Ethylbenzene	32	1.0		µg/L	1	5/17/2010 6:50:55 PM
Methyl tert-butyl ether (MTBE)	19	1.0		µg/L	1	5/17/2010 6:50:55 PM
Naphthalene	ND	2.0		µg/L	1	5/17/2010 6:50:55 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 6:50:55 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 6:50:55 PM
Xylenes, Total	14	2.0		µg/L	1	5/17/2010 6:50:55 PM
Surr: 1,2-Dichloroethane-d4	97.4	54.6-141		%REC	1	5/17/2010 6:50:55 PM
Surr: 4-Bromofluorobenzene	114	60.1-133		%REC	1	5/17/2010 6:50:55 PM
Surr: Dibromofluoromethane	99.4	78.5-130		%REC	1	5/17/2010 6:50:55 PM
Surr: Toluene-d8	102	79.5-126		%REC	1	5/17/2010 6:50:55 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4740	40.0		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-41
Lab Order:	1005380	**Collection Date:**	5/12/2010 12:06:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-13	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	3.0		mg/L	1	5/20/2010 8:47:04 PM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	5/20/2010 8:47:04 PM
Surr: DNOP	110	86.9-151		%REC	1	5/20/2010 8:47:04 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	6.9	0.50		mg/L	10	5/14/2010 6:35:07 PM
Surr: BFB	115	55.2-107	S	%REC	10	5/14/2010 6:35:07 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	180	10		µg/L	10	5/17/2010 7:18:32 PM
Toluene	ND	10		µg/L	10	5/17/2010 7:18:32 PM
Ethylbenzene	530	10		µg/L	10	5/17/2010 7:18:32 PM
Methyl tert-butyl ether (MTBE)	20	10		µg/L	10	5/17/2010 7:18:32 PM
Naphthalene	41	20		µg/L	10	5/17/2010 7:18:32 PM
1-Methylnaphthalene	ND	40		µg/L	10	5/17/2010 7:18:32 PM
2-Methylnaphthalene	ND	40		µg/L	10	5/17/2010 7:18:32 PM
Xylenes, Total	2300	40		µg/L	20	5/19/2010 3:13:21 AM
Surr: 1,2-Dichloroethane-d4	101	54.6-141		%REC	10	5/17/2010 7:18:32 PM
Surr: 4-Bromofluorobenzene	98.5	60.1-133		%REC	10	5/17/2010 7:18:32 PM
Surr: Dibromofluoromethane	110	78.5-130		%REC	10	5/17/2010 7:18:32 PM
Surr: Toluene-d8	107	79.5-126		%REC	10	5/17/2010 7:18:32 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4590	100		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-42
Lab Order:	1005380	**Collection Date:**	5/12/2010 1:49:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-14	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/20/2010 9:24:04 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 9:24:04 PM
Surr: DNOP	115	86.9-151		%REC	1	5/20/2010 9:24:04 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.15	0.050		mg/L	1	5/14/2010 7:04:02 PM
Surr: BFB	104	55.2-107		%REC	1	5/14/2010 7:04:02 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/17/2010 7:46:15 PM
Toluene	ND	1.0		µg/L	1	5/17/2010 7:46:15 PM
Ethylbenzene	ND	1.0		µg/L	1	5/17/2010 7:46:15 PM
Methyl tert-butyl ether (MTBE)	39	1.0		µg/L	1	5/17/2010 7:46:15 PM
Naphthalene	ND	2.0		µg/L	1	5/17/2010 7:46:15 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 7:46:15 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 7:46:15 PM
Xylenes, Total	ND	2.0		µg/L	1	5/17/2010 7:46:15 PM
Surr: 1,2-Dichloroethane-d4	99.2	54.6-141		%REC	1	5/17/2010 7:46:15 PM
Surr: 4-Bromofluorobenzene	111	60.1-133		%REC	1	5/17/2010 7:46:15 PM
Surr: Dibromofluoromethane	105	78.5-130		%REC	1	5/17/2010 7:46:15 PM
Surr: Toluene-d8	97.2	79.5-126		%REC	1	5/17/2010 7:46:15 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4510	20.0		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-43
Lab Order:	1005380	**Collection Date:**	5/12/2010 2:30:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-15	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/20/2010 10:01:04 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 10:01:04 PM
Surr: DNOP	108	86.9-151		%REC	1	5/20/2010 10:01:04 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.31	0.050		mg/L	1	5/14/2010 7:32:52 PM
Surr: BFB	95.7	55.2-107		%REC	1	5/14/2010 7:32:52 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/17/2010 10:04:27 PM
Toluene	ND	1.0		µg/L	1	5/17/2010 10:04:27 PM
Ethylbenzene	ND	1.0		µg/L	1	5/17/2010 10:04:27 PM
Methyl tert-butyl ether (MTBE)	380	5.0		µg/L	5	5/17/2010 8:14:01 PM
Naphthalene	ND	2.0		µg/L	1	5/17/2010 10:04:27 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 10:04:27 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 10:04:27 PM
Xylenes, Total	ND	2.0		µg/L	1	5/17/2010 10:04:27 PM
Surr: 1,2-Dichloroethane-d4	97.0	54.6-141		%REC	1	5/17/2010 10:04:27 PM
Surr: 4-Bromofluorobenzene	105	60.1-133		%REC	1	5/17/2010 10:04:27 PM
Surr: Dibromofluoromethane	98.5	78.5-130		%REC	1	5/17/2010 10:04:27 PM
Surr: Toluene-d8	100	79.5-126		%REC	1	5/17/2010 10:04:27 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4200	40.0		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-48
Lab Order:	1005380	**Collection Date:**	5/12/2010 3:33:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-16	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/20/2010 10:37:29 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 10:37:29 PM
Surr: DNOP	109	86.9-151		%REC	1	5/20/2010 10:37:29 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.061	0.050		mg/L	1	5/14/2010 10:25:55 PM
Surr: BFB	89.9	55.2-107		%REC	1	5/14/2010 10:25:55 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/17/2010 8:41:40 PM
Toluene	ND	1.0		µg/L	1	5/17/2010 8:41:40 PM
Ethylbenzene	ND	1.0		µg/L	1	5/17/2010 8:41:40 PM
Methyl tert-butyl ether (MTBE)	13	1.0		µg/L	1	5/17/2010 8:41:40 PM
Naphthalene	ND	2.0		µg/L	1	5/17/2010 8:41:40 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 8:41:40 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 8:41:40 PM
Xylenes, Total	ND	2.0		µg/L	1	5/17/2010 8:41:40 PM
Surr: 1,2-Dichloroethane-d4	97.8	54.6-141		%REC	1	5/17/2010 8:41:40 PM
Surr: 4-Bromofluorobenzene	114	60.1-133		%REC	1	5/17/2010 8:41:40 PM
Surr: Dibromofluoromethane	102	78.5-130		%REC	1	5/17/2010 8:41:40 PM
Surr: Toluene-d8	101	79.5-126		%REC	1	5/17/2010 8:41:40 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4560	100		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-50
Lab Order:	1005380	**Collection Date:**	5/12/2010 4:06:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-17	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	4.0	1.0		mg/L	1	5/21/2010 1:39:22 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/21/2010 1:39:22 AM
Surr: DNOP	115	86.9-151		%REC	1	5/21/2010 1:39:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	7.7	1.0		mg/L	20	5/14/2010 10:54:40 PM
Surr: BFB	105	55.2-107		%REC	20	5/14/2010 10:54:40 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	72	10		µg/L	10	5/17/2010 9:09:19 PM
Toluene	ND	10		µg/L	10	5/17/2010 9:09:19 PM
Ethylbenzene	260	10		µg/L	10	5/17/2010 9:09:19 PM
Methyl tert-butyl ether (MTBE)	16	10		µg/L	10	5/17/2010 9:09:19 PM
Naphthalene	63	20		µg/L	10	5/17/2010 9:09:19 PM
1-Methylnaphthalene	ND	40		µg/L	10	5/17/2010 9:09:19 PM
2-Methylnaphthalene	ND	40		µg/L	10	5/17/2010 9:09:19 PM
Xylenes, Total	1200	20		µg/L	10	5/17/2010 9:09:19 PM
Surr: 1,2-Dichloroethane-d4	94.6	54.6-141		%REC	10	5/17/2010 9:09:19 PM
Surr: 4-Bromofluorobenzene	97.2	60.1-133		%REC	10	5/17/2010 9:09:19 PM
Surr: Dibromofluoromethane	103	78.5-130		%REC	10	5/17/2010 9:09:19 PM
Surr: Toluene-d8	103	79.5-126		%REC	10	5/17/2010 9:09:19 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4320	100		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	MW-5
Lab Order:	1005380	**Collection Date:**	5/12/2010 4:41:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-18	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/21/2010 2:15:54 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/21/2010 2:15:54 AM
Surr: DNOP	113	86.9-151		%REC	1	5/21/2010 2:15:54 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.10	0.050		mg/L	1	5/14/2010 11:52:19 PM
Surr: BFB	88.5	55.2-107		%REC	1	5/14/2010 11:52:19 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/17/2010 9:36:56 PM
Toluene	ND	1.0		µg/L	1	5/17/2010 9:36:56 PM
Ethylbenzene	ND	1.0		µg/L	1	5/17/2010 9:36:56 PM
Methyl tert-butyl ether (MTBE)	63	1.0		µg/L	1	5/17/2010 9:36:56 PM
Naphthalene	ND	2.0		µg/L	1	5/17/2010 9:36:56 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 9:36:56 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/17/2010 9:36:56 PM
Xylenes, Total	ND	2.0		µg/L	1	5/17/2010 9:36:56 PM
Surr: 1,2-Dichloroethane-d4	95.7	54.6-141		%REC	1	5/17/2010 9:36:56 PM
Surr: 4-Bromofluorobenzene	113	60.1-133		%REC	1	5/17/2010 9:36:56 PM
Surr: Dibromofluoromethane	101	78.5-130		%REC	1	5/17/2010 9:36:56 PM
Surr: Toluene-d8	101	79.5-126		%REC	1	5/17/2010 9:36:56 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4590	100		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-45
Lab Order:	1005380	**Collection Date:**	5/13/2010 8:42:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-19	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/21/2010 2:52:06 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/21/2010 2:52:06 AM
Surr: DNOP	115	86.9-161		%REC	1	5/21/2010 2:52:06 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.20	0.050		mg/L	1	5/15/2010 12:21:12 AM
Surr: BFB	102	55.2-107		%REC	1	5/15/2010 12:21:12 AM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/18/2010 2:47:52 PM
Toluene	ND	1.0		µg/L	1	5/18/2010 2:47:52 PM
Ethylbenzene	ND	1.0		µg/L	1	5/18/2010 2:47:52 PM
Methyl tert-butyl ether (MTBE)	160	1.0		µg/L	1	5/18/2010 2:47:52 PM
Naphthalene	ND	2.0		µg/L	1	5/18/2010 2:47:52 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/18/2010 2:47:52 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/18/2010 2:47:52 PM
Xylenes, Total	ND	2.0		µg/L	1	5/18/2010 2:47:52 PM
Surr: 1,2-Dichloroethane-d4	87.0	54.6-141		%REC	1	5/18/2010 2:47:52 PM
Surr: 4-Bromofluorobenzene	102	60.1-133		%REC	1	5/18/2010 2:47:52 PM
Surr: Dibromofluoromethane	92.7	78.5-130		%REC	1	5/18/2010 2:47:52 PM
Surr: Toluene-d8	97.6	79.5-126		%REC	1	5/18/2010 2:47:52 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4480	100		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-46
Lab Order:	1005380	**Collection Date:**	5/13/2010 9:07:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-20	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/21/2010 3:28:05 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/21/2010 3:28:05 AM
Surr: DNOP	110	86.9-151		%REC	1	5/21/2010 3:28:05 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.14	0.050		mg/L	1	5/15/2010 12:50:03 AM
Surr: BFB	100	55.2-107		%REC	1	5/15/2010 12:50:03 AM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/18/2010 3:15:23 PM
Toluene	ND	1.0		µg/L	1	5/18/2010 3:15:23 PM
Ethylbenzene	ND	1.0		µg/L	1	5/18/2010 3:15:23 PM
Methyl tert-butyl ether (MTBE)	110	1.0		µg/L	1	5/18/2010 3:15:23 PM
Naphthalene	ND	2.0		µg/L	1	5/18/2010 3:15:23 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/18/2010 3:15:23 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/18/2010 3:15:23 PM
Xylenes, Total	ND	2.0		µg/L	1	5/18/2010 3:15:23 PM
Surr: 1,2-Dichloroethane-d4	88.5	54.6-141		%REC	1	5/18/2010 3:15:23 PM
Surr: 4-Bromofluorobenzene	104	60.1-133		%REC	1	5/18/2010 3:15:23 PM
Surr: Dibromofluoromethane	93.7	78.5-130		%REC	1	5/18/2010 3:15:23 PM
Surr: Toluene-d8	105	79.5-126		%REC	1	5/18/2010 3:15:23 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4080	100		mg/L	1	5/18/2010 5:33:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	MW-20
Lab Order:	1005380	**Collection Date:**	5/13/2010 9:36:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-21	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/21/2010 4:04:03 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/21/2010 4:04:03 AM
Surr: DNOP	111	86.9-151		%REC	1	5/21/2010 4:04:03 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.60	0.050		mg/L	1	5/15/2010 1:18:51 AM
Surr: BFB	108	55.2-107	S	%REC	1	5/15/2010 1:18:51 AM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	1.7	1.0		µg/L	1	5/18/2010 4:10:35 PM
Toluene	ND	1.0		µg/L	1	5/18/2010 4:10:35 PM
Ethylbenzene	ND	1.0		µg/L	1	5/18/2010 4:10:35 PM
Methyl tert-butyl ether (MTBE)	180	1.0		µg/L	1	5/18/2010 4:10:35 PM
Naphthalene	ND	2.0		µg/L	1	5/18/2010 4:10:35 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/18/2010 4:10:35 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/18/2010 4:10:35 PM
Xylenes, Total	ND	2.0		µg/L	1	5/18/2010 4:10:35 PM
Surr: 1,2-Dichloroethane-d4	85.7	54.6-141		%REC	1	5/18/2010 4:10:35 PM
Surr: 4-Bromofluorobenzene	110	60.1-133		%REC	1	5/18/2010 4:10:35 PM
Surr: Dibromofluoromethane	91.7	78.5-130		%REC	1	5/18/2010 4:10:35 PM
Surr: Toluene-d8	100	79.5-126		%REC	1	5/18/2010 4:10:35 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	4180	40.0		mg/L	1	5/19/2010 3:40:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	MW-21
Lab Order:	1005380	**Collection Date:**	5/13/2010 10:06:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-22	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/21/2010 4:40:32 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/21/2010 4:40:32 AM
Surr: DNOP	114	86.9-151		%REC	1	5/21/2010 4:40:32 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.10	0.050		mg/L	1	5/15/2010 2:16:29 AM
Surr: BFB	89.1	55.2-107		%REC	1	5/15/2010 2:16:29 AM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/18/2010 5:05:43 PM
Toluene	ND	1.0		µg/L	1	5/18/2010 5:05:43 PM
Ethylbenzene	ND	1.0		µg/L	1	5/18/2010 5:05:43 PM
Methyl tert-butyl ether (MTBE)	82	1.0		µg/L	1	5/18/2010 5:05:43 PM
Naphthalene	ND	2.0		µg/L	1	5/18/2010 5:05:43 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/18/2010 5:05:43 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/18/2010 5:05:43 PM
Xylenes, Total	ND	2.0		µg/L	1	5/18/2010 5:05:43 PM
Surr: 1,2-Dichloroethane-d4	91.6	54.6-141		%REC	1	5/18/2010 5:05:43 PM
Surr: 4-Bromofluorobenzene	107	60.1-133		%REC	1	5/18/2010 5:05:43 PM
Surr: Dibromofluoromethane	91.8	78.5-130		%REC	1	5/18/2010 5:05:43 PM
Surr: Toluene-d8	101	79.5-126		%REC	1	5/18/2010 5:05:43 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	5840	40.0		mg/L	1	5/19/2010 3:40:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-47
Lab Order:	1005380	**Collection Date:**	5/13/2010 10:40:00 AM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-23	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/21/2010 5:16:30 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/21/2010 5:16:30 AM
Surr: DNOP	114	86.9-151		%REC	1	5/21/2010 5:16:30 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/15/2010 2:45:17 AM
Surr: BFB	101	55.2-107		%REC	1	5/15/2010 2:45:17 AM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/18/2010 5:33:15 PM
Toluene	ND	1.0		µg/L	1	5/18/2010 5:33:15 PM
Ethylbenzene	ND	1.0		µg/L	1	5/18/2010 5:33:15 PM
Methyl tert-butyl ether (MTBE)	9.4	1.0		µg/L	1	5/18/2010 5:33:15 PM
Naphthalene	ND	2.0		µg/L	1	5/18/2010 5:33:15 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/18/2010 5:33:15 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/18/2010 5:33:15 PM
Xylenes, Total	ND	2.0		µg/L	1	5/18/2010 5:33:15 PM
Surr: 1,2-Dichloroethane-d4	87.5	54.6-141		%REC	1	5/18/2010 5:33:15 PM
Surr: 4-Bromofluorobenzene	95.3	60.1-133		%REC	1	5/18/2010 5:33:15 PM
Surr: Dibromofluoromethane	91.0	78.5-130		%REC	1	5/18/2010 5:33:15 PM
Surr: Toluene-d8	103	79.5-126		%REC	1	5/18/2010 5:33:15 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	10000	100		mg/L	1	5/19/2010 3:40:00 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TRIP BLANK
Lab Order:	1005380	**Collection Date:**	
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-24	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/15/2010 3:14:04 AM
Surr: BFB	97.1	55.2-107		%REC	1	5/15/2010 3:14:04 AM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/18/2010 6:00:50 PM
Toluene	ND	1.0		µg/L	1	5/18/2010 6:00:50 PM
Ethylbenzene	ND	1.0		µg/L	1	5/18/2010 6:00:50 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/18/2010 6:00:50 PM
Naphthalene	ND	2.0		µg/L	1	5/18/2010 6:00:50 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/18/2010 6:00:50 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/18/2010 6:00:50 PM
Xylenes, Total	ND	2.0		µg/L	1	5/18/2010 6:00:50 PM
Surr: 1,2-Dichloroethane-d4	92.4	54.6-141		%REC	1	5/18/2010 6:00:50 PM
Surr: 4-Bromofluorobenzene	107	60.1-133		%REC	1	5/18/2010 6:00:50 PM
Surr: Dibromofluoromethane	96.1	78.5-130		%REC	1	5/18/2010 6:00:50 PM
Surr: Toluene-d8	96.2	79.5-126		%REC	1	5/18/2010 6:00:50 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-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Treefarm Composite
Lab Order:	1005380	**Collection Date:**	5/13/2010 3:53:00 PM
Project:	Thriftway #810 Refinery	**Date Received:**	5/14/2010
Lab ID:	1005380-25	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: SOIL METALS						Analyst: **SNV**
Calcium	3400	25		mg/Kg	1	5/18/2010 6:40:01 PM
Iron	4900	200		mg/Kg	200	5/25/2010 10:37:35 AM
Magnesium	660	25		mg/Kg	1	5/18/2010 6:40:01 PM
Sodium	470	25		mg/Kg	1	5/20/2010 10:38:22 AM
CONDUCTANCE						Analyst: **TAF**
Specific Conductance	800	1.0		µmhos/cm	1	6/1/2010 6:00:00 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:** 1005380

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Diesel Range											
Sample ID: MB-22278		*MBLK*				Batch ID:	**22278**	Analysis Date:		5/20/2010 10:58:18 AM	
Diesel Range Organics (DRO)	ND	mg/L	1.0								
Motor Oil Range Organics (MRO)	ND	mg/L	5.0								
Sample ID: MB-22294		*MBLK*				Batch ID:	**22294**	Analysis Date:		5/20/2010 11:50:44 PM	
Diesel Range Organics (DRO)	ND	mg/L	1.0								
Motor Oil Range Organics (MRO)	ND	mg/L	5.0								
Sample ID: LCS-22278		*LCS*				Batch ID:	**22278**	Analysis Date:		5/20/2010 11:34:31 AM	
Diesel Range Organics (DRO)	5.505	mg/L	1.0	5	0	110	74	157			
Sample ID: LCS-22294		*LCS*				Batch ID:	**22294**	Analysis Date:		5/21/2010 12:26:57 AM	
Diesel Range Organics (DRO)	6.343	mg/L	1.0	5	0	127	74	157			
Sample ID: LCSD-22278		*LCSD*				Batch ID:	**22278**	Analysis Date:		5/20/2010 12:10:46 PM	
Diesel Range Organics (DRO)	5.946	mg/L	1.0	5	0	119	74	157	7.71	23	
Sample ID: LCSD-22294		*LCSD*				Batch ID:	**22294**	Analysis Date:		5/21/2010 1:03:07 AM	
Diesel Range Organics (DRO)	6.359	mg/L	1.0	5	0	127	74	157	0.255	23	
Method: EPA Method 8015B: Gasoline Range											
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R38724**	Analysis Date:		5/14/2010 9:50:34 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: b 27		*MBLK*				Batch ID:	**R38724**	Analysis Date:		5/14/2010 9:57:07 PM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R38754**	Analysis Date:		5/17/2010 9:27:27 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: 2.5UG GRO LCS		*LCS*				Batch ID:	**R38724**	Analysis Date:		5/14/2010 8:01:45 PM	
Gasoline Range Organics (GRO)	0.5232	mg/L	0.050	0.5	0	105	77.8	124			
Sample ID: 2.5UG GRO LCS-II		*LCS*				Batch ID:	**R38724**	Analysis Date:		5/15/2010 3:42:53 AM	
Gasoline Range Organics (GRO)	0.5142	mg/L	0.050	0.5	0	103	77.8	124			
Sample ID: 2.5UG GRO LCS		*LCS*				Batch ID:	**R38754**	Analysis Date:		5/17/2010 3:01:28 PM	
Gasoline Range Organics (GRO)	0.5176	mg/L	0.050	0.5	0	104	77.8	124			
Sample ID: 2.5UG GRO LCSD		*LCSD*				Batch ID:	**R38724**	Analysis Date:		5/15/2010 4:11:37 AM	
Gasoline Range Organics (GRO)	0.5148	mg/L	0.050	0.5	0	103	77.8	124	1.62	10.3	
Sample ID: 2.5UG GRO LCSD-II		*LCSD*				Batch ID:	**R38724**	Analysis Date:		5/15/2010 4:11:37 AM	
Gasoline Range Organics (GRO)	0.5148	mg/L	0.050	0.5	0	103	77.8	124	0.117	10.3	

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:** 1005380

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260: Volatiles Short List											
Sample ID: 1005380-09a msd		*MSD*				Batch ID:	**R38750**	Analysis Date:		5/17/2010 5:28:08 PM	
Benzene	19.99	µg/L	1.0	20	0	100	72.4	126	1.71	20	
Toluene	21.01	µg/L	1.0	20	0	105	79.2	115	3.12	20	
Sample ID: 5ml rb		*MBLK*				Batch ID:	**R38750**	Analysis Date:		5/17/2010 9:14:35 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:	**R38776**	Analysis Date:		5/18/2010 12:57:22 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: b11		*MBLK*				Batch ID:	**R38776**	Analysis Date:		5/19/2010 12:55:16 AM	
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	4.0								
2-Methylnaphthalene	ND	µg/L	4.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100ng lcs		*LCS*				Batch ID:	**R38750**	Analysis Date:		5/17/2010 11:26:10 AM	
Benzene	20.44	µg/L	1.0	20	0	102	82.4	116			
Toluene	21.16	µg/L	1.0	20	0	106	89.5	123			
Sample ID: 100ng lcs_b		*LCS*				Batch ID:	**R38776**	Analysis Date:		5/18/2010 1:52:39 PM	
Benzene	17.92	µg/L	1.0	20	0	89.6	82.4	116			
Toluene	20.43	µg/L	1.0	20	0	102	89.5	123			
Sample ID: 100ng lcs_c		*LCS*				Batch ID:	**R38776**	Analysis Date:		5/19/2010 1:50:22 AM	
Benzene	17.26	µg/L	1.0	20	0	86.3	82.4	116			
Toluene	19.37	µg/L	1.0	20	0	96.9	89.5	123			
Sample ID: 1005380-09a ms		*MS*				Batch ID:	**R38750**	Analysis Date:		5/17/2010 5:00:25 PM	
Benzene	20.34	µg/L	1.0	20	0	102	72.4	126			
Toluene	20.36	µg/L	1.0	20	0	102	79.2	115			

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:** 1005380

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: Soil Metals											
Sample ID: MB-22311		*MBLK*				Batch ID:	**22311**	Analysis Date:		5/18/2010 5:11:11 PM	
Calcium	ND	mg/Kg	25								
Iron	ND	mg/Kg	1.0								
Magnesium	ND	mg/Kg	25								
Sample ID: MB-22311		*MBLK*				Batch ID:	**22311**	Analysis Date:		5/20/2010 10:18:40 AM	
Sodium	ND	mg/Kg	25								
Sample ID: LCS-22311		*LCS*				Batch ID:	**22311**	Analysis Date:		5/18/2010 5:15:39 PM	
Calcium	2387	mg/Kg	25	2500	7.542	95.2	80	120			
Iron	23.48	mg/Kg	1.0	25	0	93.9	80	120			
Magnesium	2449	mg/Kg	25	2500	1.493	97.9	80	120			
Sample ID: LCS-22311		*LCS*				Batch ID:	**22311**	Analysis Date:		5/20/2010 10:21:31 AM	
Sodium	2498	mg/Kg	25	2500	0	99.9	80	120			
Method: SM2540C MOD: Total Dissolved Solids											
Sample ID: 1005380-10CMSD		*MSD*				Batch ID:	**22301**	Analysis Date:		5/18/2010 5:33:00 PM	
Total Dissolved Solids	7440	mg/L	40.0	2000	5472	98.4	80	120	1.55	20	
Sample ID: MB-22301		*MBLK*				Batch ID:	**22301**	Analysis Date:		5/18/2010 5:33:00 PM	
Total Dissolved Solids	ND	mg/L	20.0								
Sample ID: MB-22315		*MBLK*				Batch ID:	**22315**	Analysis Date:		5/19/2010 3:40:00 PM	
Total Dissolved Solids	ND	mg/L	20.0								
Sample ID: LCS-22301		*LCS*				Batch ID:	**22301**	Analysis Date:		5/18/2010 5:33:00 PM	
Total Dissolved Solids	1015	mg/L	20.0	1000	0	102	80	120			
Sample ID: LCS-22315		*LCS*				Batch ID:	**22315**	Analysis Date:		5/19/2010 3:40:00 PM	
Total Dissolved Solids	1007	mg/L	20.0	1000	0	101	80	120			
Sample ID: 1005380-10CMS		*MS*				Batch ID:	**22301**	Analysis Date:		5/18/2010 5:33:00 PM	
Total Dissolved Solids	7556	mg/L	40.0	2000	5472	104	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: **5/14/2010**

Work Order Number **1005380** Received by: ARS

Checklist completed by: _____ 5/14/10 Sample ID labels checked by: TS

Signature Date 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?	**1.9°**	*<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, LLC.

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: Chad Dawson

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.3

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. 1005330	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel C6-C34)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA) BTEX, MTBE, TOTAL NAPH	8270 (Semi-VOA)	1540C (TDS)				Air Bubbles (Y or N)
5-11-10	1040	H_2O	TW-11	6x 40mL Vod 1x250mL	None & HCL	1			X							X		X				
	1125		TW-12			2			X							X		X				
	1418		TW-18			3			X							X		X				
	1452		TW-~~15~~ 24D			4			X							X		X				
	1527		TW-30			5			X							X		X				
	1600		TW-31			6			X							X		X				
	1645		TW-37			7			X							X		X				
5-12-10	0843		TW-36			8			X							X		X				
	0919		TW-35			9			X							X		X				
	1000		TW-34			10			X							X		X				
	1047		TW-38			11			X							X		X				
	1123		TW-39			12			X							X		X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
5-13-10	1213	Chad D	Blaine Watson	5/13/10	1213
5/13/10	1630	Blaine Watson		5/14/10	9:00

Remarks: Bill to BioTech
per Andy: 8260 BTEX/MTBE/Total Napthalene $70
8015 GRO-MRO $160
discounted price for TDS

1 of 2

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

Chain-of-Custody Record

Client: Animas Environmental Services, LLC.

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: Chad Dawson

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.9

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. 1005330	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,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA) BTEX MTBE Total Naph	8270 (Semi-VOA)	2540C (TDS)				Air Bubbles (Y or N)
5-12-10	1206	H_2O	TW-41	6x40mL VOA 1x250mL	None & HCl	13			X							X		X				
	1349		TW-42			14			X							X		X				
	1430		TW-43			15			X							X		X				
	1533		TW-48			16			X							X		X				
	1606		TW-5D			17			X							X		X				
	1641		MW-5			18			X							X		X				
5-13-10	0842		TW-45			19			X							X		X				
	0907		TW-46			20			X							X		X				
	0936		MW-20			21			X							X		X				
	1006		MW-21			22			X							X		X				
	1040		TW-47			23			X							X		X				
			Trip Blank			24										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
5-13-10	1213	Chad D	Blaine Watson	5/13/10	1213
5/13/10	1630	Blaine Watson		5/14/10	9:00

Remarks: Bill to BioTech
per Andy: 8260 BTEX/MTBE/total Napthalene $70
8015 GRO-DRO $60
discounted price for TDS 2 of 2

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

Chain-of-Custody Record

Client: Animas Environmental

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: Chad Dawson

On Ice: ☒ Yes ☐ No

Sample Temperature: 19

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. 1005322	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	6010 - Sodium, Iron, Calcium	electrical conductivity			Air Bubbles (Y or N)
5-13-10	1553	Soil	Treefarm Composite	2-40z glass	—	25												X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
5-13-10	1630	Chad D	Deborah Watson	5/13/10	1630
5/13/10	1640	Deborah Watson		5/14/10	9:00

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.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, May 26, 2010

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.: 1005517

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 5/19/2010 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.

Reporting limits are determined by EPA methodology.

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: *26-May-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TW-49
Lab Order:	1005517	**Collection Date:**	5/17/2010 3:38:00 PM
Project:	TW 810 Refinery	**Date Received:**	5/19/2010
Lab ID:	1005517-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/20/2010 5:59:52 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 5:59:52 AM
Surr: DNOP	114	86.9-151		%REC	1	5/20/2010 5:59:52 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/25/2010 3:50:39 PM
Surr: BFB	97.1	55.2-107		%REC	1	5/25/2010 3:50:39 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	5/19/2010 4:34:20 PM
Toluene	ND	1.0		µg/L	1	5/19/2010 4:34:20 PM
Ethylbenzene	ND	1.0		µg/L	1	5/19/2010 4:34:20 PM
Methyl tert-butyl ether (MTBE)	17	1.0		µg/L	1	5/19/2010 4:34:20 PM
Naphthalene	ND	2.0		µg/L	1	5/19/2010 4:34:20 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/19/2010 4:34:20 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/19/2010 4:34:20 PM
Xylenes, Total	ND	2.0		µg/L	1	5/19/2010 4:34:20 PM
Surr: 1,2-Dichloroethane-d4	116	54.6-141		%REC	1	5/19/2010 4:34:20 PM
Surr: 4-Bromofluorobenzene	121	60.1-133		%REC	1	5/19/2010 4:34:20 PM
Surr: Dibromofluoromethane	118	78.5-130		%REC	1	5/19/2010 4:34:20 PM
Surr: Toluene-d8	106	79.5-126		%REC	1	5/19/2010 4:34:20 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	5580	40.0		mg/L	1	5/21/2010 3:18:00 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: *26-May-10*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	MW-7
Lab Order:	1005517	**Collection Date:**	5/17/2010 5:01:00 PM
Project:	TW 810 Refinery	**Date Received:**	5/19/2010
Lab ID:	1005517-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JB**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/20/2010 6:36:21 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/20/2010 6:36:21 AM
Surr: DNOP	117	86.9-151		%REC	1	5/20/2010 6:36:21 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.14	0.050		mg/L	1	5/25/2010 4:48:27 PM
Surr: BFB	106	55.2-107		%REC	1	5/25/2010 4:48:27 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **HL**
Benzene	17	1.0		µg/L	1	5/19/2010 5:03:39 PM
Toluene	ND	1.0		µg/L	1	5/19/2010 5:03:39 PM
Ethylbenzene	ND	1.0		µg/L	1	5/19/2010 5:03:39 PM
Methyl tert-butyl ether (MTBE)	23	1.0		µg/L	1	5/19/2010 5:03:39 PM
Naphthalene	ND	2.0		µg/L	1	5/19/2010 5:03:39 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/19/2010 5:03:39 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/19/2010 5:03:39 PM
Xylenes, Total	ND	2.0		µg/L	1	5/19/2010 5:03:39 PM
Surr: 1,2-Dichloroethane-d4	118	54.6-141		%REC	1	5/19/2010 5:03:39 PM
Surr: 4-Bromofluorobenzene	116	60.1-133		%REC	1	5/19/2010 5:03:39 PM
Surr: Dibromofluoromethane	126	78.5-130		%REC	1	5/19/2010 5:03:39 PM
Surr: Toluene-d8	110	79.5-126		%REC	1	5/19/2010 5:03:39 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	5480	40.0		mg/L	1	5/21/2010 3:18:00 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

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: TW 810 Refinery **Work Order:** 1005517

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Diesel Range											
Sample ID: MB-22330		*MBLK*				Batch ID:	**22330**	Analysis Date:		5/20/2010 1:45:51 AM	
Diesel Range Organics (DRO)	ND	mg/L	1.0								
Motor Oil Range Organics (MRO)	ND	mg/L	5.0								
Sample ID: LCS-22330		*LCS*				Batch ID:	**22330**	Analysis Date:		5/20/2010 2:22:03 AM	
Diesel Range Organics (DRO)	5.945	mg/L	1.0	5	0	119	74	157			
Sample ID: LCSD-22330		*LCSD*				Batch ID:	**22330**	Analysis Date:		5/20/2010 2:58:33 AM	
Diesel Range Organics (DRO)	5.617	mg/L	1.0	5	0	112	74	157	5.68	23	
Method: EPA Method 8015B: Gasoline Range											
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R38918**	Analysis Date:		5/25/2010 9:48:10 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: 2.5UG GRO LCS		*LCS*				Batch ID:	**R38918**	Analysis Date:		5/25/2010 2:24:46 PM	
Gasoline Range Organics (GRO)	0.5150	mg/L	0.050	0.5	0	103	77.8	124			
Method: EPA Method 8260: Volatiles Short List											
Sample ID: b2		*MBLK*				Batch ID:	**R38807**	Analysis Date:		5/19/2010 11:40:35 AM	
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	4.0								
2-Methylnaphthalene	ND	µg/L	4.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100ng lcs_b		*LCS*				Batch ID:	**R38807**	Analysis Date:		5/19/2010 12:39:14 PM	
Benzene	20.17	µg/L	1.0	20	0	101	82.4	116			
Toluene	21.89	µg/L	1.0	20	0	109	89.5	123			
Method: SM2540C MOD: Total Dissolved Solids											
Sample ID: MB-22344		*MBLK*				Batch ID:	**22344**	Analysis Date:		5/21/2010 3:18:00 PM	
Total Dissolved Solids	ND	mg/L	20.0								
Sample ID: LCS-22344		*LCS*				Batch ID:	**22344**	Analysis Date:		5/21/2010 3:18:00 PM	
Total Dissolved Solids	1018	mg/L	20.0	1000	14	100	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: **5/19/2010**

Work Order Number **1005517** Received by: ARS

Checklist completed by: _____ 5/19/10 Sample ID labels checked by: _____

Signature Date 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?	**4.6°**	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Animas Environmental

Mailing Address: 624 E. Comanche St. Farmington, NM 87401

Phone #: (505)564-2281

email or Fax#: (505) 564-2281 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 056204

Project Manager: Ross Kennemer

Sampler: Chad Dawson

On Ice: ☒ Yes ☐ No

Sample temperature: 5.6

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. 1005514	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only) (Gasoline Range)	TPH Method 8015B (Gas/Diesel) (C6-C28)	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 plus Naph	8270 (Semi-VOA)	TDS 2540c				Air Bubbles (Y or N)
5-17-10	1538	H_2O	TW-49	6x 40mL VOA 1x250mL PL.	None & HCL	1			X							X		X				
5-17-10	1701	H_2O	MW-7	6x 40mL VOA 1x250mL PL.	None & HCL	2			X							X		X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
5-18-10	0850	Chad D	Deborah Watson	5/18/10	0850
5-18-10	1635	Deborah Watson		5/19/10	9:45

Remarks:
Bill to Bio Tech
Per Andy: 8260 BTEX/MTBE/total Naphthalene $70
8015 GRO-DRO $60
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.

Remediation Service Int'l
4835 Colt Unit D
Ventura CA 93003
805.644.8382
805.644.8378 FAX
www.rsi-save.com

610945.9

Report Generator Version 1.4

Date of Report:	7/21/2010
Project Name:	Thriftway Refinery Unit #1
Unit ID:	0
Controller S/N:	170
Software version:	844

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

Date Range From:	4/1/2010 0:20
Date Range To :	6/1/2010 8:56
Lbs. Removed/Period:	2320.49
Gal Removed/Period:	374.33
SCF Processed/Period	1529241

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:

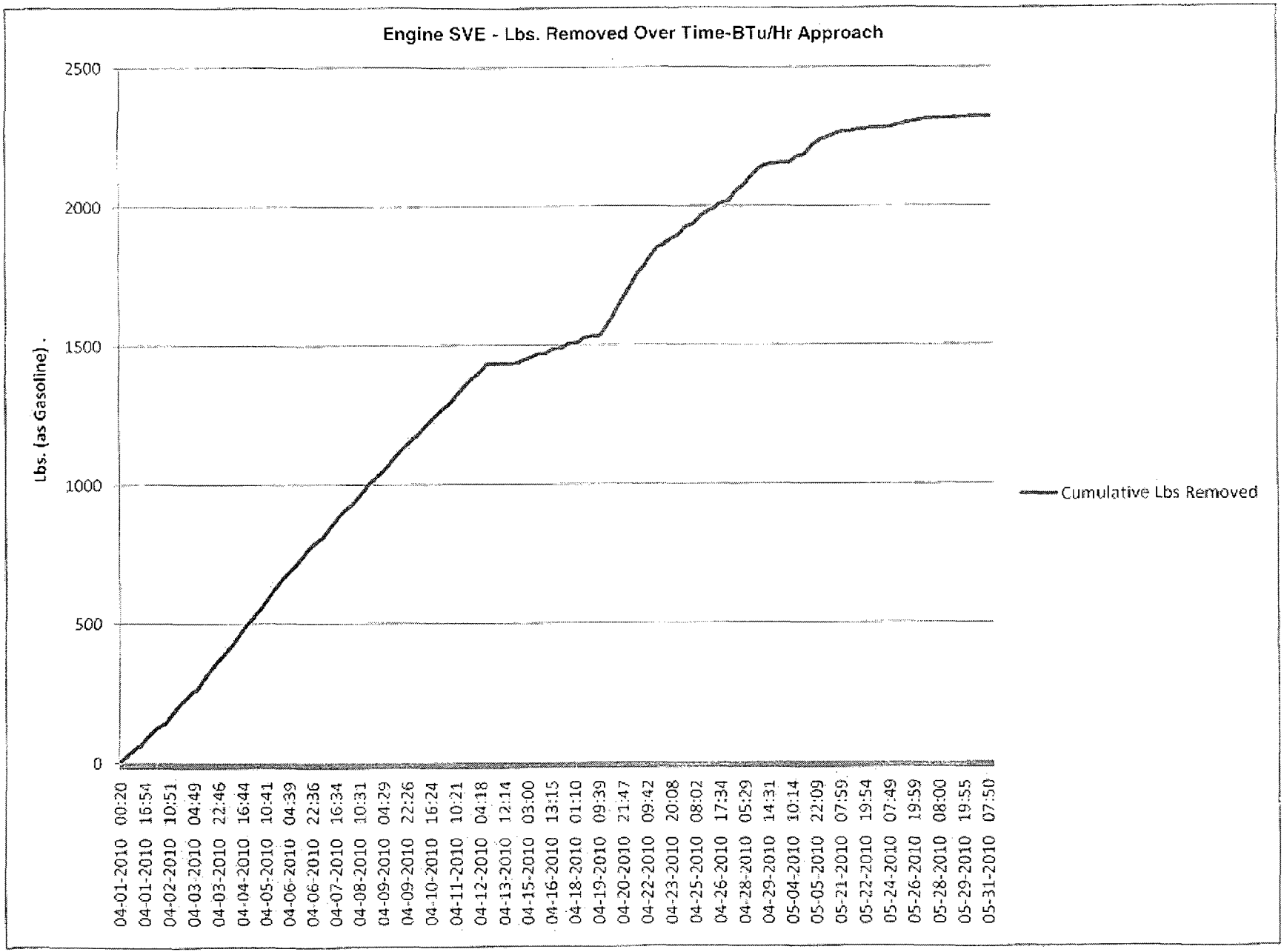
RSIs Innovative Approach to Estimating Btu/Hr:
1. Measure alternate fuel usage of engine prior to introduction of process flow
2. Multiply the SCFM flow rate of the alternate fuel (propane or natural gas) by the Btu value to determine energy demand on the engine at static conditions
3. The controller 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

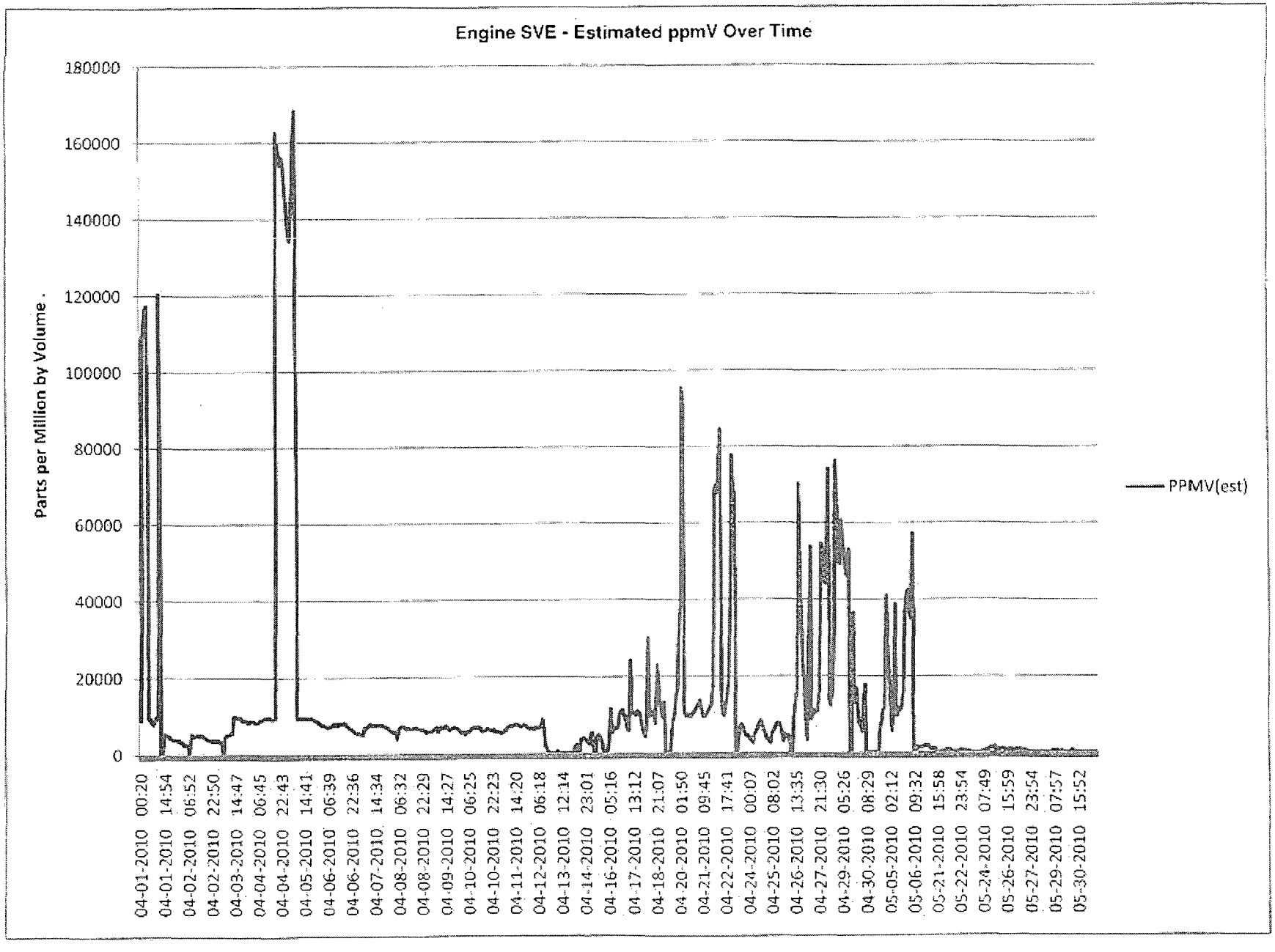
RSIs Innovative Approach to Estimating PPMV:
1. The controller completes the Btu/hr calculation as explained above
2. The controller looks at the well flow rate (estimated or measured in SCFM)
3. The controller then computes the average PPMV using the mass transfer equation to solve for PPMV
4. If the 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

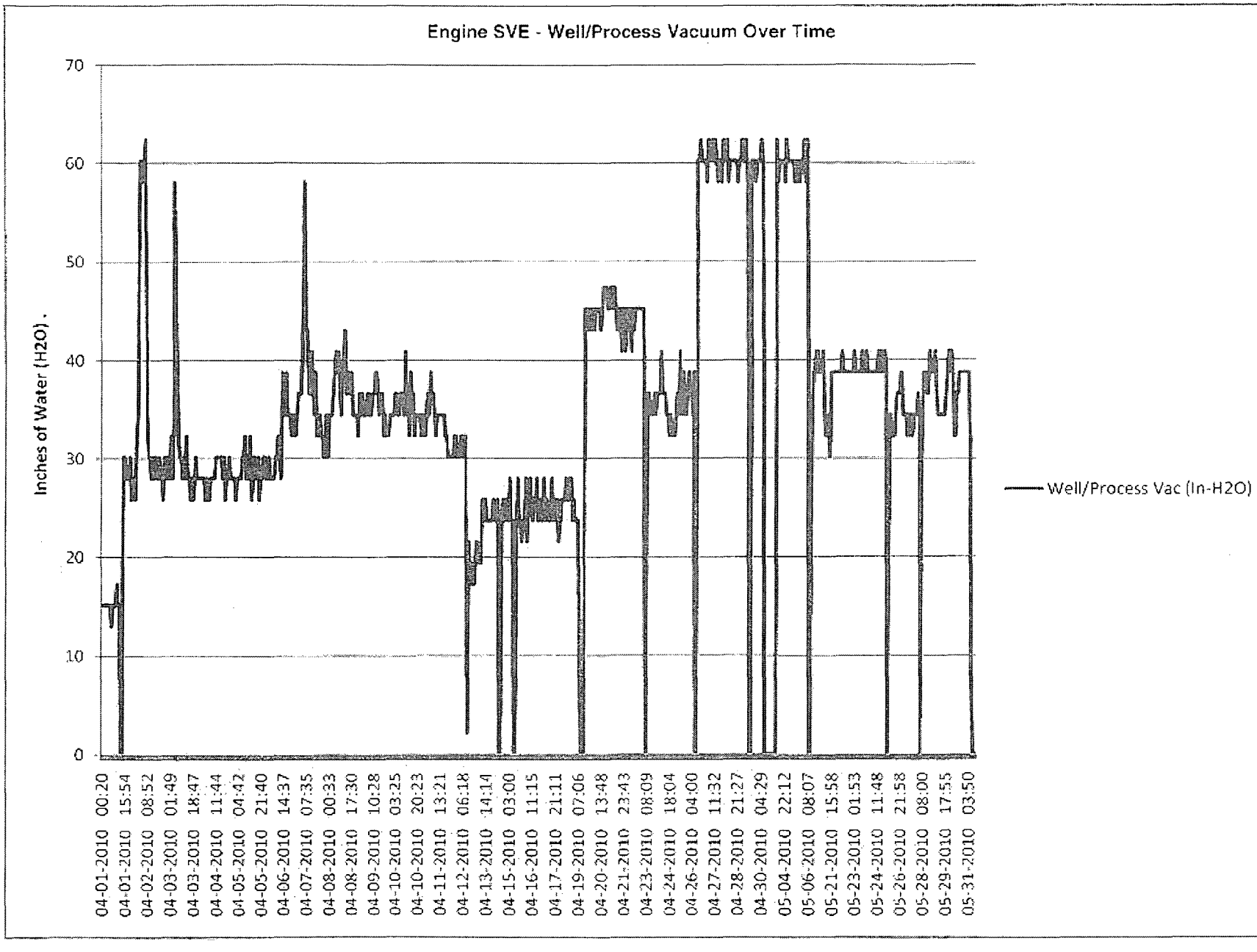
There are many advantages to using RSIs innovative approach in calculating how much mass was removed from a project in a given time period. Our method eliminates human calculation error and prevents incorrect or non-calibrated use of field instrumentation and it is a consistent periodic measurement over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

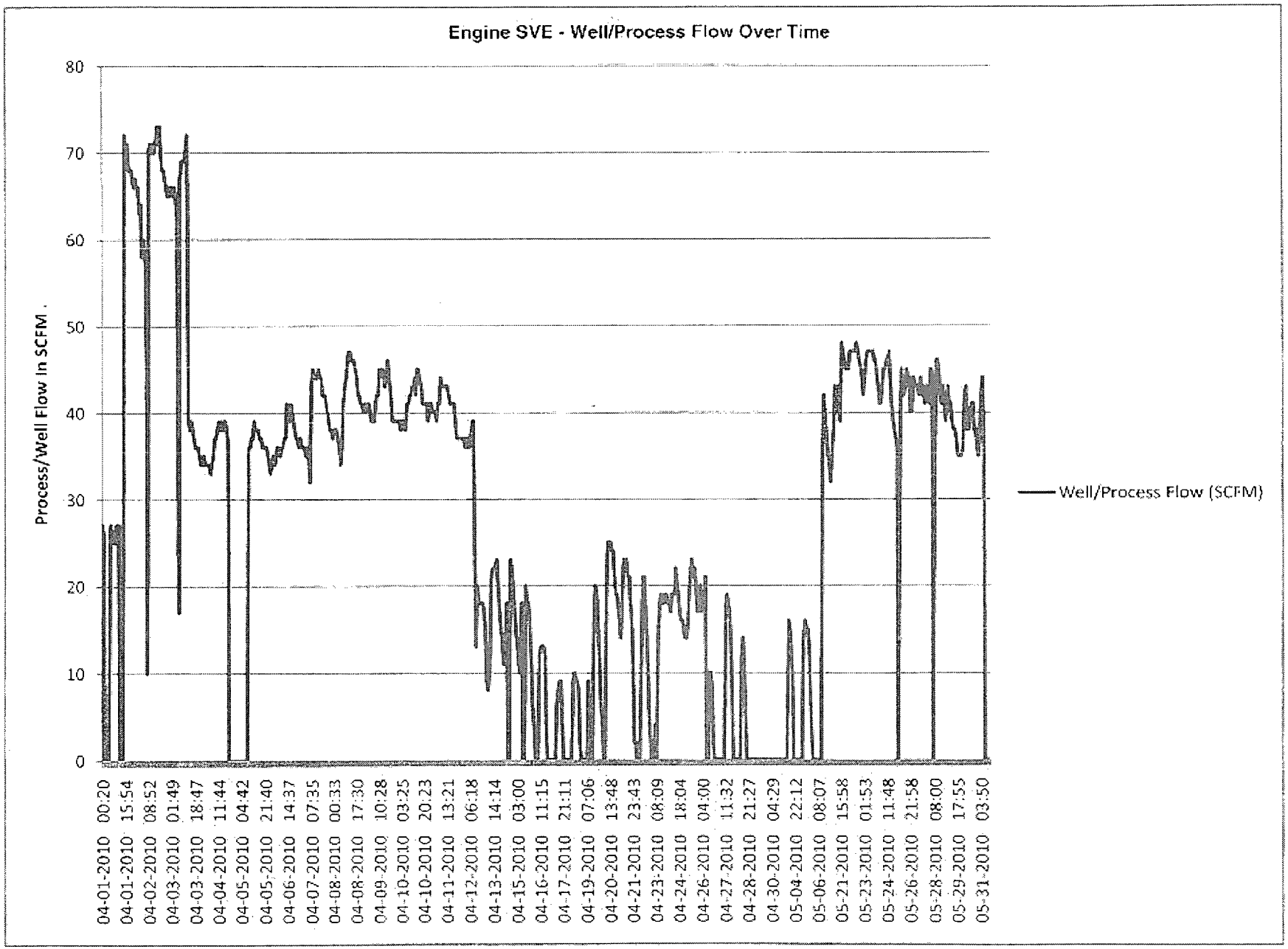
Our estimates of VOC removal have proven to be reasonable when compared to independent lab data. Because the process flow rate and the alternate fuel flow rate measurements are dependent upon proper system operation there are no expressed or implied warrantees of fitness of use for any purpose when using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

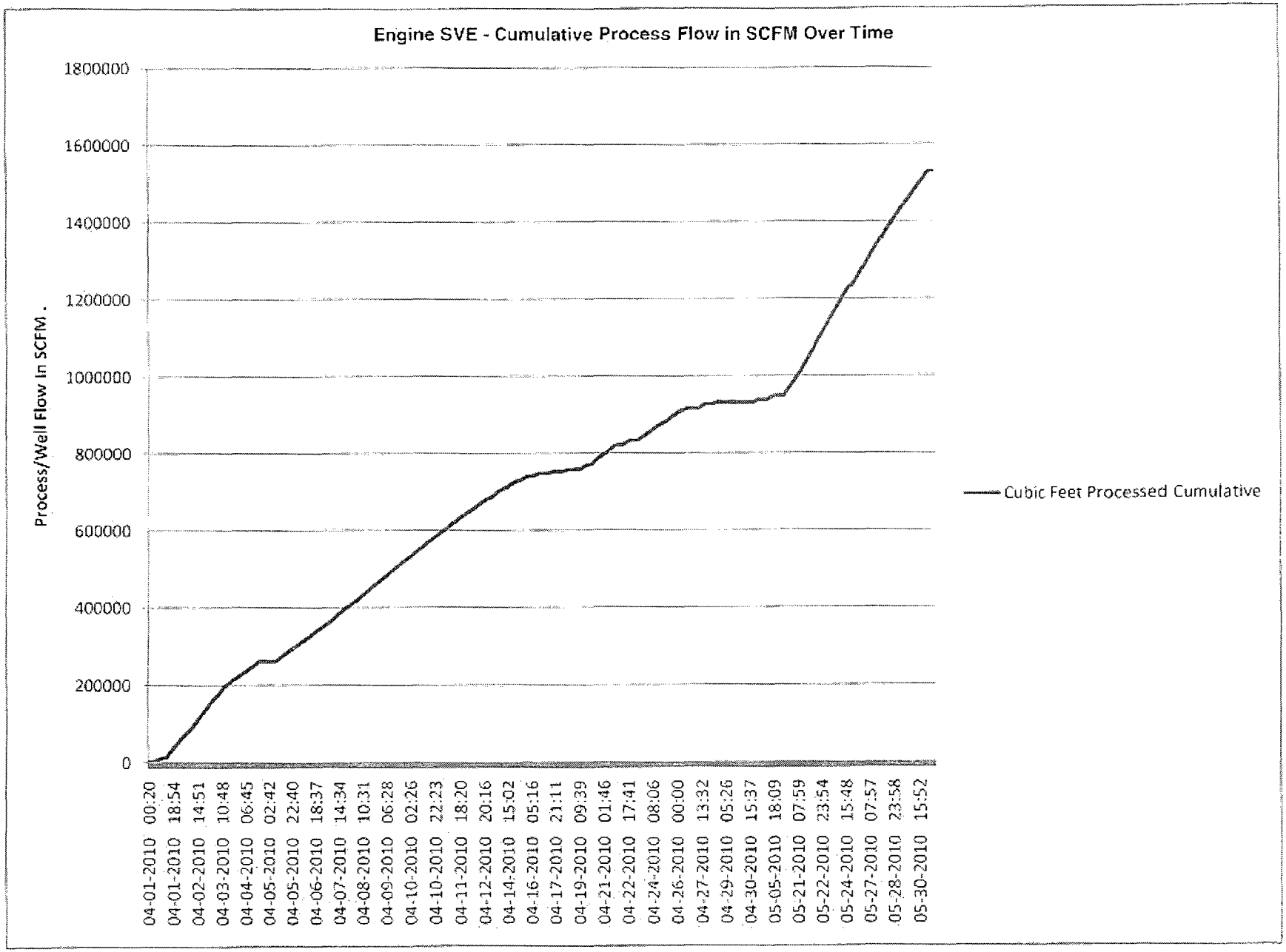
Please do not hesitate to contact RSI 1-800-368-8685 if you should have any questions or require further information

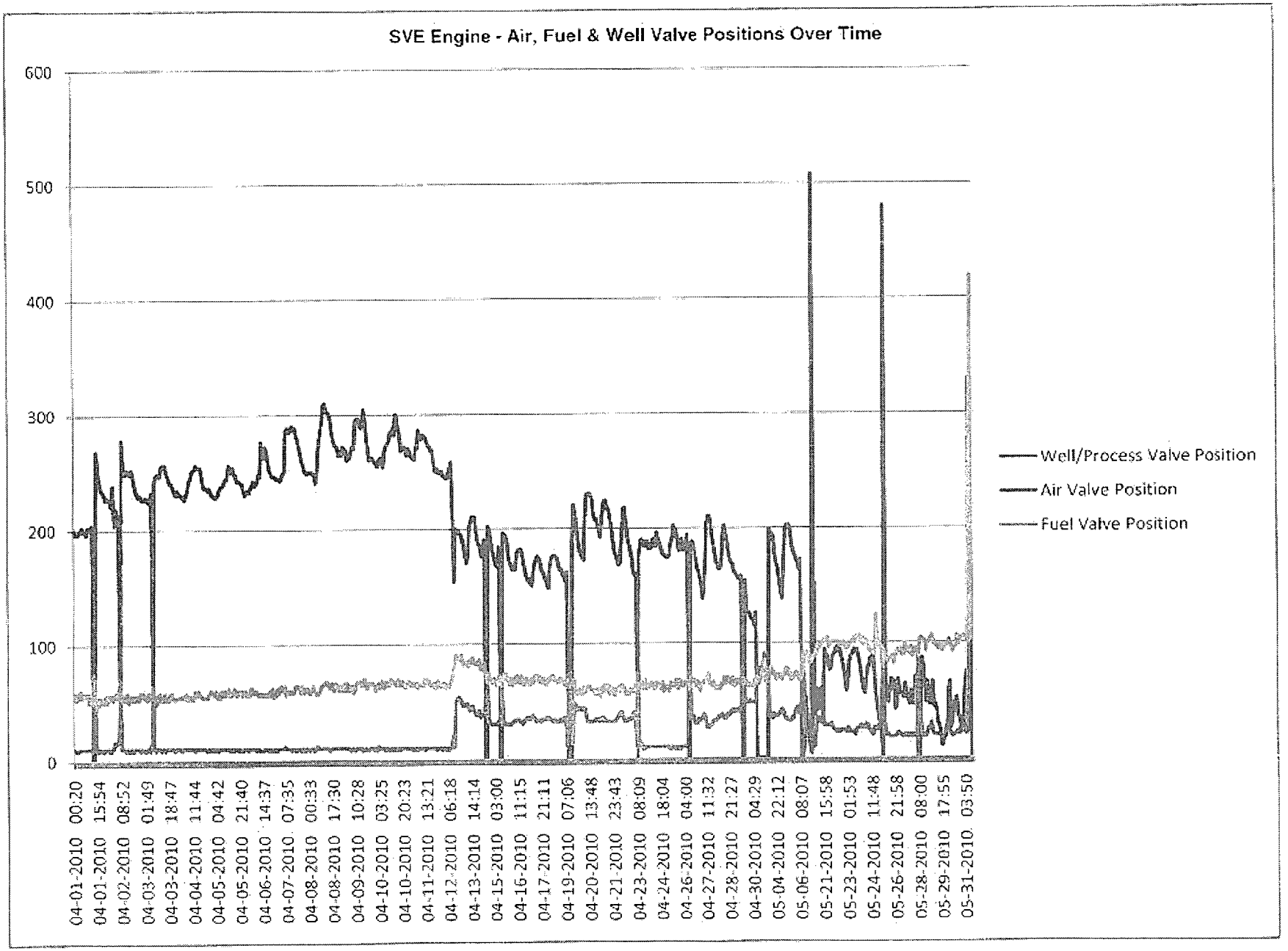

Engine SVE - Lbs. Removed Over Time-BTu/Hr Approach
Lbs. (as Gasoline) .
2500
2000
1500
1000
500
0
04-01-2010 00:20
04-01-2010 16:54
04-02-2010 10:51
04-03-2010 04:49
04-03-2010 22:46
04-04-2010 16:44
04-05-2010 10:41
04-06-2010 04:39
04-06-2010 22:36
04-07-2010 16:34
04-08-2010 10:31
04-09-2010 04:29
04-09-2010 22:26
04-10-2010 16:24
04-11-2010 10:21
04-12-2010 04:18
04-13-2010 12:14
04-15-2010 03:00
04-16-2010 13:15
04-18-2010 01:10
04-19-2010 09:39
04-20-2010 21:47
04-22-2010 09:42
04-23-2010 20:08
04-25-2010 08:02
04-26-2010 17:34
04-28-2010 05:29
04-29-2010 14:31
05-04-2010 10:14
05-05-2010 22:09
05-21-2010 07:59
05-22-2010 19:54
05-24-2010 07:49
05-26-2010 19:59
05-28-2010 08:00
05-29-2010 19:55
05-31-2010 07:50
Cumulative Lbs Removed

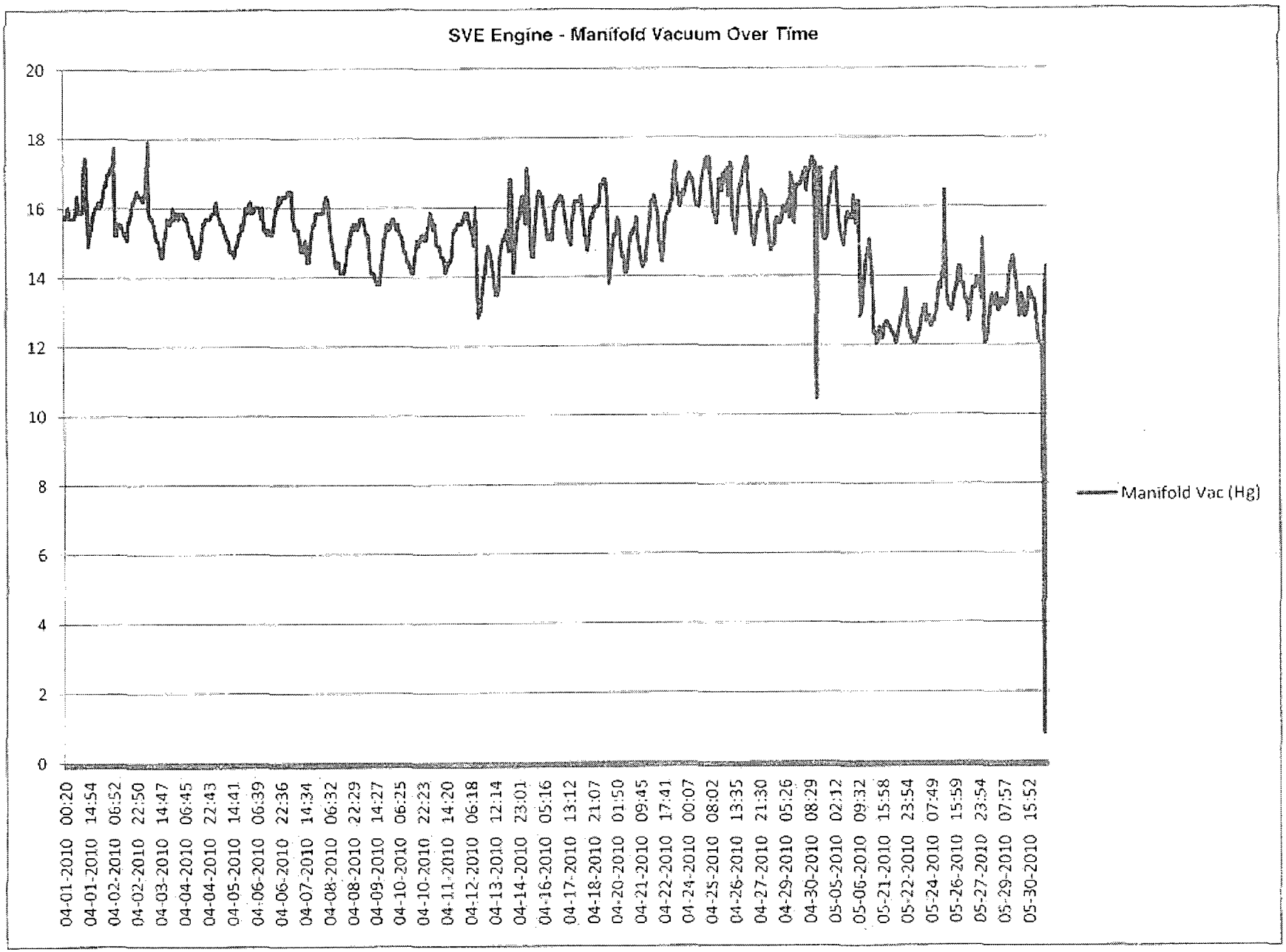

Engine SVE - Estimated ppmV Over Time
Parts per Million by Volume .
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
04-01-2010 00:20
04-01-2010 14:54
04-02-2010 06:52
04-02-2010 22:50
04-03-2010 14:47
04-04-2010 06:45
04-04-2010 22:43
04-05-2010 14:41
04-06-2010 06:39
04-06-2010 22:36
04-07-2010 14:34
04-08-2010 06:32
04-08-2010 22:29
04-09-2010 14:27
04-10-2010 06:25
04-10-2010 22:23
04-11-2010 14:20
04-12-2010 06:18
04-13-2010 12:14
04-14-2010 23:01
04-16-2010 05:16
04-17-2010 13:12
04-18-2010 21:07
04-20-2010 01:50
04-21-2010 09:45
04-22-2010 17:41
04-24-2010 00:07
04-25-2010 08:02
04-26-2010 13:35
04-27-2010 21:30
04-29-2010 05:26
04-30-2010 08:29
05-05-2010 02:12
05-06-2010 09:32
05-21-2010 15:58
05-22-2010 23:54
05-24-2010 07:49
05-26-2010 15:59
05-27-2010 23:54
05-29-2010 07:57
05-30-2010 15:52
PPMV(est)

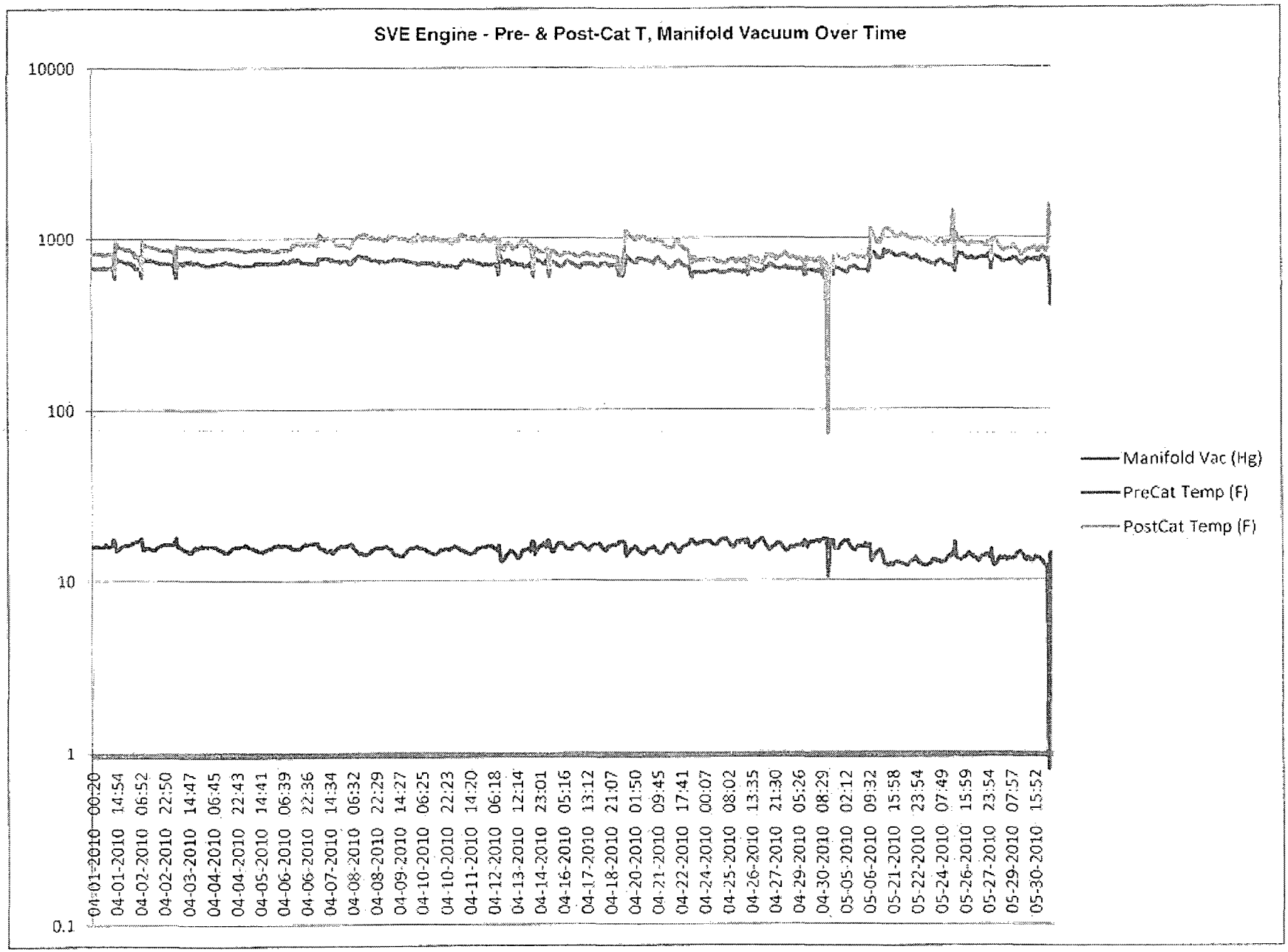

Engine SVE - Well/Process Vacuum Over Time
Inches of Water (H2O)
70
60
50
40
30
20
10
0
04-01-2010 00:20
04-01-2010 15:54
04-02-2010 08:52
04-03-2010 01:49
04-03-2010 18:47
04-04-2010 11:44
04-05-2010 04:42
04-05-2010 21:40
04-06-2010 14:37
04-07-2010 07:35
04-08-2010 00:33
04-08-2010 17:30
04-09-2010 10:28
04-10-2010 03:25
04-10-2010 20:23
04-11-2010 13:21
04-12-2010 06:18
04-13-2010 14:14
04-15-2010 03:00
04-16-2010 11:15
04-17-2010 21:11
04-19-2010 07:06
04-20-2010 13:48
04-21-2010 23:43
04-23-2010 08:09
04-24-2010 18:04
04-26-2010 04:00
04-27-2010 11:32
04-28-2010 21:27
04-30-2010 04:29
05-04-2010 22:12
05-06-2010 08:07
05-21-2010 15:58
05-23-2010 01:53
05-24-2010 11:48
05-26-2010 21:58
05-28-2010 08:00
05-29-2010 17:55
05-31-2010 03:50
Well/Process Vac (In-H2O)

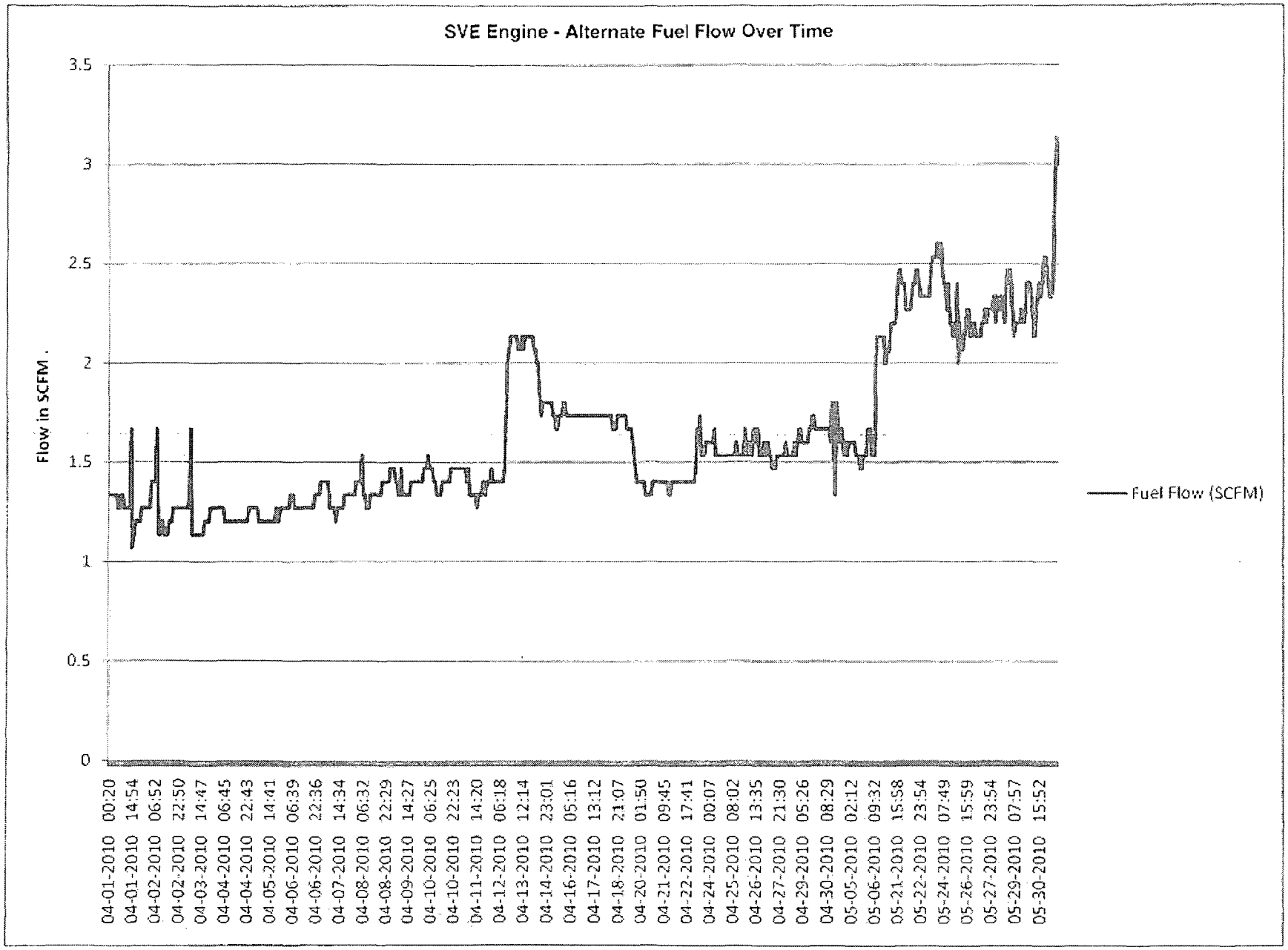

Engine SVE - Well/Process Flow Over Time
Process/Well Flow In SCFM
80
70
60
50
40
30
20
10
0
04-01-2010 00:20
04-01-2010 15:54
04-02-2010 08:52
04-03-2010 01:49
04-03-2010 18:47
04-04-2010 11:44
04-05-2010 04:42
04-05-2010 21:40
04-06-2010 14:37
04-07-2010 07:35
04-08-2010 00:33
04-08-2010 17:30
04-09-2010 10:28
04-10-2010 03:25
04-10-2010 20:23
04-11-2010 13:21
04-12-2010 06:18
04-13-2010 14:14
04-15-2010 03:00
04-16-2010 11:15
04-17-2010 21:11
04-19-2010 07:06
04-20-2010 13:48
04-21-2010 23:43
04-23-2010 08:09
04-24-2010 18:04
04-26-2010 04:00
04-27-2010 11:32
04-28-2010 21:27
04-30-2010 04:29
05-04-2010 22:12
05-06-2010 08:07
05-21-2010 15:58
05-23-2010 01:53
05-24-2010 11:48
05-26-2010 21:58
05-28-2010 08:00
05-29-2010 17:55
05-31-2010 03:50
Well/Process Flow (SCFM)


Engine SVE - Cumulative Process Flow in SCFM Over Time
Process/Well Flow In SCFM .
1800000
1600000
1400000
1200000
1000000
800000
600000
400000
200000
0
04-01-2010 00:20
04-01-2010 18:54
04-02-2010 14:51
04-03-2010 10:48
04-04-2010 06:45
04-05-2010 02:42
04-05-2010 22:40
04-06-2010 18:37
04-07-2010 14:34
04-08-2010 10:31
04-09-2010 06:28
04-10-2010 02:26
04-10-2010 22:23
04-11-2010 18:20
04-12-2010 20:16
04-14-2010 15:02
04-16-2010 05:16
04-17-2010 21:11
04-19-2010 09:39
04-21-2010 01:46
04-22-2010 17:41
04-24-2010 08:06
04-26-2010 00:00
04-27-2010 13:32
04-29-2010 05:26
04-30-2010 15:37
05-05-2010 18:09
05-21-2010 07:59
05-22-2010 23:54
05-24-2010 15:48
05-27-2010 07:57
05-28-2010 23:58
05-30-2010 15:52
Cubic Feet Processed Cumulative


SVE Engine - Air, Fuel & Well Valve Positions Over Time
600
500
400
300
200
100
0
04-01-2010 00:20
04-01-2010 15:54
04-02-2010 08:52
04-03-2010 01:49
04-03-2010 18:47
04-04-2010 11:44
04-05-2010 04:42
04-05-2010 21:40
04-06-2010 14:37
04-07-2010 07:35
04-08-2010 00:33
04-08-2010 17:30
04-09-2010 10:28
04-10-2010 03:25
04-10-2010 20:23
04-11-2010 13:21
04-12-2010 06:18
04-13-2010 14:14
04-15-2010 03:00
04-16-2010 11:15
04-17-2010 21:11
04-19-2010 07:06
04-20-2010 13:48
04-21-2010 23:43
04-23-2010 08:09
04-24-2010 18:04
04-26-2010 04:00
04-27-2010 11:32
04-28-2010 21:27
04-30-2010 04:29
05-04-2010 22:12
05-06-2010 08:07
05-21-2010 15:58
05-23-2010 01:53
05-24-2010 11:48
05-26-2010 21:58
05-28-2010 08:00
05-29-2010 17:55
05-31-2010 03:50
Well/Process Valve Position
Air Valve Position
Fuel Valve Position


SVE Engine - Manifold Vacuum Over Time
20
18
16
14
12
10
8
6
4
2
0
04-01-2010 00:20
04-01-2010 14:54
04-02-2010 06:52
04-02-2010 22:50
04-03-2010 14:47
04-04-2010 06:45
04-04-2010 22:43
04-05-2010 14:41
04-06-2010 06:39
04-06-2010 22:36
04-07-2010 14:34
04-08-2010 06:32
04-08-2010 22:29
04-09-2010 14:27
04-10-2010 06:25
04-10-2010 22:23
04-11-2010 14:20
04-12-2010 06:18
04-13-2010 12:14
04-14-2010 23:01
04-16-2010 05:16
04-17-2010 13:12
04-18-2010 21:07
04-20-2010 01:50
04-21-2010 09:45
04-22-2010 17:41
04-24-2010 00:07
04-25-2010 08:02
04-26-2010 13:35
04-27-2010 21:30
04-29-2010 05:26
04-30-2010 08:29
05-05-2010 02:12
05-06-2010 09:32
05-21-2010 15:58
05-22-2010 23:54
05-24-2010 07:49
05-26-2010 15:59
05-27-2010 23:54
05-29-2010 07:57
05-30-2010 15:52
Manifold Vac (Hg)


SVE Engine - Pre- & Post-Cat T, Manifold Vacuum Over Time
10000
1000
100
10
1
0.1
04-01-2010 00:20
04-01-2010 14:54
04-02-2010 06:52
04-02-2010 22:50
04-03-2010 14:47
04-04-2010 06:45
04-04-2010 22:43
04-05-2010 14:41
04-06-2010 06:39
04-06-2010 22:36
04-07-2010 14:34
04-08-2010 06:32
04-08-2010 22:29
04-09-2010 14:27
04-10-2010 06:25
04-10-2010 22:23
04-11-2010 14:20
04-12-2010 06:18
04-13-2010 12:14
04-14-2010 23:01
04-16-2010 05:16
04-17-2010 13:12
04-18-2010 21:07
04-20-2010 01:50
04-21-2010 09:45
04-22-2010 17:41
04-24-2010 00:07
04-25-2010 08:02
04-26-2010 13:35
04-27-2010 21:30
04-29-2010 05:26
04-30-2010 08:29
05-05-2010 02:12
05-06-2010 09:32
05-21-2010 15:58
05-22-2010 23:54
05-24-2010 07:49
05-26-2010 15:59
05-27-2010 23:54
05-29-2010 07:57
05-30-2010 15:52
Manifold Vac (Hg)
PreCat Temp (F)
PostCat Temp (F)


SVE Engine - Alternate Fuel Flow Over Time
Flow in SCFM .
3.5
3
2.5
2
1.5
1
0.5
0
04-01-2010 00:20
04-01-2010 14:54
04-02-2010 06:52
04-02-2010 22:50
04-03-2010 14:47
04-04-2010 06:45
04-04-2010 22:43
04-05-2010 14:41
04-06-2010 06:39
04-06-2010 22:36
04-07-2010 14:34
04-08-2010 06:32
04-08-2010 22:29
04-09-2010 14:27
04-10-2010 06:25
04-10-2010 22:23
04-11-2010 14:20
04-12-2010 06:18
04-13-2010 12:14
04-14-2010 23:01
04-16-2010 05:16
04-17-2010 13:12
04-18-2010 21:07
04-20-2010 01:50
04-21-2010 09:45
04-22-2010 17:41
04-24-2010 00:07
04-25-2010 08:02
04-26-2010 13:35
04-27-2010 21:30
04-29-2010 05:26
04-30-2010 08:29
05-05-2010 02:12
05-06-2010 09:32
05-21-2010 15:58
05-22-2010 23:54
05-24-2010 07:49
05-26-2010 15:59
05-27-2010 23:54
05-29-2010 07:57
05-30-2010 15:52
Fuel Flow (SCFM)

Remediation Service Int'l
4835 Colt Unit D
Ventura CA 93003
805.644.8382
805.644.8378 FAX
www.rsi-save.com

1555721

Report Generator Version 1.4

Due to file size, data has been resampled from 'O2' events only at an event frequency of 1 out of 3

Date of Report:	7/21/2010
Project Name:	Thriftway Refinery Unit #2
Unit ID:	0
Controller S/N:	182
Software version:	844

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

Date Range From:	4/1/2010 0:40
Date Range To :	6/30/2010 22:55
Lbs. Removed/Period:	4901.17
Gal Removed/Period:	790.6
SCF Processed/Period	4089207

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)

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Footnotes:

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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.

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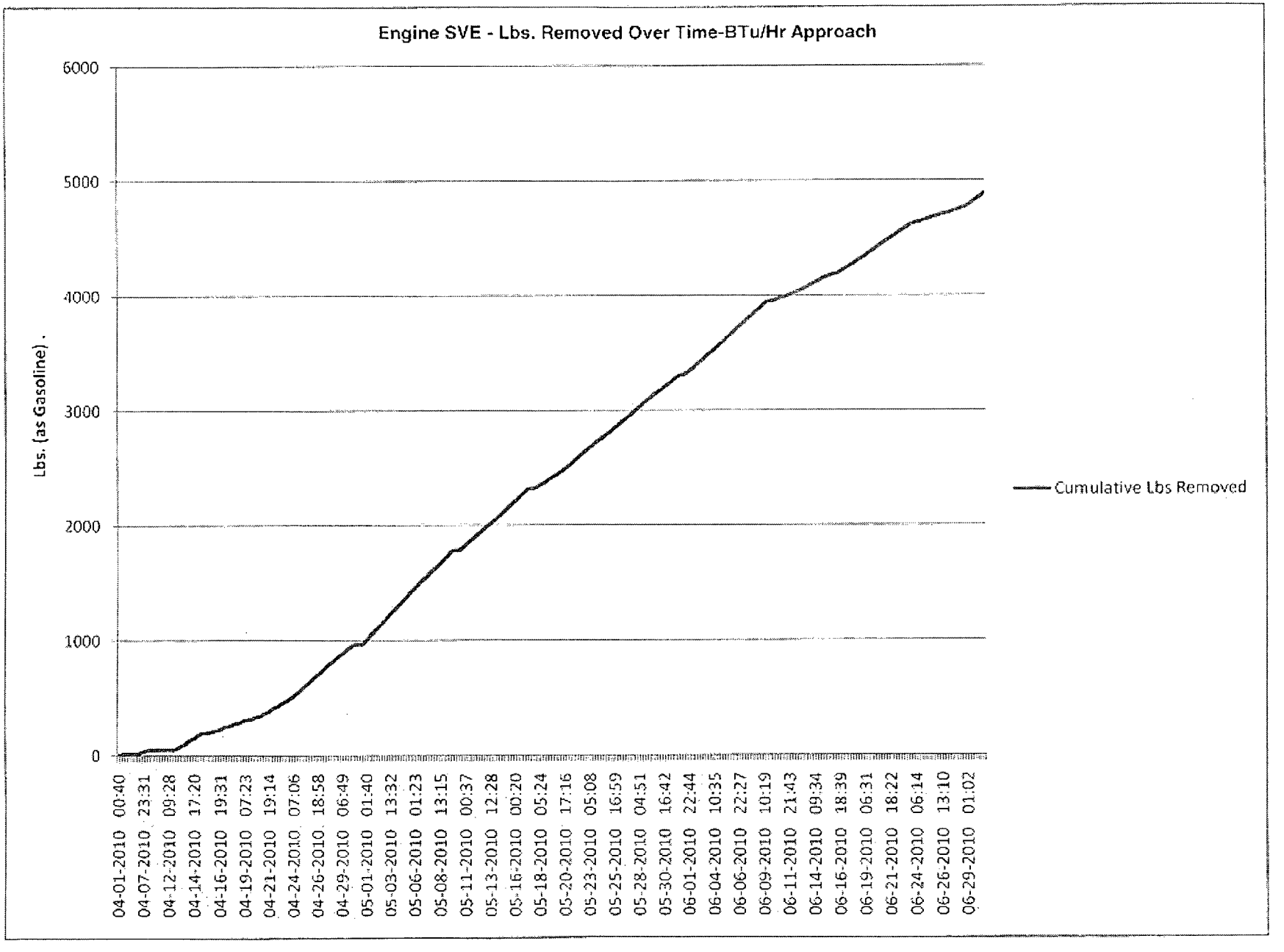
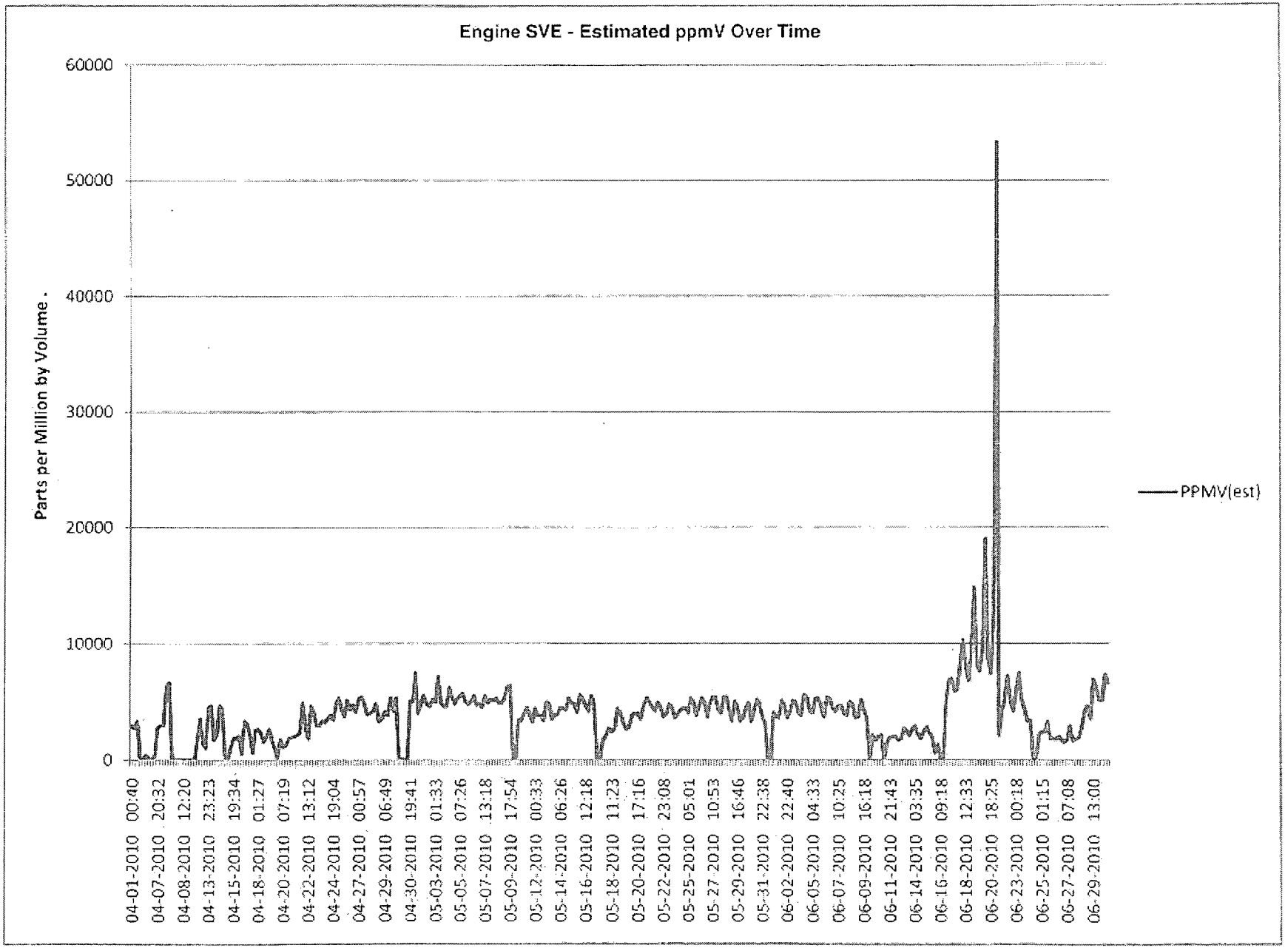
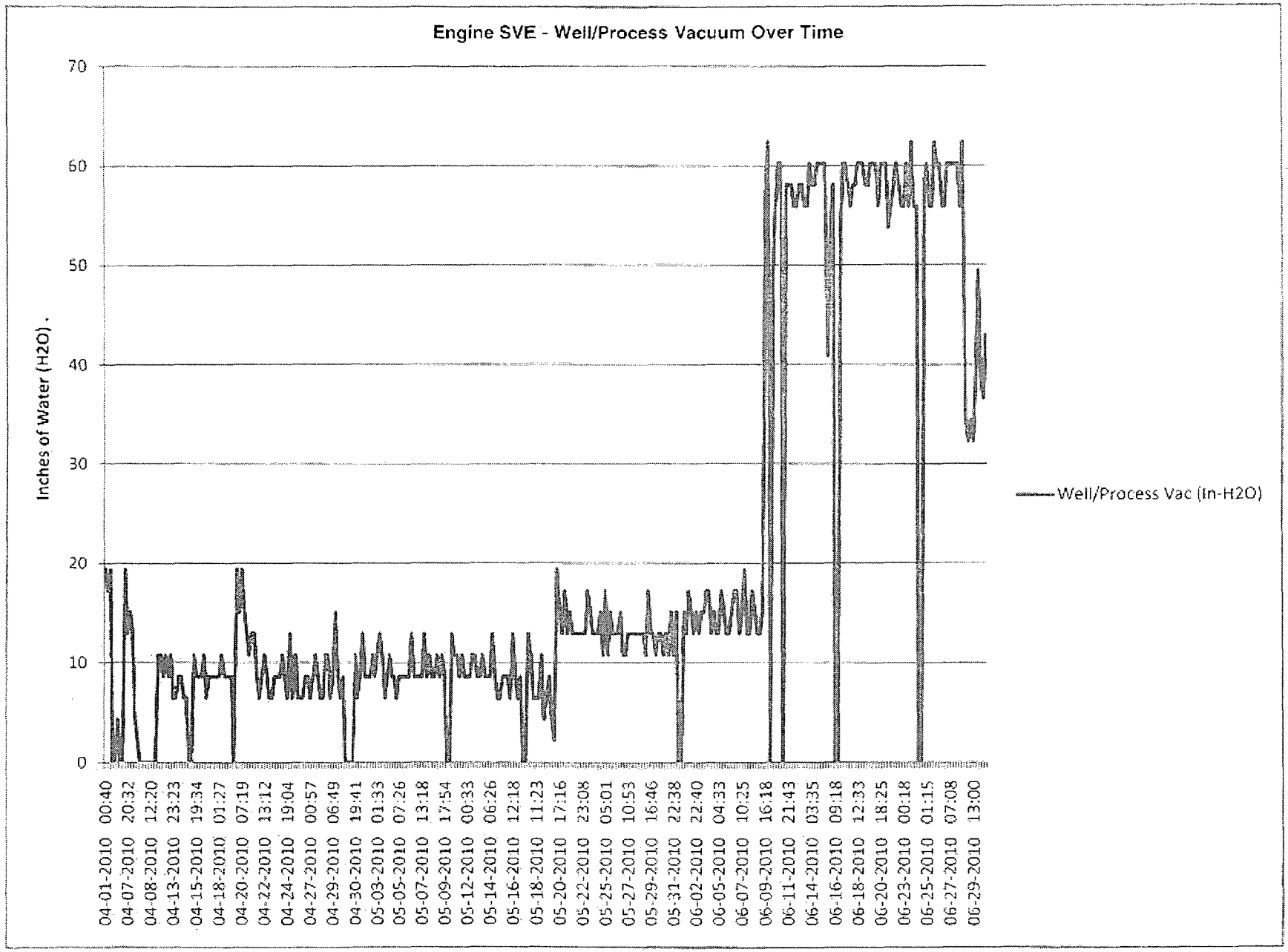
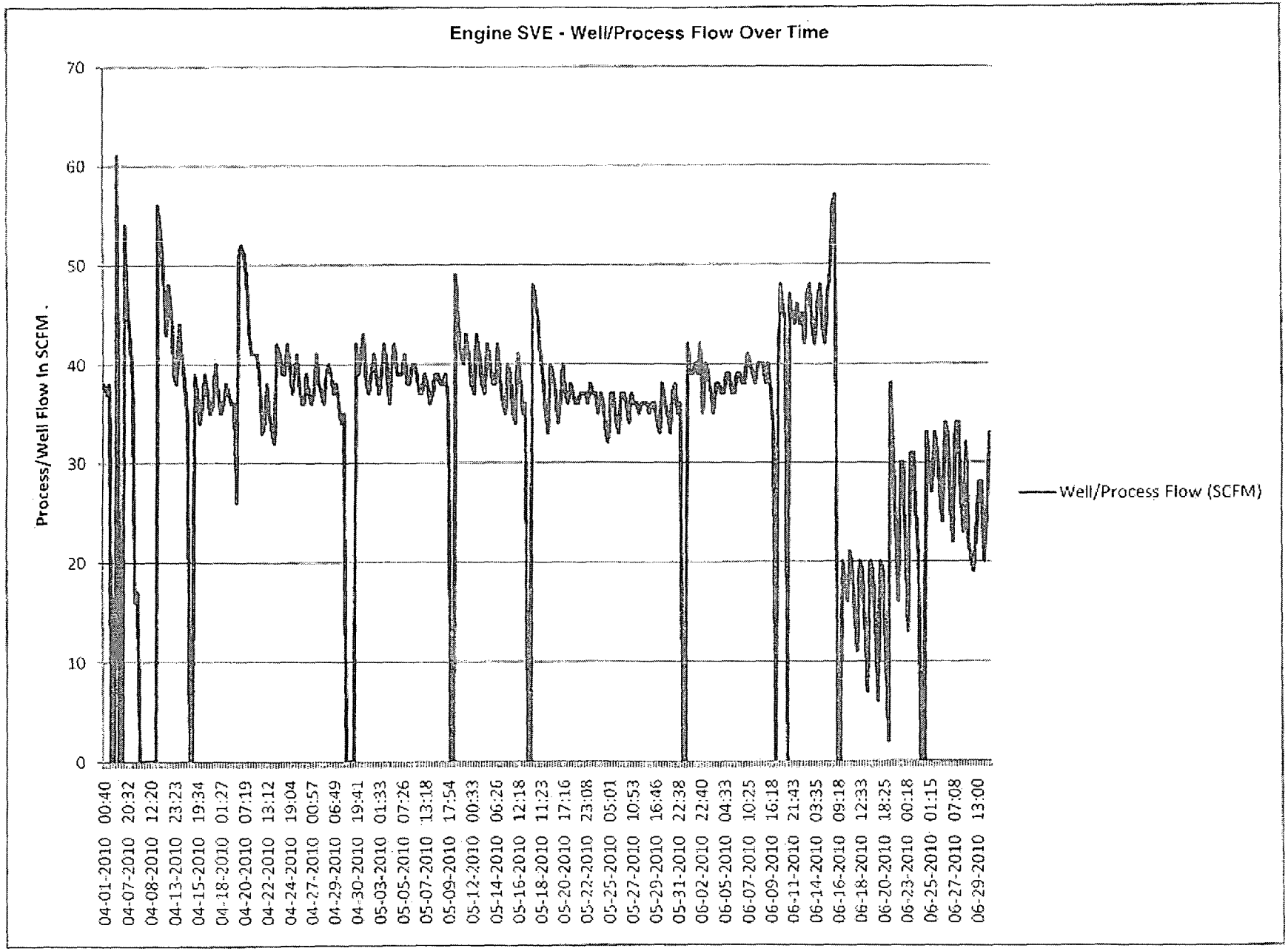
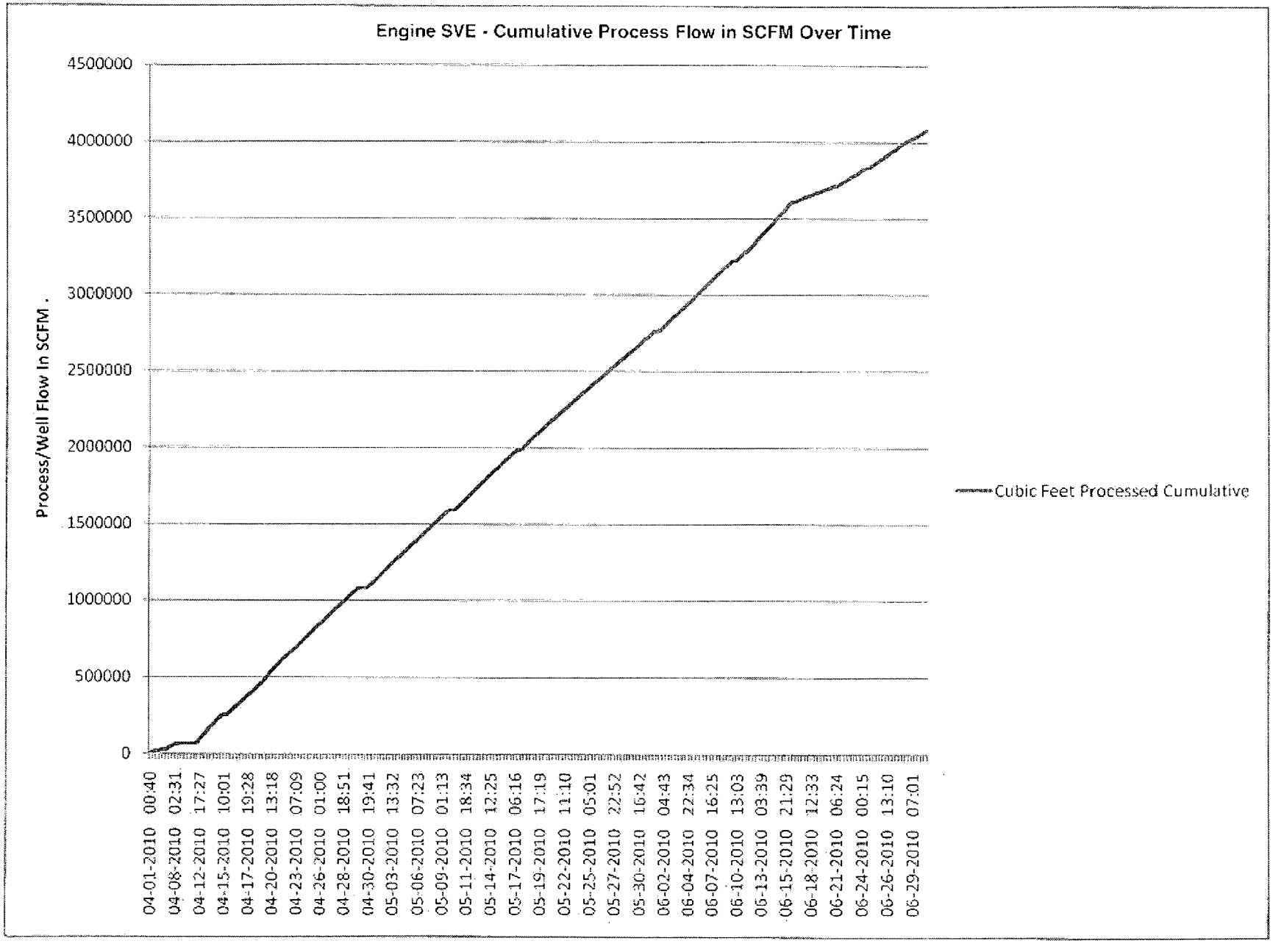
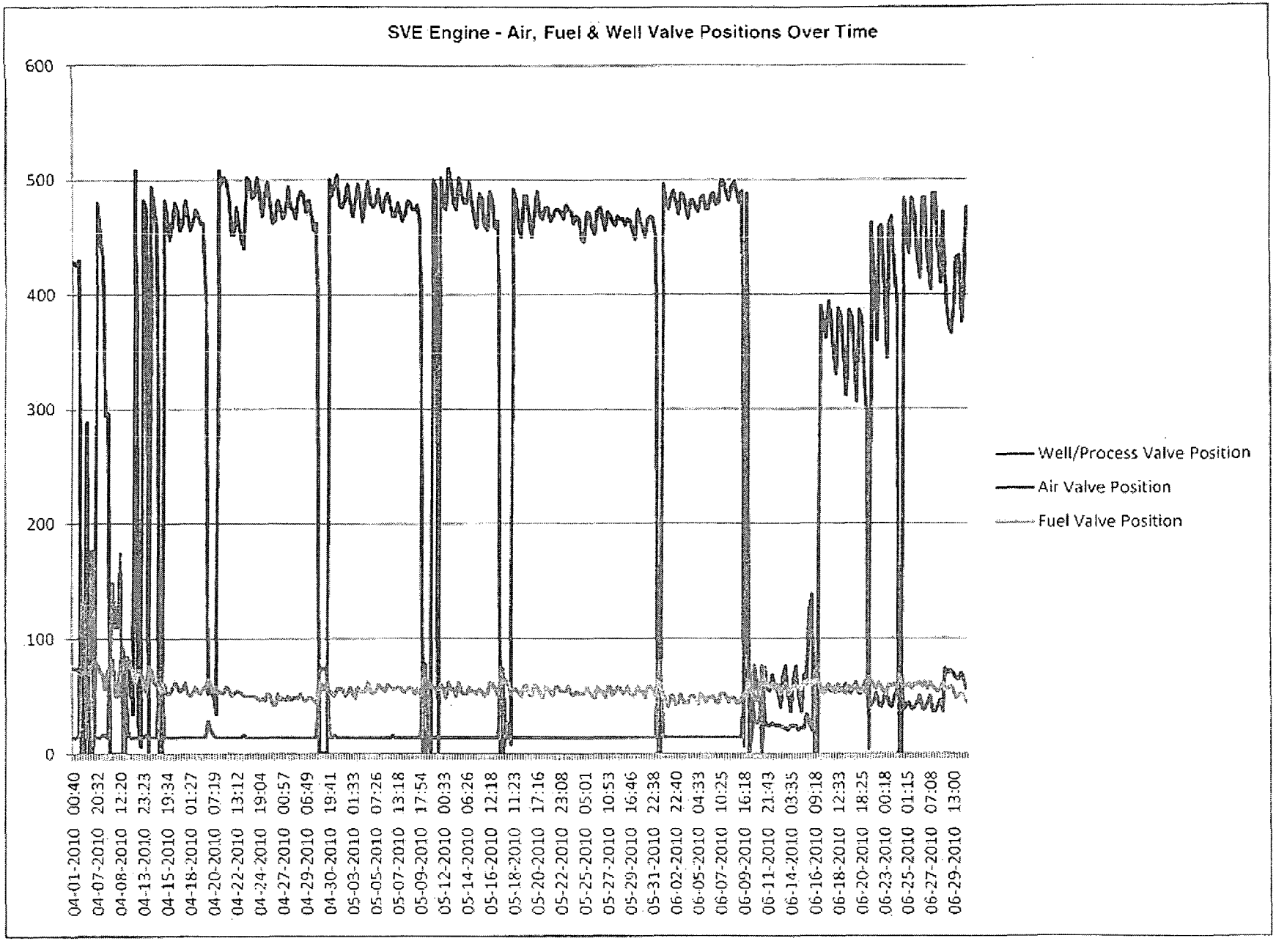

Engine SVE - Lbs. Removed Over Time-BTu/Hr Approach
Lbs. (as Gasoline) .
6000
5000
4000
3000
2000
1000
0
04-01-2010 00:40
04-07-2010 23:31
04-12-2010 09:28
04-14-2010 17:20
04-16-2010 19:31
04-19-2010 07:23
04-21-2010 19:14
04-24-2010 07:06
04-26-2010 18:58
04-29-2010 06:49
05-01-2010 01:40
05-03-2010 13:32
05-06-2010 01:23
05-08-2010 13:15
05-11-2010 00:37
05-13-2010 12:28
05-16-2010 00:20
05-18-2010 05:24
05-20-2010 17:16
05-23-2010 05:08
05-25-2010 16:59
05-28-2010 04:51
05-30-2010 16:42
06-01-2010 22:44
06-04-2010 10:35
06-06-2010 22:27
06-09-2010 10:19
06-11-2010 21:43
06-14-2010 09:34
06-16-2010 18:39
06-19-2010 06:31
06-21-2010 18:22
06-24-2010 06:14
06-26-2010 13:10
06-29-2010 01:02
Cumulative Lbs Removed

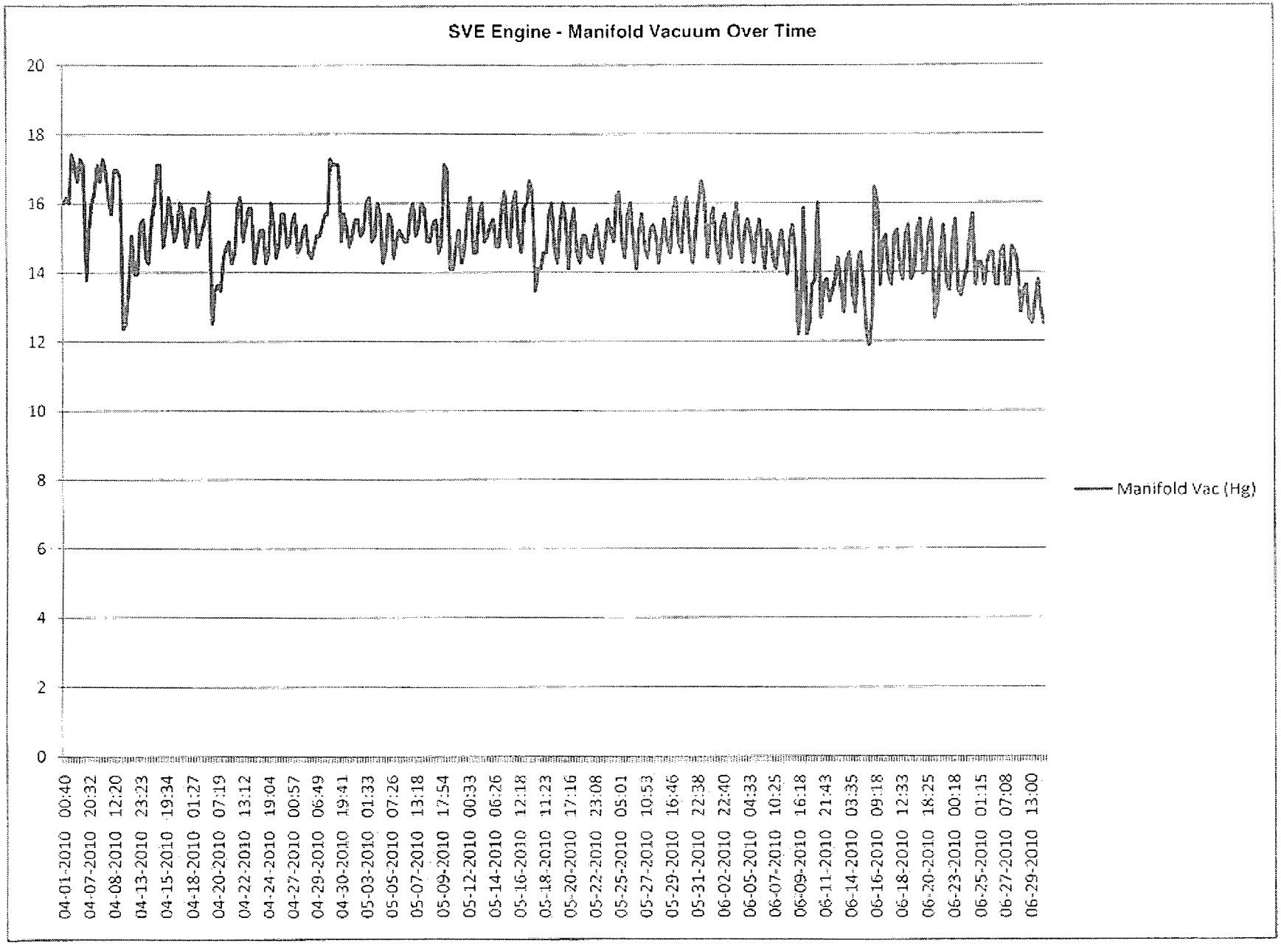

Engine SVE - Estimated ppmV Over Time
Parts per Million by Volume .
60000
50000
40000
30000
20000
10000
0
04-01-2010 00:40
04-07-2010 20:32
04-08-2010 12:20
04-13-2010 23:23
04-15-2010 19:34
04-18-2010 01:27
04-20-2010 07:19
04-22-2010 13:12
04-24-2010 19:04
04-27-2010 00:57
04-29-2010 06:49
04-30-2010 19:41
05-03-2010 01:33
05-05-2010 07:26
05-07-2010 13:18
05-09-2010 17:54
05-12-2010 00:33
05-14-2010 06:26
05-16-2010 12:18
05-18-2010 11:23
05-20-2010 17:16
05-22-2010 23:08
05-25-2010 05:01
05-27-2010 10:53
05-29-2010 16:46
05-31-2010 22:38
06-02-2010 22:40
06-05-2010 04:33
06-07-2010 10:25
06-09-2010 16:18
06-11-2010 21:43
06-14-2010 03:35
06-16-2010 09:18
06-18-2010 12:33
06-20-2010 18:25
06-23-2010 00:18
06-25-2010 01:15
06-27-2010 07:08
06-29-2010 13:00
PPMV(est)

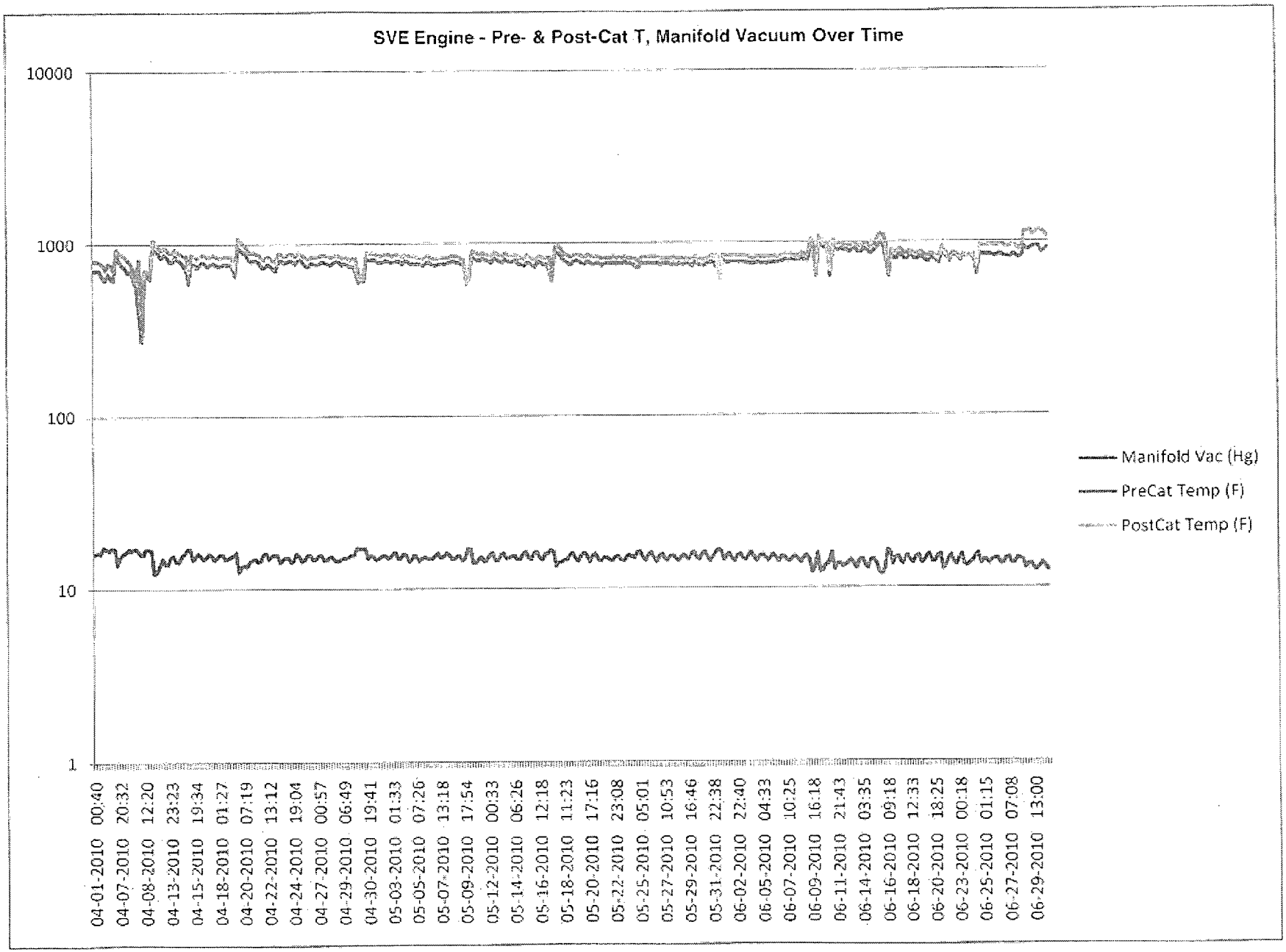

Engine SVE - Well/Process Vacuum Over Time
Inches of Water (H2O)
70
60
50
40
30
20
10
0
04-01-2010 00:40
04-07-2010 20:32
04-08-2010 12:20
04-13-2010 23:23
04-15-2010 19:34
04-18-2010 01:27
04-20-2010 07:19
04-22-2010 13:12
04-24-2010 19:04
04-27-2010 00:57
04-29-2010 06:49
04-30-2010 19:41
05-03-2010 01:33
05-05-2010 07:26
05-07-2010 13:18
05-09-2010 17:54
05-12-2010 00:33
05-14-2010 06:26
05-16-2010 12:18
05-18-2010 11:23
05-20-2010 17:16
05-22-2010 23:08
05-25-2010 05:01
05-27-2010 10:53
05-29-2010 16:46
05-31-2010 22:38
06-02-2010 22:40
06-05-2010 04:33
06-07-2010 10:25
06-09-2010 16:18
06-11-2010 21:43
06-14-2010 03:35
06-16-2010 09:18
06-18-2010 12:33
06-20-2010 18:25
06-23-2010 00:18
06-25-2010 01:15
06-27-2010 07:08
06-29-2010 13:00
Well/Process Vac (In-H2O)

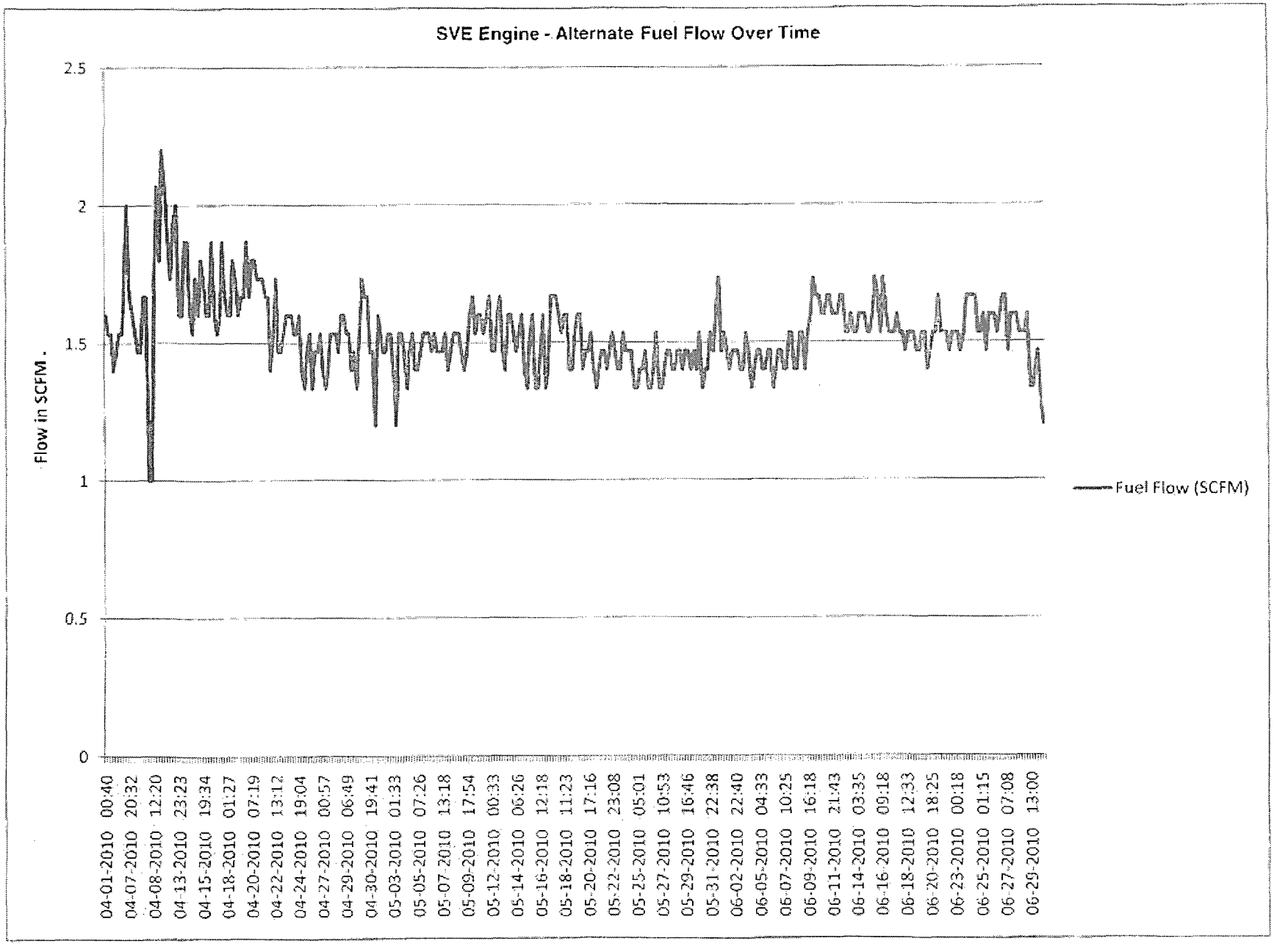

Engine SVE - Well/Process Flow Over Time
Process/Well Flow In SCFM .
70
60
50
40
30
20
10
0
04-01-2010 00:40
04-07-2010 20:32
04-08-2010 12:20
04-13-2010 23:23
04-15-2010 19:34
04-18-2010 01:27
04-20-2010 07:19
04-22-2010 13:12
04-24-2010 19:04
04-27-2010 00:57
04-29-2010 06:49
04-30-2010 19:41
05-03-2010 01:33
05-05-2010 07:26
05-07-2010 13:18
05-09-2010 17:54
05-12-2010 00:33
05-14-2010 06:26
05-16-2010 12:18
05-18-2010 11:23
05-20-2010 17:16
05-22-2010 23:08
05-25-2010 05:01
05-27-2010 10:53
05-29-2010 16:46
05-31-2010 22:38
06-02-2010 22:40
06-05-2010 04:33
06-07-2010 10:25
06-09-2010 16:18
06-11-2010 21:43
06-14-2010 03:35
06-16-2010 09:18
06-18-2010 12:33
06-20-2010 18:25
06-23-2010 00:18
06-25-2010 01:15
06-27-2010 07:08
06-29-2010 13:00
Well/Process Flow (SCFM)


Engine SVE - Cumulative Process Flow in SCFM Over Time
Process/Well Flow In SCFM .
4500000
4000000
3500000
3000000
2500000
2000000
1500000
1000000
500000
0
04-01-2010 00:40
04-08-2010 02:31
04-12-2010 17:27
04-15-2010 10:01
04-17-2010 19:28
04-20-2010 13:18
04-23-2010 07:09
04-26-2010 01:00
04-28-2010 18:51
04-30-2010 19:41
05-03-2010 13:32
05-06-2010 07:23
05-09-2010 01:13
05-11-2010 18:34
05-14-2010 12:25
05-17-2010 06:16
05-19-2010 17:19
05-22-2010 11:10
05-25-2010 05:01
05-27-2010 22:52
05-30-2010 16:42
06-02-2010 04:43
06-04-2010 22:34
06-07-2010 16:25
06-10-2010 13:03
06-13-2010 03:39
06-15-2010 21:29
06-18-2010 12:33
06-21-2010 06:24
06-24-2010 00:15
06-26-2010 13:10
06-29-2010 07:01
Cubic Feet Processed Cumulative


SVE Engine - Air, Fuel & Well Valve Positions Over Time
600
500
400
300
200
100
0
04-01-2010 00:40
04-07-2010 20:32
04-08-2010 12:20
04-13-2010 23:23
04-15-2010 19:34
04-18-2010 01:27
04-20-2010 07:19
04-22-2010 13:12
04-24-2010 19:04
04-27-2010 00:57
04-29-2010 06:49
04-30-2010 19:41
05-03-2010 01:33
05-05-2010 07:26
05-07-2010 13:18
05-09-2010 17:54
05-12-2010 00:33
05-14-2010 06:26
05-16-2010 12:18
05-18-2010 11:23
05-20-2010 17:16
05-22-2010 23:08
05-25-2010 05:01
05-27-2010 10:53
05-29-2010 16:46
05-31-2010 22:38
06-02-2010 22:40
06-05-2010 04:33
06-07-2010 10:25
06-09-2010 16:18
06-11-2010 21:43
06-14-2010 03:35
06-16-2010 09:18
06-18-2010 12:33
06-20-2010 18:25
06-23-2010 00:18
06-25-2010 01:15
06-27-2010 07:08
06-29-2010 13:00
Well/Process Valve Position
Air Valve Position
Fuel Valve Position


SVE Engine - Manifold Vacuum Over Time
20
18
16
14
12
10
8
6
4
2
0
04-01-2010 00:40
04-07-2010 20:32
04-08-2010 12:20
04-13-2010 23:23
04-15-2010 19:34
04-18-2010 01:27
04-20-2010 07:19
04-22-2010 13:12
04-24-2010 19:04
04-27-2010 00:57
04-29-2010 06:49
04-30-2010 19:41
05-03-2010 01:33
05-05-2010 07:26
05-07-2010 13:18
05-09-2010 17:54
05-12-2010 00:33
05-14-2010 06:26
05-16-2010 12:18
05-18-2010 11:23
05-20-2010 17:16
05-22-2010 23:08
05-25-2010 05:01
05-27-2010 10:53
05-29-2010 16:46
05-31-2010 22:38
06-02-2010 22:40
06-05-2010 04:33
06-07-2010 10:25
06-09-2010 16:18
06-11-2010 21:43
06-14-2010 03:35
06-16-2010 09:18
06-18-2010 12:33
06-20-2010 18:25
06-23-2010 00:18
06-25-2010 01:15
06-27-2010 07:08
06-29-2010 13:00
Manifold Vac (Hg)


SVE Engine - Pre- & Post-Cat T, Manifold Vacuum Over Time
10000
1000
100
10
1
04-01-2010 00:40
04-07-2010 20:32
04-08-2010 12:20
04-13-2010 23:23
04-15-2010 19:34
04-18-2010 01:27
04-20-2010 07:19
04-22-2010 13:12
04-24-2010 19:04
04-27-2010 00:57
04-29-2010 06:49
04-30-2010 19:41
05-03-2010 01:33
05-05-2010 07:26
05-07-2010 13:18
05-09-2010 17:54
05-12-2010 00:33
05-14-2010 06:26
05-16-2010 12:18
05-18-2010 11:23
05-20-2010 17:16
05-22-2010 23:08
05-25-2010 05:01
05-27-2010 10:53
05-29-2010 16:46
05-31-2010 22:38
06-02-2010 22:40
06-05-2010 04:33
06-07-2010 10:25
06-09-2010 16:18
06-11-2010 21:43
06-14-2010 03:35
06-16-2010 09:18
06-18-2010 12:33
06-20-2010 18:25
06-23-2010 00:18
06-25-2010 01:15
06-27-2010 07:08
06-29-2010 13:00
Manifold Vac (Hg)
PreCat Temp (F)
PostCat Temp (F)


SVE Engine - Alternate Fuel Flow Over Time
Flow in SCFM .
2.5
2
1.5
1
0.5
0
04-01-2010 00:40
04-07-2010 20:32
04-08-2010 12:20
04-13-2010 23:23
04-15-2010 19:34
04-18-2010 01:27
04-20-2010 07:19
04-22-2010 13:12
04-24-2010 19:04
04-27-2010 00:57
04-29-2010 06:49
04-30-2010 19:41
05-03-2010 01:33
05-05-2010 07:26
05-07-2010 13:18
05-09-2010 17:54
05-12-2010 00:33
05-14-2010 06:26
05-16-2010 12:18
05-18-2010 11:23
05-20-2010 17:16
05-22-2010 23:08
05-25-2010 05:01
05-27-2010 10:53
05-29-2010 16:46
05-31-2010 22:38
06-02-2010 22:40
06-05-2010 04:33
06-07-2010 10:25
06-09-2010 16:18
06-11-2010 21:43
06-14-2010 03:35
06-16-2010 09:18
06-18-2010 12:33
06-20-2010 18:25
06-23-2010 00:18
06-25-2010 01:15
06-27-2010 07:08
06-29-2010 13:00
Fuel Flow (SCFM)

Soil Boring Log
Soil Boring No: TW-46
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	5-5-10 - 1330 1408
Location:	Bloomfield, NM	Finish Date/Time:	5-5-10 1430
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)	5'	Logged by:	~~B. Watson~~ MB/CD
Final DTW (ft):		Well Diameter (in.):	2"

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0'	SAND, BROWN, COARSE, DRY						
Top: 5'	WET, SAND LT. GREY - SLIGHT ODOR, COARSE.						
Top: 10	TD - SAND, COARSE, LT. GREY SOME COBB, 1/4 - 1/2" GRAVEL						
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							

10 - 2.5' - 0.010 SLOT
10 - 1.5 - 10x20
1.5 - .5 - BENT. PLUG
.5 - 0 - NEAT SEAL

Soil Boring Log — TW-47
Soil Boring No:
Monitor Well No:

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

Project:	Former Thriftway Refinery	**Project No.:**	050204
Client:	Thriftway	**Start Date/Time:**	5-5-10 - 1500
Location:	Bloomfield, NM	**Finish Date/Time:**	5-5-10 - 1525
Driller:	BioTech Remediation	**Elevation:**	
Drilling Method:	Hollow-stem Auger	**Datum:**	
Initial DTW (ft)		**Logged by:**	B. ~~Watson~~ MS/CP
Final DTW (ft):		**Well Diameter (in.):**	2"

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	SAND, TAN, FINE GRAIN (DRY)						
Top: 5'	SAND - COARSE. ¼-½ GRAVEL WET.						
Top: 10'	TD. SAND, BROWN, COARSE RIVER GRAVEL - ¼ x ½"						
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							

10 - 2.5' = 0.010 SLOT
10 - 1.5' 10 x 20
1.5 - .5 BENT. / PLUG
.5 - 0 - NEAT / SEAL

Soil Boring Log TW-48
Soil Boring No:
Monitor Well No:

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

Project:	Former Thriftway Refinery	**Project No.:**	050204
Client:	Thriftway	**Start Date/Time:**	5-5-10 / 1130
Location:	Bloomfield, NM	**Finish Date/Time:**	1200
Driller:	BioTech Remediation	**Elevation:**	
Drilling Method:	Hollow-stem Auger	**Datum:**	
Initial DTW (ft)	5'	**Logged by:**	~~B. Watson~~ M. Bearhart / CW
Final DTW (ft):		**Well Diameter (in.):**	2"

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	SAND, TAN, MEDIUM - MOIST						
Top: 5'	SAND - COARSE, TRACE OF GRAVEL						
7'	1" - WET - COBBLE / SAND						
Top: 10'	TD -						
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							

10'-2.5' - 0.010 SCREEN
10-1.5 - 10x20
1.5-.5 - BENTONITE PLUG/SEAL
.5-0 - NEAT / SURFACE CASING

Soil Boring Log
Soil Boring No: TW-45
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	5-3-10 - 1300
Location:	Bloomfield, NM	Finish Date/Time:	5-5-10 - 1330
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)	5'	Logged by:	B. Watson MB / CW
Final DTW (ft):		Well Diameter (in.):	2"

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	SAND, BROWN, MED GRAIN.						
Top: 5'	- WATER - SAND, BROWN, COARSE.						
Top: 10'	TD - SAND BROWN, COARSE.						
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							

10'-2.5' 0.010 SLOT
10-1.5' - 10x20
1.5'-.5' BENT. / PLUG
.5'-0' - NEAT / SEAL

Soil Boring Log TW-50
Soil Boring No:
Monitor Well No:

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

Project:	Former Thriftway Refinery	**Project No.:**	050204
Client:	Thriftway	**Start Date/Time:**	1200 / 5-5-10
Location:	Bloomfield, NM	**Finish Date/Time:**	1230 / 5-5-10
Driller:	BioTech Remediation	**Elevation:**	
Drilling Method:	Hollow-stem Auger	**Datum:**	
Initial DTW (ft)	5'	**Logged by:**	~~B. Watson~~ MS / CW
Final DTW (ft):		**Well Diameter (in.):**	2"

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	- Strong Odor @ Collar						
	Sand, med Grain. Tan. Strong						
Top: 5'	odor @ 5'. Water						
	Sand. Black -						
	Strong odor.						
Top: 10	TD - Sand, Blk. Coarse.						
	Very strong odor.						
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							

10-2.5' 0.010 Screen
10-1.5' = 10x20
1.5-.5 Plug
.5-0 = Neat Seal

Soil Boring Log
Soil Boring No: MPE-49
Monitor Well No:

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

Project:	Former Thriftway Refinery	**Project No.:**	050204
Client:	Thriftway	**Start Date/Time:**	6-10-10 1400
Location:	Bloomfield, NM	**Finish Date/Time:**	6-10-10 1530
Driller:	BioTech Remediation	**Elevation:**	
Drilling Method:	Hollow-stem Auger	**Datum:**	
Initial DTW (ft)		**Logged by:**	B. Watson
Final DTW (ft):		**Well Diameter (in.):**	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	GRAVEL - FILL						
Top: 1	SAND, FINE, BROWN, DRY SOFT						
Top: 5'	SAND w/ LENSES OF CLAYEY SAND FINE, BROWN, DRY SOFT						
Top: 13'	CLAY BROWN, SOFT MOIST						
Top: 14'	FAT CLAY, BROWN, SOFT, MOIST						
Top: 17'	SAND, MED. GREY WET SOFT						
Top: 22'	TD - SAND - MED BROWN.						
Top:							
Top:							
Top:							

22' → 12 0.010 SLOT
22 → 10 10 x 20 GRIT
11 → 10 3/8" BENT. PLUG
10 → 0 NEAT / GROUT

Soil Boring Log
Soil Boring No: BHPE-39
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	6-2-10 1300
Location:	Bloomfield, NM	Finish Date/Time:	6-2-10 1400
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)		Logged by:	B. Watson / MS / CD
Final DTW (ft):		Well Diameter (in.):	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	SAND, FINE, BROWN. W/ CLAY / DRY						
Top: 7	SAND, FINE BROWN / DRY						
Top: 11'	SANDY CLAY. FINE, BROWN / DRY						
Top: 10.5	SANDY CLAY, GREY, MEDGRAIN DRY - STRONG ODOR.						
Top: 13	- SANDY CLAY, GREY & MED. MOIST.			13'	39		
Top: 18	TD - SAME			18'	14		
Top:							
Top:							
Top:							
Top:							

18' - 8' - 0.010 SLOT
18' - 7' - 10 X20
7' ~~4~~ - 6' BENT. / ~~SAND~~ CHIPS
6' - 0' NEAT / SEAL

Soil Boring Log

Soil Boring No: MPE - 40
Monitor Well No:

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

Project:	Former Thriftway Refinery	**Project No.:**	050204
Client:	Thriftway	**Start Date/Time:**	6-2-10 1427
Location:	Bloomfield, NM	**Finish Date/Time:**	6-2-10 1515
Driller:	BioTech Remediation	**Elevation:**	
Drilling Method:	Hollow-stem Auger	**Datum:**	
Initial DTW (ft)		**Logged by:**	B. Watson
Final DTW (ft):		**Well Diameter (in.):**	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	**Unit Description**	**Interval**	**Recovery (ft)**	**Depth (ft)**	**OVM (ppm)**	**Depth (ft)**	**Well Construction Information**
Top: 0	CLAYEY SAND, FINE, BROWN, DRY						
Top: 4'	SANDY CLAY, FINE, BROWN, DRY						
Top: 7'	CLAYEY SAND, FINE, BROWN, DRY						
Top: 13'	SAND, MED GRAIN, BROWN, MOIST						
Top: 14'	SAND, MED, GREY, STRONG ODOR WET			14'	169		
Top: 19'	TD - SAND, MED, GREY, STRONG ODOR						
Top:							
Top:							
Top:							
Top:							

19'-9' - 0.010 SLOT
19-8 - 10x20 SAND
8-7 - BENT / PEAS
7-0 - NEAT / GROUT

Soil Boring Log
Soil Boring No: MPE - 41
Monitor Well No:

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

Project:	Former Thriftway Refinery	**Project No.:**	050204
Client:	Thriftway	**Start Date/Time:**	6-3-20 0930
Location:	Bloomfield, NM	**Finish Date/Time:**	
Driller:	BioTech Remediation	**Elevation:**	
Drilling Method:	Hollow-stem Auger	**Datum:**	
Initial DTW (ft)		**Logged by:**	B. Watson
Final DTW (ft):		**Well Diameter (in.):**	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	**Unit Description**	**Interval**	**Recovery (ft)**	**Depth (ft)**	**OVM (ppm)**	**Depth (ft)**	**Well Construction Information**
Top: 0	- SAND, FINE, BROWN DRY						
Top: 4'	CLAYEY SAND, FINE BROWN, DRY						
Top: 6'	SAND, FINE, BROWN, DRY SOFT						
Top: 11'	FAT CLAY - GREY - SOFT						
Top: 12	FAT CLAY, GREY ODOR						
Top: 15	SAND, ~~FINE~~ MED - GREY ODOR			15'	5.5		
Top: 15.5	- SAND, ~~FINE~~ MED, GREY, ODOR WET			15.5	36.9		
Top: 20	TD						
Top:							
Top:							

20-10' - 0.010 SLOT
20-9' - 10 x 20 GRIT
9-8 - 3/8" HOLE PLUG
8-0 - NEAT / SEAL

Soil Boring Log
Soil Boring No: MPE-42
Monitor Well No:

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

Project:	Former Thriftway Refinery	**Project No.:**	050204
Client:	Thriftway	**Start Date/Time:**	6-3-10 1056
Location:	Bloomfield, NM	**Finish Date/Time:**	6-3-10 1200
Driller:	BioTech Remediation	**Elevation:**	
Drilling Method:	Hollow-stem Auger	**Datum:**	
Initial DTW (ft)		**Logged by:**	B. Watson
Final DTW (ft):		**Well Diameter (in.):**	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0'	-Sand, Fine, Brown, Dry						
Top: 5'	Clayey Sand, Fine, Brown, Dry, Lenes of Sandy Clay						
Top: 12'	-Sand & Clay, Fine, Brown, Dry						
Top: 15'	Sand, medium, Brown to Grey, ~~Dry~~ moist, odor			15'	361		
Top: 17	Sandy Clay, Fine, Grey, odor, wet			17'	195		
				20'	325		
Top: 20'	TD Same						
Top:							
Top:							
Top:							
Top:							

20 → 10 = 0.010 Slot
20 — 9' 10 x 20
9 — 8' 3/8 Bent. Seal
8 — 0 Neat / Grout

Soil Boring Log
Soil Boring No: MPE-43
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	4-3-10 1300
Location:	Bloomfield, NM	Finish Date/Time:	4-3-10 1400
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)		Logged by:	B. Watson
Final DTW (ft):		Well Diameter (in.):	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	Clayey Sand, Dark Brown, Soft, Dry Fine Grain						
Top: 4'	Sand, Fine, Brown, Dry.						
Top: 10	Sandy Clay, Fine, Brown, Dry						
Top: 11	Sand Fine Brown Dry						
Top: 13	Clay, Grey, Soft, Moist						
Top: 15	Sand, Med. Grey, Moist						
Top: 17	Sand Med Grey Strong odor Wet			17	2816		
Top: 22	TD-						
Top:							
Top:							

22-12 - 0.010 Slot
22-11 - 10x20
11-10 - 3/8 Bent. Plug
10-0 Neat / Grout

Soil Boring Log
Soil Boring No: MPE - 44
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	6-3-10 1430
Location:	Bloomfield, NM	Finish Date/Time:	
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)		Logged by:	B. Watson
Final DTW (ft):		Well Diameter (in.):	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	SAND, FINE, BROWN, DRY.						
Top: 13'	FAT CLAY - GREY, MOIST - STRONG ODOR			~~13~~			
				15'	27.4		
Top: 17'	SAND, MED. GREY - WET STRONG ODOR						
				20'	1015		
Top: 22	TD - SAME AS ABOVE						
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							

22-12 - 0.010 SLOT
22-11 - 10x20
11-10 - 3/8 BENT. PLUG
10-0 - NEAT GROUT

Soil Boring Log
Soil Boring No: MPE-45
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	6-4-10 1050
Location:	Bloomfield, NM	Finish Date/Time:	6-4-10 1135
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)		Logged by:	B. Watson
Final DTW (ft):		Well Diameter (in.):	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	SAND, FINE, BROWN, DRY						
Top: 6'	CLAYEY SAND, FINE, BROWN, DRY						
Top: 15'	FAT CLAY, GREY, DRY STONG ODOR			15'	132		
Top: 18'	SAND, MED, DK. GREY WET. VERY STRONG ODOR			18	154		
Top: 23	TD' SAME						
Top:							
Top:							
Top:							
Top:							
Top:							

23' → 13' 0.010 SLOT
23 → 12 10X30
12 → 11 3/8 BENT. / SAND
11' → 0 NEAT / SEAL

Soil Boring Log
Soil Boring No: MPE-4C
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	6-4-10 1150
Location:	Bloomfield, NM	Finish Date/Time:	
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)		Logged by:	B. Watson
Final DTW (ft):		Well Diameter (in.):	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	CLAYEY SAND. DRK BROWN. FINE DRY						
Top: 5	SAND, FINE, BROWN, DRY						
Top: 5'	CLAY, BROWN, DRY SOFT						
Top: 8'	SAND, FINE, BROWN, DRY						
Top: 10'	CLAYEY SAND, FINE, GREY SLIGHT ODOR, DRY			10'	85		
Top: 15	CLAY - DARK GREY, DRY STRONG ODOR			15'	115		
Top: 16	FAT CLAY, GREY, DRY STRONG ODOR						
Top: 20	SAND, MED - DRK GREY WET			20	715		
Top: 25'	TD - SAND / COARSE, w / 1/4 GRAVEL - GREY - ODOR						
Top:							

25 - 10 - 0.010 SLOT
25 - 9' 10 x 20
9' - 8' 3/8" BENT / PLUG
8 - 0 NEAT / SEAL

Soil Boring Log
Soil Boring No: MPE - 47
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	6-22-10 1030
Location:	Bloomfield, NM	Finish Date/Time:	6-22-10 1135
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)		Logged by:	B. Watson
Final DTW (ft):		Well Diameter (in.):	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	SAND, FINE, BROWN, DRY						
Top: 6	SANDY CLAY, BROWN, DRY						
Top: 10	SAND, FINE, BROWN, DRY						
Top: 15	CLAY - GREY, MOIST - SLIGHT ODOR			13'	6.8		
Top: 17	- SAND, MED, GREY, MOIST - STRONG ODOR						
Top: 18	SAN, MED, GREY - WET			18'	920		
Top: 23	- TO SAND, MED, GREY						
Top:							
Top:							
Top:							

23 - 13 - 6.010 SLOT
23 - 12 - 10 x 20
12 - 11 - 3/8 BENT. / PLUG
11 - 0 - NEAT / GROUT

Soil Boring Log
Soil Boring No: MPE 48
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	6-10-10 1230
Location:	Bloomfield, NM	Finish Date/Time:	6-10-10 1340
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)		Logged by:	B. Watson
Final DTW (ft):		Well Diameter (in.):	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	SAND, FINE, BROWN, DRY						
Top: 8'	CLAYEY SAND LENSES, FINE, BROWN DRY						
Top: 10'	SAND, FINE, BROWN, DRY SOFT						
Top: 13	FAT CLAY, BROWN, MOIST, SOFT						
Top: 17	SAND, MED, BROWN, WET, SOFT						
Top: 22	TD - SAND, MED BROWN, WET SOFT. (FLOWING)						
Top:							
Top:							
Top:							
Top:							

22' — 12 0.010 SLOT
20' — 11' 10 x 30 GRIT
11 — 10 3/8" BENT. PLUG
10' — 0 NEAT / GROUT

Soil Boring Log
Soil Boring No: MPE-49
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	6-10-10 1400
Location:	Bloomfield, NM	Finish Date/Time:	6-10-10 1530
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)		Logged by:	B. Watson
Final DTW (ft):		Well Diameter (in.):	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	Gravel - Fill						
Top: 1	Sand, Fine, Brown, Dry Soft						
Top: 5'	Sand w/ Lenses of Clayey Sand Fine, Brown, Dry Soft						
Top: 13'	Clay Brown, Soft Moist						
Top: 14'	Fat Clay, Brown, Soft, Moist						
Top: 17'	Sand, Med. Grey WET Soft						
Top: 22'	TD - Sand - Med Brown.						
Top:							
Top:							
Top:							

22' — 12 0.010 Slot
22 — 10 10 x 20 Grit
11 — 10 3/8" Bent. Plug
10 — 0 Neat Grout

6-11-10

10.00 - 1143

MPE-50

0 - Sand, ~~tan~~ Brown, Fine Grained, Dry

7' - Clayey Sand, Brown, Fine, Dry,
~~Lenes~~ Lenes of Sandy Clay

13' - Same as Above, moist, Staining & odor

15' - Fat Clay, Fine, moist, Heavy Staining & odor.

17' - Sand, medium, Stained, odor, wet

18' - Clayey Sand, medium, Stained, odor, wet.

TD - 22'

OVM: 991 1023

OVM: 394 @ 17' 1036

OVM: 100 @ 19' 1059

WELL CONST.

22 - 12	0.010 SLOT
22 - 11	10 x 20 SAND
11 - 10	3/8" BENT/SEAL
10 - 0	NEAT GROUT

MPE-51

6-11-10

1155

0 - Sand, Fine, Brown, Dry

6' - Clayey Sand, Fine, Brown, Dry
w/ Lenes of Sandy Clay

14' - Clay, Fine, Stained, odor, moist

16' - Fat Clay, Fine, Stained, odor, moist

17' - Sand, Medium, Stained, odor, wet

OVM: 48.9 @ 15' - 1222

OVM: 46.9 @ 17' - 1231

OVM: 284 @ 20' - 1239

TD - 22'

WELL CONST.

22' - 12	0.010 SLOT
22 - 11	10 x 20
11 - 10	3/8" BENT PLUG
10 - 0	NEAT GROUT

Soil Boring Log
Soil Boring No: MPE - S2
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	6-19-10 1030
Location:	Bloomfield, NM	Finish Date/Time:	6-19-10 1145
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)		Logged by:	B. Watson
Final DTW (ft):		Well Diameter (in.):	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	Clayey Sand, Brown → Dark Brown, Fine, dry						
Top: 5	Same as above, w/ Lenses of Sandy Clay. Brown, Dry.						
Top: 6.	Sandy Clay, Brown, Fine, Dry.						
Top: 8	~~Same~~ Clayey Sand, Brown, Dry, Fine, Lenses of Sandy Clay						
Top: 10'	Same as above, Hydrocarbon Staining & odor			10	70		
Top: 13	Sand, Fine, Stained, odor, moist			15	21.1		
Top: 15'	Fat Clay, Stained, odor, moist						
Top: 18'	Sand, med., Stained, odor, wet			20'	115		
Top: 23	TD						
Top:							

23'-13' - 0.010 Slot
23-12' - 10x20 Grit
12'-11' - 3/8" Hole Plug
11'-0 - NEAT/SEAL

Soil Boring Log
Soil Boring No: MPE-55
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	6-14-10 1245
Location:	Bloomfield, NM	Finish Date/Time:	6-14-10
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)		Logged by:	B. Watson
Final DTW (ft):		Well Diameter (in.):	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	Sand, Brown, Fine, Dry, Lenes of Sandy Clay.						
Top: 13'	Clayey Sand, Stained, ~~odor~~, moist, Lenes of Sandy Clay			14	0		
Top: 15	Clay, Fat, Stained, odor, moist			17	46.8		
				18	200		
Top: 17	Sand, medium, stained, odor, wet						
Top: 22'	TD						
Top:							
Top:							
Top:							
Top:							

22-12' - 0.010 Slot
22-11' - 10x20 Grit
11-10' - 3/8" Hole Plug
10-0 - Neat/Seal

Soil Boring Log
Soil Boring No: MPE-584
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	6-14-10 1245 1400
Location:	Bloomfield, NM	Finish Date/Time:	6-14-10 1550
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)		Logged by:	B. Watson
Final DTW (ft):		Well Diameter (in.):	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	Sand, Brown, Fine, Dry.						
Top: 6'	Clayey Sand, Brown, Fine, Dry, Lenses of Sandy Clay						
Top: 13	Fat Clay, Brown to Stained, Fine, moist Hydrocarbon Stain @ 14'			13	7.6		
Top: 16'	Sand, med, Heavy staining, odor, Wet			17	583		
				20	589		
Top: 21	TD						
Top:							
Top:							
Top:							
Top:							
Top:							

21 - 11 - 0.010" slot
21 - 10 - 10x20 Grout
10 - 9 - 3/8" Hole Plug
9 - 0 - Neat/Seal

Soil Boring Log
Soil Boring No: MPE-55
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	6-15-10 1020
Location:	Bloomfield, NM	Finish Date/Time:	6-15-10 1140
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)		Logged by:	B. Watson
Final DTW (ft):		Well Diameter (in.):	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	Sand, Fine, Brown, Dry, Lenes of Sandy Clay. Hard @ 8ft. to 13ft. ~~to Coarse~~						
Top: 15	Sand, medium, Brown to Stained, odor, wet ↳ to coarse			15	85.7		
Top: 20'	& TD			20	15.7		
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							

20-10 - 0.010' Slot
20-9 - 10x20 Grit
9-8 - 3/8" Hole Plug
8-0 - Neat / Seal

Soil Boring Log
Soil Boring No: MPE-SB
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	6-15-10 1230
Location:	Bloomfield, NM	Finish Date/Time:	6-15-10 1340
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)		Logged by:	B. Watson
Final DTW (ft):		Well Diameter (in.):	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	Sand, Brown, Fine, Dry, Lenses of Sandy Clay						
Top: 6'	Sandy Clay, Brown, Fine, Dry						
Top: 9'	Sand, med to coarse, Brown to light grey (organic), no odor, moist.						
Top: 11	Same as above, wet, Hydrocarbon Staining Slight odor, wet			11	51.3		
Top: 16	TD			16	56.6		
Top:							
Top:							
Top:							
Top:							

16-6 - 0.010 Slot
16-5 - 10 x 20 grit
5-4 - 3/8" Bent Plug
4-0 - Neat/Grout

Soil Boring Log

Soil Boring No: MPE-57

Monitor Well No:

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

Project: Former Thriftway Refinery
Client: Thriftway
Location: Bloomfield, NM
Driller: BioTech Remediation
Drilling Method: Hollow-stem Auger
Initial DTW (ft)
Final DTW (ft):

Project No.: 050204
Start Date/Time: 6-15-10 1345
Finish Date/Time: 6-15-10 1449
Elevation:
Datum:
Logged by: B. Watson
Well Diameter (in.):

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	Sand, Brown, Fine, dry, Lenes of Sandy Clay						
Top: 7	Sand, Brown to Light Grey, slight staining, moist, wet @ 10'						
				10'	310		
Top: 15	TD			15	41.6		
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							

15-5 - 0.010 Slot
15-4 - 10x20 Grit
4-3 - 3/8" Hole Plug
3-0 - Neat / Grout

Soil Boring Log
Soil Boring No: MPE-58
Monitor Well No:

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

Project:	Former Thriftway Refinery	Project No.:	050204
Client:	Thriftway	Start Date/Time:	6-15-10 1455
Location:	Bloomfield, NM	Finish Date/Time:	6-15-10 1550
Driller:	BioTech Remediation	Elevation:	
Drilling Method:	Hollow-stem Auger	Datum:	
Initial DTW (ft)		Logged by:	B. Watson
Final DTW (ft):		Well Diameter (in.):	

Geologic Information		Recovery		OVM Info		Monitor Well Details	
Depth (ft)	Unit Description	Interval	Recovery (ft)	Depth (ft)	OVM (ppm)	Depth (ft)	Well Construction Information
Top: 0	Sand, Brown, Fine, Dry, Lens of Sandy Clay						
Top: 10'	Sand, Stained & odor, ~~wet~~, mid. to Coarse.			10	197		
Top: 15'	TD			15	68.1		
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							
Top:							

15-5' - 0.010 SLOT 10x20
15-4 - ~~20x40~~ Grit
4-3 - 3/8" Hole Plug
3-0 - Neat/Grout

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: 5-7-10 & 5-10-10
Time:
Form: 1 of 2

Well I.D.	Time	Depth to NAPL (ft.)	Depth to Water (ft.)	NAPL Thickness (ft.)	Notes / Observations
TW-1	1507	—	30.93	—	
TW-2	1512	—	24.71	—	
TW-3	0853	—	27.73	—	
TW-4	0901	—	19.86	—	
TW-5	0915	—	25.31	—	
TW-6	0909	—	24.54	—	
TW-7	0905	—	21.97	—	
TW-8	0922	—	19.71	—	
TW-9	0926	—	11.39	—	
TW-10	0931	—	12.15	—	
TW-11	1105	—	17.89	—	
TW-12	1112	—	22.21	—	
TW-13	1118	20.44	21.03	0.59	
TW-14	1129	—	16.85	—	
TW-15	0946	—	12.86	—	
TW-16	0940	—	—	—	Hit Plant Growth at 11.21, Could not get DTW
TW-17	0951	—	0923	—	
TW-18	1136	—	16.11	—	
TW-19	1145	17.45	17.52	0.07	
TW-20	1156	17.28	18.25	0.97	
TW-21	~~1201~~	—	—	—	Well Damaged
TW-22	1206	14.63	14.73	0.10	
TW-23	0955	—	08.64	—	
TW-24	1210	—	10.63	—	
TW-25	1217	13.88	14.18	0.30	
TW-26	1223	15.68	16.22	0.54	
TW-28	1228	15.08	15.47	0.39	
TW-29	1237	08.91	08.96	0.05	
TW-30	1241	—	05.67	—	
TW-31	1243	—	06.78	—	
TW-32	1253	08.92	09.34	0.42	
TW-33	1259	12.68	12.70	0.02	
TW-34	1327	—	19.61	—	

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: 5-7-10 & 5-10-10
Time:
Form: 2 of 2

Well I.D.	Time	Depth to NAPL (ft.)	Depth to Water (ft.)	NAPL Thickness (ft.)	Notes / Observations
TW-35	1322	—	14.91	—	
TW-36	1317	—	12.70	—	
TW-37	1339	—	10.16	—	
TW-38	1345	—	11.09	—	
TW-39	1351	—	06.98	—	
TW-40	1357	06.78	07.90	01.12	
TW-41	1405	—	05.17	—	
TW-42	1410	—	05.55	—	
TW-43	1414	—	11.82	—	
TW-44	1419	14.100	14.68	0.02	
TW-45	1109	—	06.58	—	
TW-46	1113	—	06.80	—	
TW-47	1120	—	06.04	—	
TW-48	1059	—	06.90	—	
TW-49	1101	—	05.32	—	
TW-50	1053	~~07.~~	07.30	—	
MW-5	1440	—	04.32	—	
MW-20	1145	—	05.52	—	
MW-21	1456	—	02.69	—	

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