AP - 37

ANNUAL MONITORING REPORT

YEAR(S): 2009

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2009 ANNUAL GROUNDWATER MONITORING REPORT
LOVINGTON DEEP 6"
SECTION 3, TOWNSHIP 18 SOUTH, RANGE 37 EAST
LEA COUNTY, NEW MEXICO
PLAINS SRS #2002-10312
NMOCD REF. # AP-037

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APR 12 2010
Environmental Bureau
Oil Conservation Division

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APR 12 2010

Environmental Bureau
Oil Conservation Division

Mr. Edward Hansen
New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Plains All American – 2009 Annual Monitoring Reports
6 Sites in Lea County, New Mexico

Dear Mr. Hansen:

Plains All American is an operator of crude oil pipelines and terminal facilities in the state of New Mexico. Plains All American actively monitors certain historical release sites exhibiting groundwater impacts, consistent with assessments and work plans developed in consultation with the New Mexico Oil Conservation Division (NMOCD). In accordance with the rules and regulations of the NMOCD, Plains All American hereby submits our Annual Monitoring reports for the following sites:

8-inch Moore to Jal #1	1R-0380	AP-91	Section 16, T17S, R37E, Lea County
8-inch Moore to Jal #2	1R-0381	AP-92	Section 16, T17S, R37E, Lea County
C.S. Cayler	AP-052		Section 06, T17S, R37E, Lea County
Hobbs Junction Mainline	AP-054		Section 26, T18S, R37E, Lea County
Kimbrough Sweet 8-inch	AP-0029		Section 03, T18S, R37E, Lea County
Lovington Deep 6-inch	AP-037		Section 03, T18S, R37E, Lea County

Talon/LPE (Talon) prepared these documents and has vouched for their accuracy and completeness, and on behalf of Plains All American, I have personally reviewed the documents and interviewed Talon personnel in order to verify the accuracy and completeness of these documents. It is based upon these inquiries and reviews that Plains All American submits the enclosed Annual Monitoring Reports for the above facilities.

If you have any questions or require further information, please contact me at (575) 441-1099.

Sincerely,

Jason Henry

Jason Henry
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures

2008 ANNUAL GROUNDWATER MONITORING REPORT

LOVINGTON DEEP 6"
LEA COUNTY, NEW MEXICO
SRS #2002 - 10312
NMOCD REF. # AP-037

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Environmental Bureau
Oil Conservation Division

TALON/LPE PROJECT NO. 700376.051.01

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March 2010

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NMOCD - New Mexico Oil Conservation Division

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1.0 INTRODUCTION AND OBJECTIVES

1.1 Site Background

The Lovington Deep 6" site is located approximately 5.8 miles southwest of Lovington in Lea County, New Mexico. The release occurred on property which is utilized as pasture/range land owned by Chevron. The site is located within the West Lovington oil field, with no residences or surface water within a 1,000-foot radius of the release site. The remediation area is surrounded by a barbed wire fence and is gated.

The site is situated within a physiographic region that is on the extreme south-western portion of the Southern High Plains as it grades into the Edwards Plateau to the south and southeast and the Chihuahuan Desert of the Trans-Pecos Region to the southwest.

The topography proximal to the site is typical of the Southern High Plains, essentially flat with shallow depressions, or playa lakes, dotting the landscape. The prominent surface features on the Southern High Plains are the approximately 19,250 ephemeral playa lakes; however the density of the playa lakes diminishes toward the southern extent of the Southern High Plains. During periods of rainfall, the playas accumulate sheet runoff from watershed areas ranging in size from less than one square mile to several square miles. Only a small portion of drainage from rainfall occurs by streams. Playa lakes that collect storm water runoff can act as a recharge mechanism for groundwater.

The average elevation of the site area is approximately 3,915-feet above mean sea level with a slight slope to the southeast. The regional slope of the land surface in the Southern High Plains is approximately 100 feet per mile in a southeasterly direction.

In December 2002, a release of approximately 25 barrels (bbls) of crude oil occurred at the site due to corrosion of the pipeline. Ten (10) bbls were recovered during initial response activities. Approximately 6,000 square feet of surface area was impacted by the release. During the initial remediation phase, soil that was impacted by the release was excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved land farm for treatment.

The soil remediation was initiated by Environmental Plus, Inc. (EPI) in 2003 and the soil phase of site remediation was closed in October 2005.

On February 5, 2007, Talon/LPE (Talon) was retained by Plains Marketing, L.P. (Plains) to assume remediation activities at the Lovington Deep 6" release site. Remediation activities at the site were previously conducted by Environmental Plus, Inc. (EPI).

1.2 Site Geology

The surface deposits in Lea County are composed of Blackwater Draw (Illinoian) sediments, Ogallala sediments and undivided Quaternary alluvium, which is also termed 'cover sands'. The soil in the upper two (2) feet at the site composed of gravelly loam that contains abundant eroded gravel to cobble size caliche fragments. Below the top soil is predominately unconsolidated sand to weakly cemented sandstone which has undergone calichification of varying extent.

Below the Blackwater Draw Formation is the Ogallala Formation of Miocene to Pliocene age. The Ogallala Formation was deposited from sediments eroded from the Southern Rockies and consists mostly of eolian sediments, silty to very fine sand or loess. During the middle to late Miocene, the Ogallala was deposited by fluvial mechanism as paleovalley fill composed of gravelly to sandy braided stream deposits that trended west to east across the Southern High Plains. During the late Miocene the west to east drainage was diverted (captured) by the Pecos River. Subsequently, the Pecos River basin has experienced deflation, which facilitated eolian deposition on the Southern High Plains during the Pliocene.

1.3 Previous Environmental Investigations

During initial assessment activities to delineate the extent of impacted soil at the site, six soil borings were advanced from December 27, 2002 through January 2, 2004. During the assessment, soil boring BH-1 encountered groundwater that was impacted by phase separated hydrocarbons (PSH). Subsequently, soil boring BH-1 was completed as groundwater monitor well, MW-2. Soil borings BH-2, BH-4, BH-5, and BH-6 were advanced in order to delineate the extent of impacted groundwater and those soil borings were completed as groundwater monitor wells MW-1, MW-3, MW-4, and MW-5.

During November and December of 2004, six (6) additional groundwater monitor wells (MW-6 through MW-11) were installed to further delineate the lateral extent of groundwater impact at the site. Finally, in July 2006, six (6) additional groundwater monitor wells (MW-12 through MW-17) were installed to complete assessment of the areal extent of impacted groundwater.

PSH recovery operations have been performed at the site since March 2003, initially from hand bailing and currently with a skimmer system. Approximately 47 bbls of PSH have been recovered to date from the site.

1.4 Regulatory Framework

Groundwater analytical data from this site was evaluated to the New Mexico Water Quality Control Commission (NMWQCC) groundwater standards.

New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards	
Compound	**mg/L**
Benzene	0.010
Toluene	0.750
Ethylbenzene	0.750
Total Xylenes	0.620
PAH (Naphthalene)	0.030
PAH (Benzo[a]-pyrene)	0.007

The sections that follow provide summaries of the groundwater monitoring activities conducted at the subject site as well as analytical results from each groundwater sampling event of 2009. Analytical results for the four (4) sampling events are summarized in Table 2, Table 3, and Table

4 in Appendix B, and Figures 3a through 3d in Appendix A. Laboratory analytical data reports and chain of custody documentation are included in Appendix C. In addition, cumulative historical gauging and analytical results are on the attached CD that is an adjunct to this report.

2.0 SITE ACTIVITIES

The sections that follow summarize groundwater monitoring and PSH recovery activities conducted at the subject site during 2009. The primary function of groundwater monitoring is to measure the depths to fluids and to collect groundwater samples from monitor wells for laboratory analysis. The objective of groundwater monitoring is to evaluate the status of the dissolved-phase and PSH plumes in order to verify the effectiveness of the remediation system as to inhibiting plume migration, reducing the volume of PSH impacting the groundwater and determining if modifications to the remediation system would improve its performance and efficiency.

2.1 Groundwater Monitoring Activities

A total of four (4) groundwater monitoring events were conducted by Talon during the year 2009 on February 25 & 26, June 4, August 19, and December 15 & 16. During all of the groundwater monitoring events, the depths to fluids were measured in all of the monitoring wells (MW-1 through MW-17) using an oil/water interface probe.

During the February, June, and December groundwater monitoring events, eleven (11) monitor wells, (MW-1, and MW-3 through MW-12), were purged a minimum of three casing volumes and groundwater samples were collected. Groundwater samples were not collected from six (6) monitor wells MW-2, and MW-13 through MW-17 due to the presence of PSH.

During the August groundwater monitoring event, eleven (11) monitor wells, (MW-1 and MW-3 through MW-12), were purged a minimum of three (3) casing volumes and groundwater samples were collected. Pursuant to the NMOCD directive that samples will be collected from the groundwater below the PSH caps in monitor wells impacted with PSH, groundwater samples were collected from six (6) monitor wells (MW-2, and MW-13 through MW-17. Monitor wells impacted with PSH were not purged of three (3) casing volumes prior to sample collection; however, a minimal purge was performed to ensure that the pump effluent tubing was cleared of any PSH.

Details of the gauging, purging, and sample collection activities are presented in Section 2.2 below.

2.2 Groundwater Gauging, Purging, and Sample Collection Procedures

During each groundwater monitoring event, all monitor wells were measured with an oil/water interface probe to determine static water levels and to determine the thickness of PSH accumulations if present. The data collected from measurements was used to construct groundwater gradient maps and PSH thickness maps. The results of the measured depths to fluids collected during the four (4) events are incorporated in Table 1 – Summary of Historical Fluid Level Measurements.

Subsequent to gauging, all monitor wells were purged using a down-hole pump equipped with vinyl tubing. The pump and tubing were decontaminated with Alconox® detergent and rinsed with distilled water after each use. Recovered purge water and water used in the decontamination process was contained in on-site 55-gallon drums. After the groundwater

monitoring event, all retained water was removed with a vacuum truck. Approximately 350 gallons of purged groundwater and decontamination water during the monitoring events of 2009.

Groundwater samples were collected from all monitor wells using dedicated disposable polyethylene bailers, except for the monitor wells impacted with PSH during the August groundwater monitoring event. Groundwater samples were collected from wells impacted with PSH using a pump and vinyl tubing. Each groundwater sample was contained in laboratory supplied sample containers with the appropriate preservative required for the analysis requested. The groundwater samples were maintained on ice, in the custody of Talon personnel, until they were delivered to TraceAnalysis, Inc. in Midland, Texas for analyses.

The groundwater samples collected during all four events were quantified for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method SW-846 8021B. During the August event, samples collected from monitor wells both impacted and not impacted with PSH were also quantified for and poly-nuclear aromatic hydrocarbons (PAH) using EPA Method SW-846 8270C. Also during the August event, groundwater samples collected from wells impacted with PSH were quantified for total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO) by EPA Method SW-846 8015B.

2.3 Phase Separated Hydrocarbon Recovery

PSH recovery has been conducted at the site since 2003, initially by hand bailing. In 2007, an automated skimmer recovery system was installed at the site. The system utilized five (5) skimmers in monitor wells MW-2, and MW-13 through MW-17 to recover PSH and to inhibit migration of the PSH plume. The skimmer assembly consists of bladder pumps combined with 24-inch traveling float specific gravity skimmers attachments. The skimmer system is powered by a single-phase 230 volt, 7.5 HP two stage reciprocating air compressor. Fluid, recovered by the pumps, is retained in a 1,500-gallon poly tank. The poly tank is equipped with a high level shut off switch to prevent overflow and it is located within a secondary containment compound that is outfitted with a poly-liner. Periodically, recovered groundwater is removed from the poly tank and transported to an NMOCD approved disposal facility. PSH is also periodically removed with a vacuum truck and is re-introduced to the Plains' pipeline system at the Scharb Station and/or 34 Junction South pipeline.

During 2009 the quarterly PSH recovery totals are as followed:

- 1st Quarter – 4.26 bbls PSH, 4 bbls water
- 2nd Quarter – 0.64 bbls PSH, 0 bbls water
- 3rd Quarter – 3.70 bbls PSH, 41 bbls water
- 4th Quarter – 1.68 bbls PSH, 47 bbls water

Approximately 47 bbls of PSH have been recovered to date from the site.

3.0 GROUNDWATER MONITORING RESULTS

The results of the laboratory analyses are summarized in Table 2 – Summary of Groundwater Analytical Data in Appendix B. Laboratory analytical data reports and chain of custody documentation are provided in Appendix C. In addition, cumulative historical analytical results are included in the tables section on the attached CD that is an adjunct to this report.

3.1 Groundwater Monitoring Results

The following sections present the results from the monitoring of the first water-bearing zone underlying the site.

3.1.1 Physical Characteristics of the First Water-Bearing Zone

The primary groundwater resource under the Southern High Plains, including the site, is referred to as the Ogallala Aquifer or High Plains Aquifer. The Southern portion of the Ogallala aquifer underlies an area of about 29,000 square miles (mi^2) in western Texas and eastern New Mexico, encompassing all or part of 31 counties in Texas and 6 counties in New Mexico.

The Ogallala Aquifer has experienced acute depletion from extensive irrigation and urban demand, which have exceeded the average annual recharge rate. Recharge of the Ogallala Aquifer on the Southern High Plains occurs predominately from rainfall runoff that accumulates in ephemeral streams and playa lakes as well as direct recharge in areas that contain permeable soils such as sand hills. Recharge rates vary depending on mechanism, but averages from 0 to 1.6 inches per year.

The Ogallala Aquifer is generally unconfined and the poteniometric surface generally mirrors the land surface elevation with the regional flow direction from the northwest to the southeast. The mean regional gradient is 15 feet per mile and the typical groundwater velocity averages seven inches per day. The regional hydraulic conductivity averages 17 gallons per day per square-foot and specific yield averages 16%. The depth to groundwater at the site has historically ranged from 64 to 72 feet below ground surface (bgs) and the groundwater flow direction is to the east southeast at an average of 17 feet per mile. The saturated thickness of the Ogallala formation on the High Plains ranges from 25 feet to 175 feet. The variable thickness is due to the irregularly eroded Triassic surface that underlies it.

The composition of Ogallala groundwater is defined as mixed-cation-HCO_3, therefore, Ogallala groundwater is considered hard. Problems with scale have occurred with residential and commercial water systems that use Ogallala groundwater and often treatment strategies are employed to reduce the effects of scale. The typical total dissolved solids of Ogallala groundwater in the Hobbs-Lovington area is generally less than 1,000 mg/L (ppm) in areas not impacted by oil-field brines. The pH of Ogallala water averages 7.3.

3.1.2 Groundwater Gradient and Flow Direction

The depth to fluid measurements was collected during each of the four (4) groundwater monitoring events during the year 2009. The results of the fluid level measurements are summarized in Table 1, Appendix B - Summary of Historical Fluid Level Measurements. In

addition, cumulative historical gauging data is located in the tables section on the CD that is an adjunct to this report.

The collected data was used to construct potentiometric surface maps in order to interpret the groundwater gradient and flow direction. The maps, designated Figures 2a through 2d, are presented in Appendix A.

The potentiometric surface maps constructed for each of the four (4) groundwater monitoring events indicates that the groundwater flow direction is to southeast at an approximate gradient of 0.0033 feet/foot or approximately 17 feet per mile. Groundwater levels at the subject site have exhibited a steady decline of an average of 0.13 feet for the year that appears to be associated with a regional trend of declining groundwater levels for the Ogallala Aquifer.

3.1.3 Phase Separated Hydrocarbon (PSH)

An oil/water interface probe was used to determine the thicknesses of PSH during the four (4) groundwater monitoring events. Generally, PSH thicknesses have fluctuated from quarter to quarter during the year 2009 and have exhibited both declines and increases in thickness.

In addition to potentiometric surface maps, isopleth maps were prepared depicting the measured PSH thicknesses and PSH plume geometry. PSH plume delineation and thickness maps are presented in Appendix A as Figures 3a through 3d. Currently, the PSH plume is delineated by the current monitor well geometry.

- In February 2009, PSH was observed in monitor wells MW-2 and MW-13 through MW-17. PSH thickness ranged from 0.03 feet to 0.26 feet.
- In June 2009, PSH was observed in monitor wells MW-2 and MW-13 through MW-17. PSH thickness ranged from 0.14 feet to 3.90 feet.
- In August 2009, PSH was observed in monitor wells MW-2 and MW-13 through MW-17. PSH thickness ranged from 0.15 feet to 3.89 feet.
- In December 2009, PSH was observed in monitor wells MW-2 and MW-13 through MW-17. PSH thickness ranged from 0.12 feet to 3.10 feet.

PSH isopleths maps are presented as Figure 3a through 3d in Appendix A. The measurements indicate that the PSH plume thicknesses have fluctuated over the year 2009 with overall increases and decreases. The largest increases in PSH thicknesses occurred in monitor wells MW-2 and MW-17, which are located near the center of the plume indicating that the pumps may be drawing the plume inward.

PSH recovery operations have been performed at the site since March 2003. Currently, there are a total of five (5) skimmer pumps in operation in monitor wells MW-2, MW-13, MW-14, MW-16 and MW-17. A summary of the historical groundwater and PSH gauging is provided in Table 1. Approximately 47 bbls of PSH have been recovered to date.

3.1.4 Groundwater Sampling Results

During the first quarter, February 2009, sampling event, groundwater samples were collected from monitor wells MW-1 and, MW-3 through MW-12. Samples were not collected from monitor wells MW-2 and MW-13 through MW-17, due to the presence of PSH. Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from <0.00100 mg/L to 14.0 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-1, MW-3, MW-4, MW-5, MW-10, and MW-12.
- Toluene concentrations ranged from <0.00100 mg/L to 1.02 mg/L. The toluene concentration exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater sample collected from monitor well MW-3.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.990 mg/L. The ethylbenzene concentration exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater sample collected from monitor well MW-3.
- Xylene concentrations ranged from <0.00100 mg/L to 1.38 mg/L. Xylene concentrations exceeded the NMWQCC groundwater standard of 0.620 mg/L in the groundwater samples collected from monitor wells MW-3 and MW-10.
- Samples were not collected from monitor wells MW-2 and MW-13 through MW-17 due to the presence of PSH.

During the second quarter, June 2009, sampling event, groundwater samples were collected from monitor wells MW-1 and, MW-3 through MW-12. Samples were not collected from monitor wells MW-2 and MW-13 through MW-17 due to the presence of PSH. Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from <0.00100 mg/L to 18.6 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-1, MW-3, MW-10, and MW-12.
- Toluene concentrations ranged from <0.00100 mg/L to 0.515 mg/L. The toluene concentration exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater sample collected from monitor well MW-3.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.380 mg/L. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any sampled monitor well.
- Xylene concentrations ranged from <0.00100 mg/L to 0.0563 mg/L. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any sampled monitor well.
- Samples were not collected from monitor wells MW-2 and MW-13 through MW-17 due to the presence of PSH.

During the August 2009 sampling event, groundwater samples were collected from all seventeen (17) monitor wells including wells impacted with PSH (MW-2 and MW-13 through MW-17). The samples that were collected from each monitor well were quantified for poly-nuclear aromatic hydrocarbons as well as BTEX. In addition, groundwater samples collected from monitor wells impacted with PSH were quantified for total petroleum hydrocarbons (TPH) by EPA Method 8015.

Laboratory analytical results for the groundwater samples collected from monitor wells not impacted with PSH exhibited the following findings:

- Benzene concentrations ranged from <0.00100 mg/L to 16.9 mg/L. Benzene

concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor well MW-3, MW-6, MW-10, and MW-12.

- Toluene concentrations ranged from <0.00100 mg/L to 0.971 mg/L. The toluene concentration exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater sample collected from monitor well MW-3.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.607 mg/L. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any groundwater sample collected from monitor wells not impacted with PSH.
- Xylene concentrations ranged from <0.00100 mg/L to 0.981 mg/L. Xylene concentrations exceeded the NMWQCC groundwater standard of 0.620 mg/L in groundwater samples collected from monitor wells MW-3 and MW-10.
- PAH concentrations did not exceed NMWQCC groundwater standards in any groundwater sample collected from monitor wells not impacted with PSH. PAH analytical results for monitor wells not impacted with PSH are summarized in Table 3 in Appendix B.

Laboratory analytical results for the groundwater samples collected from monitor wells that are impacted with PSH exhibited the following findings:

- Benzene concentrations ranged from 3.2 mg/L to 22.6 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from all monitor wells impacted with PSH.
- Toluene concentrations ranged from 1.66 mg/L to 16.6 mg/L. Toluene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in all groundwater samples collected from monitor wells impacted with PSH.
- Ethylbenzene concentrations ranged from 0.603 mg/L to 2.56 mg/L. Ethylbenzene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in all groundwater samples collected from monitor wells impacted with PSH except for the sample collected from monitor well MW-16.
- Xylene concentrations ranged from 1.78 mg/L to 7.54 mg/L. Xylene concentrations exceeded the NMWQCC groundwater standard of 0.620 mg/L in all groundwater samples collected from monitor wells impacted with PSH.
- The PAH analyte, naphthalene, exceeded the NMWQCC groundwater standard of 0.030 mg/L in samples collected from all monitor wells impacted with PSH. Analytical results for PAH in groundwater samples collected from monitor well impacted with PSH are summarized in Table 4 in Appendix B.

During the fourth quarter, December 2009, sampling event, groundwater samples were collected from monitor wells MW-1 and, MW-3 through MW-12. Samples were not collected from monitor wells MW-2 and MW-13 through MW-17, due to the presence of PSH. Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from <0.00100 mg/L to 15.9 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-3, MW-10 and MW-12.
- Toluene concentrations ranged from <0.00100 mg/L to 0.568 mg/L. Toluene concentration did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any groundwater sample collected.

- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.316 mg/L. All ethylbenzene concentrations were below the NMWQCC groundwater standard of 0.750 mg/L.
- Xylene concentrations ranged from <0.00100 mg/L to 0.129 mg/L. All xylene concentrations were below the NMWQCC groundwater standard of 0.620 mg/L.

The dissolved-phase plume is delineated to NMWQCC groundwater standards in all directions except down-gradient to the east of monitor well MW-12 as depicted on the groundwater concentration maps 3a through 3d in Appendix A. The results of the laboratory analyses are summarized in Table 2 – Summary of Groundwater Analytical Results in Appendix B. Laboratory analytical data reports and chains of custody documentation are provided in Appendix C.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The following section presents a summary of the four groundwater monitoring events conducted at the Lovington Deep 6" site and Section 4.2 provides recommendations for future corrective action.

4.1 Summary of Findings

- The groundwater flow direction in the first water-bearing zone is to the east or east southeast at a gradient averaging 0.0033 ft/ft or approximately 17 feet per mile based upon the water level measurement data collected during 2009.

- Groundwater levels at the subject site have exhibited a steady decline averaging 0.13 feet for the year 2009 that appears to be associated with a regional trend of declining groundwater levels for the Ogallala Aquifer.

- Down-gradient monitor well MW-12 exhibited benzene concentrations above NMWQCC groundwater standards during each of the four quarterly groundwater monitoring events indicating that the dissolved-phase plume is not delineated in the down-gradient direction.

- PSH has impacted monitor wells MW-2 and MW-13 through MW-17 and those monitor wells are equipped with skimmers and bladder pumps. The PSH plume underlying this site has been delineated by the current monitor well geometry. PSH thicknesses have increased in monitor wells MW-2 and MW-17. Since those monitor wells are proximal to the center of the PSH plume, the increase in PSH thicknesses may be indicative that the PSH plume is drawing inward.

- The PSH recovery system has removed approximately ten (10) bbls of crude oil from the groundwater during 2009 indicating that the system is performing its function.

4.2 Recommendations

Based upon the results of the quarterly groundwater monitoring and PSH recovery efforts, Talon proposes the following actions:

- Continue operation and maintenance of the skimmer/bladder pump recovery system. Monitor the system on a weekly basis to optimize PSH recovery efficiency.
- Add or reposition pumps as necessary to optimize PSH recovery and inhibit plume migration.
- Perform quarterly groundwater monitoring events in accordance with NMOCD directives.
- Based on the results of the PAH analyses over the past several years, Talon/LPE recommends that further PAH analyses be conducted only on those monitor wells which have historically exhibited previous concentrations of PAH constituents near or above the NMWQCC standards. Monitor wells that are not impacted with PSH have not exhibited

concentrations of PAH constituents exceeding NMWQCC groundwater standards.

- Install one (1) additional monitor well east of monitor well MW-12 for the delineation of the dissolved-phase plume (see Figure 1).
- Replace the skimmer and bladder pump in monitor well MW-17 with a pneumatic total fluids pump to further retard PSH plume migration and to enhance PSH recovery.

APPENDIX A

Drawings

Figure 1 - Site Plan with Proposed Well

Figure 2a - Groundwater Gradient Map - 02/26/2009

Figure 2b - Groundwater Gradient Map - 06/04/2009

Figure 2c - Groundwater Gradient Map - 08/19/2009

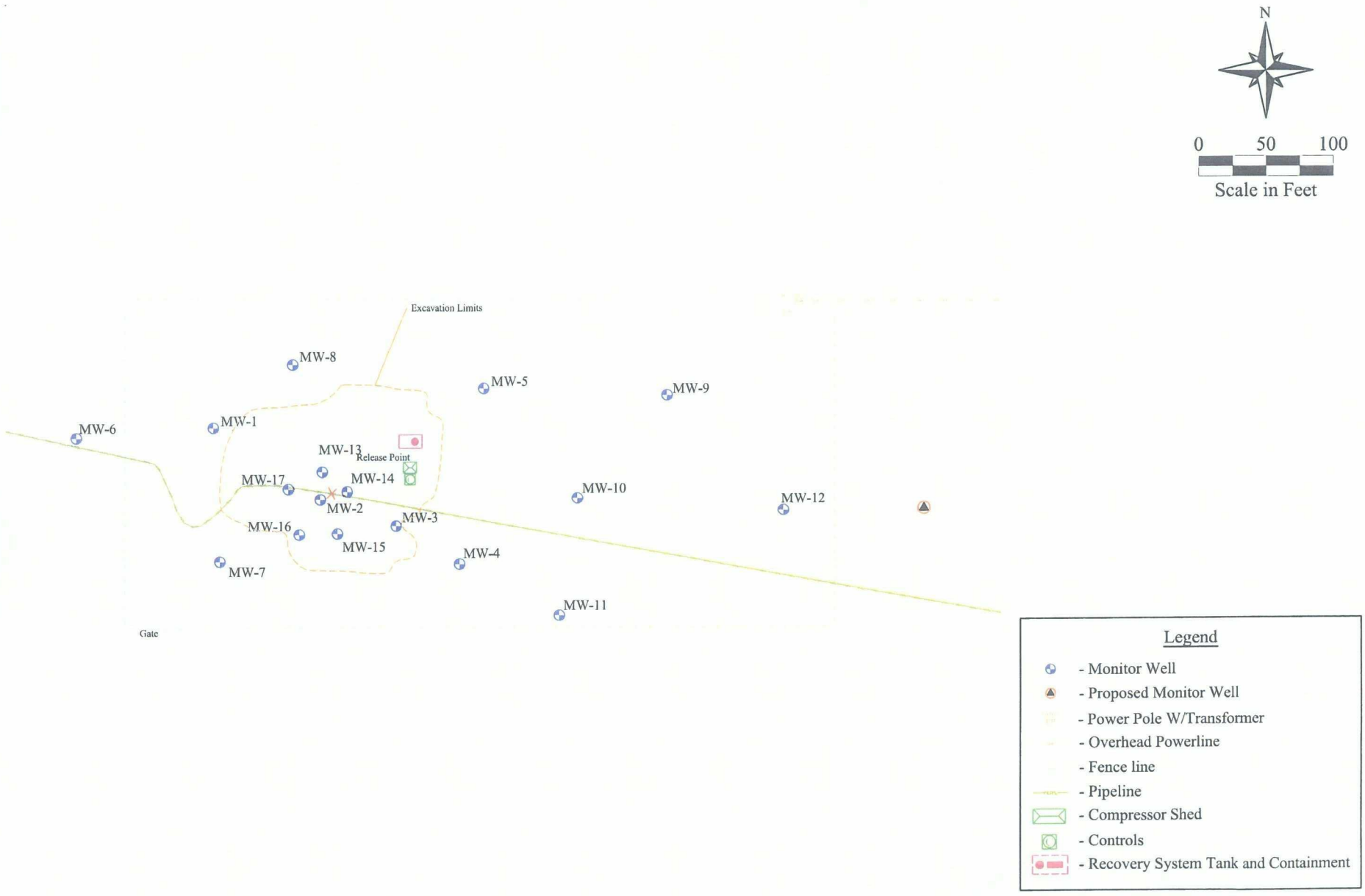
Figure 2d - Groundwater Gradient Map - 12/16/2009

Figure 3a - PSH Thickness & Groundwater Concentration Map - 02/26/2009

Figure 3b - PSH Thickness & Groundwater Concentration Map - 06/04/2009

Figure 3c - PSH Thickness & Groundwater Concentration Map - 08/19/2009

Figure 3d - PSH Thickness & Groundwater Concentration Map - 12/16/2009



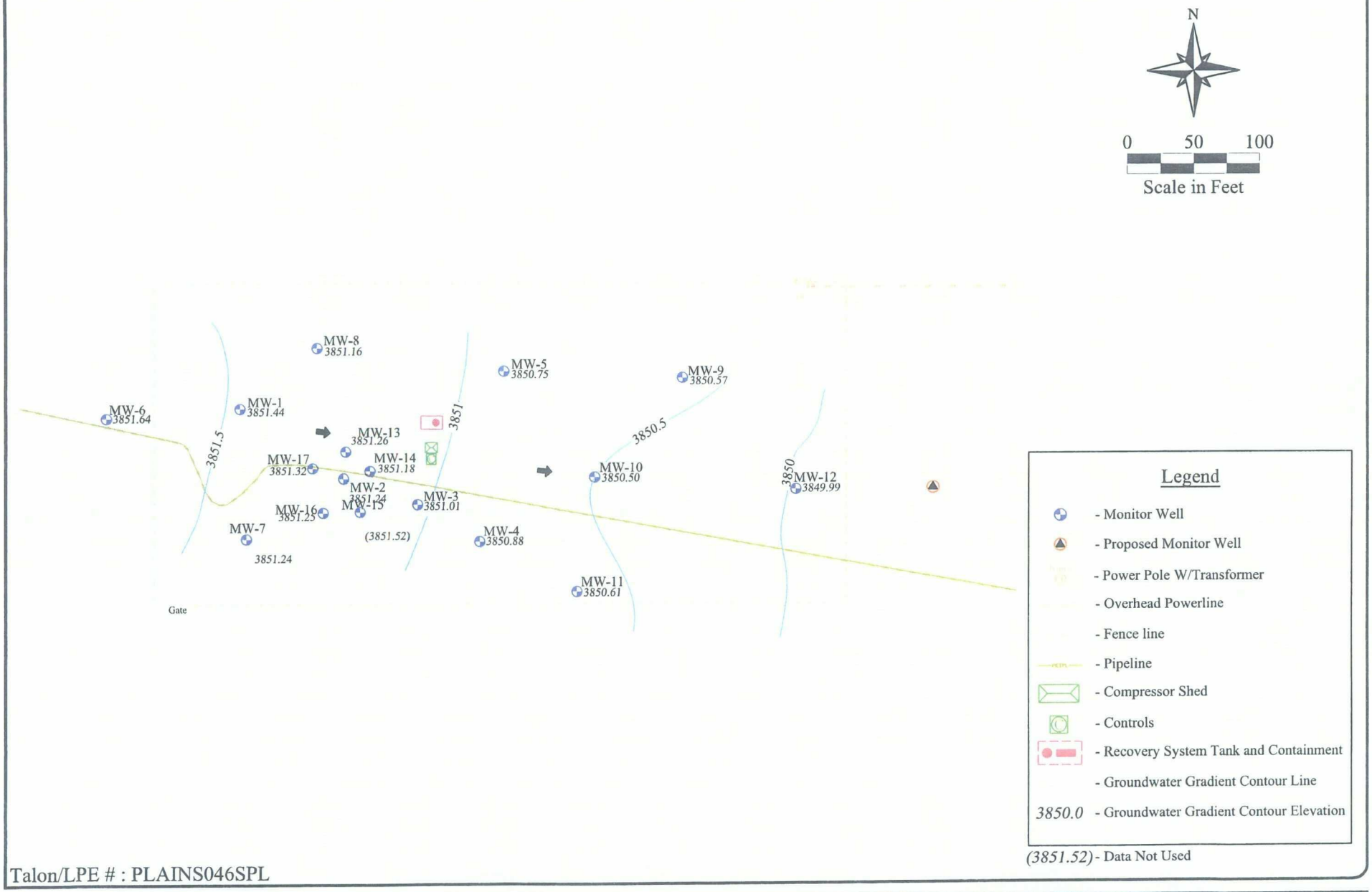
Talon/LPE # : PLAINS046SPL

TALON LPE

Date: 03/31/2009
Scale: 1" = 100'
Drawn By: SJA

Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. # AP-037
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico
Figure 1 - Site Plan with Proposed Well



Talon/LPE # : PLAINS046SPL

TALON LPE

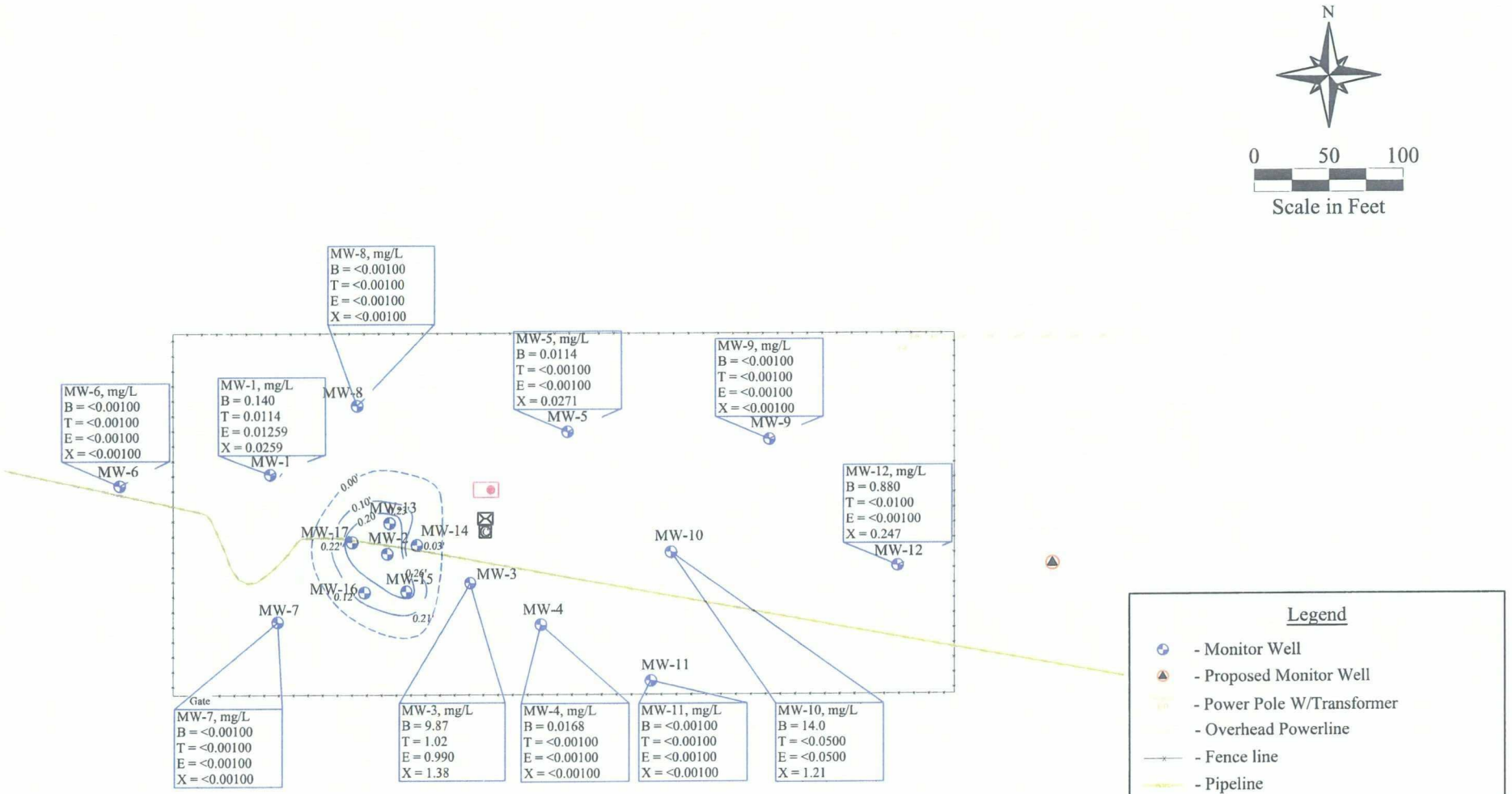
Date: 07/14/2009
Scale: 1" = 100'
Drawn By: HDJ

Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. # AP-037

SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico

Figure 2a- Groundwater Gradient Map, - 02/25/2009



Talon/LPE # : 700376.051.01

TALON LPE

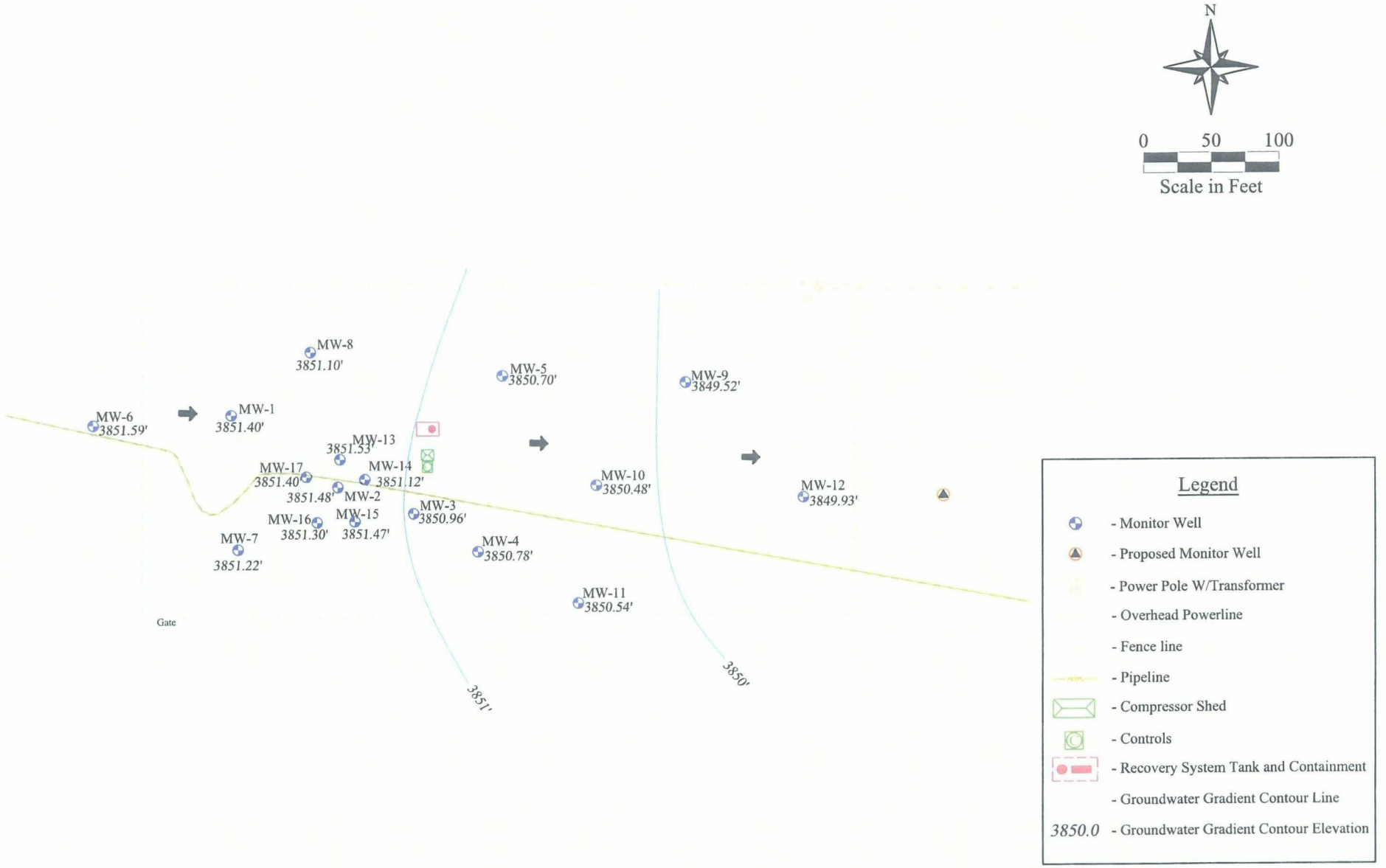
Date: 01/13/2010
Scale: 1" = 100'
Drawn By: TJS

Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. # AP-037

SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico

Figure 3a - PSH Thickness & Groundwater Concentration Map - 02/26/2009



Talon/LPE # : PLAINS046SPL

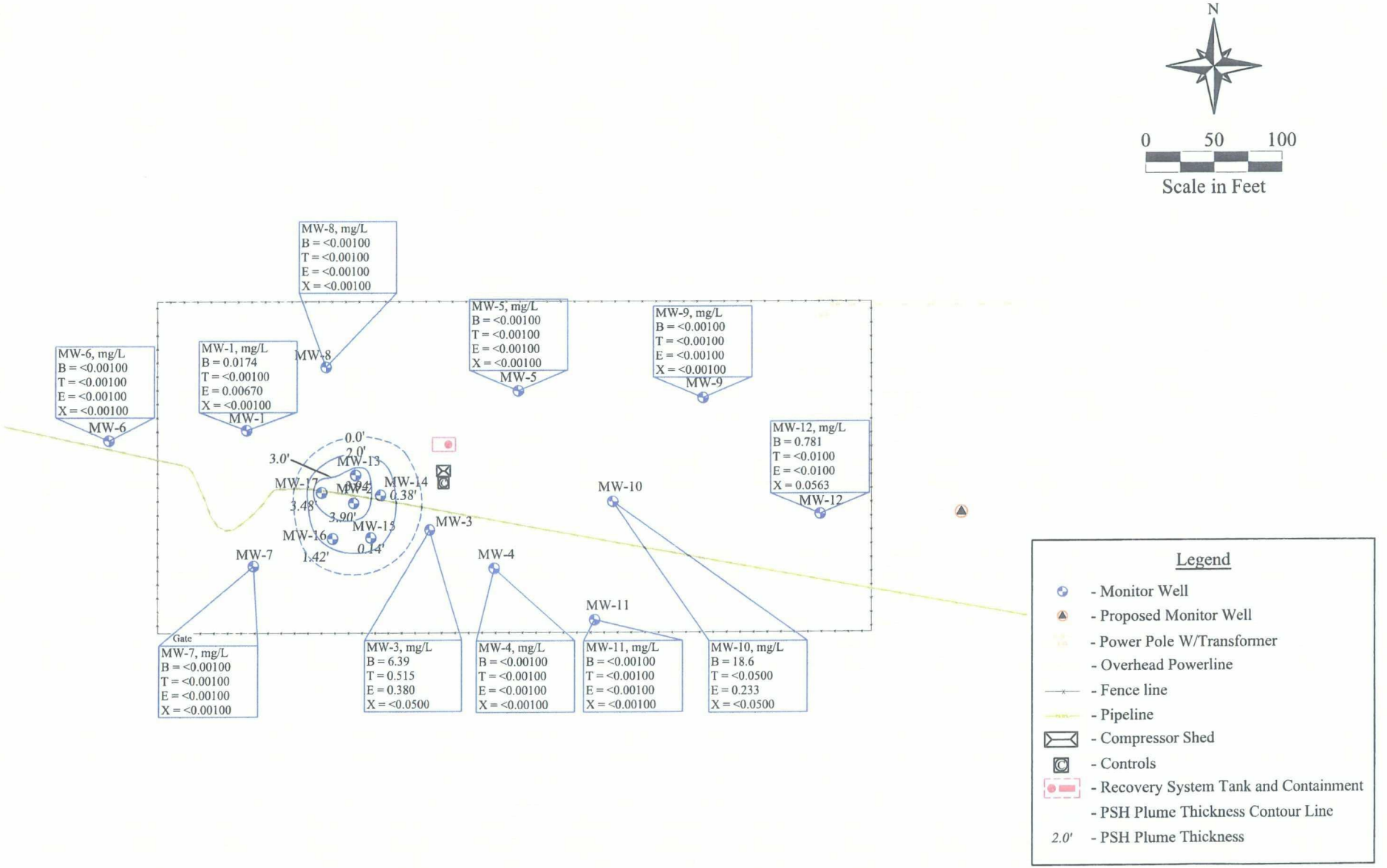
Date:	07/14/2009
Scale:	1" = 100'
Drawn By:	HDJ

Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. # AP-037

SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico

Figure 2b - Groundwater Gradient Map (6/4/2009)



Talon/LPE # : 700376.051.01

TALON LPE

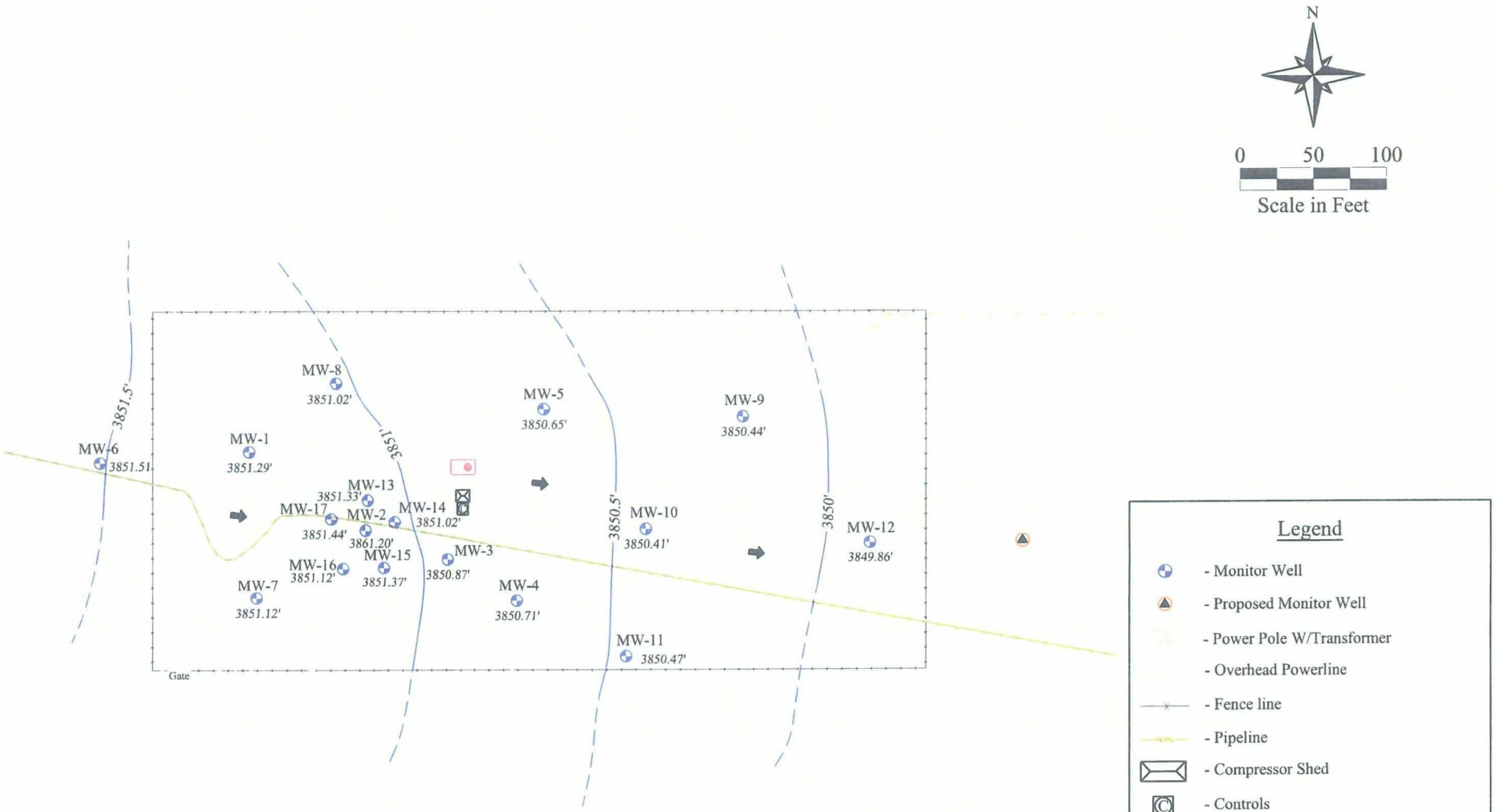
Date: 01/13/2010
Scale: 1" = 100'
Drawn By: TJS

Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. # AP-037

SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico

Figure 3b - PSH Thickness & Groundwater Concentration Map (6/4/2009)



Talon/LPE # : 700376.051.01

TALON LPE

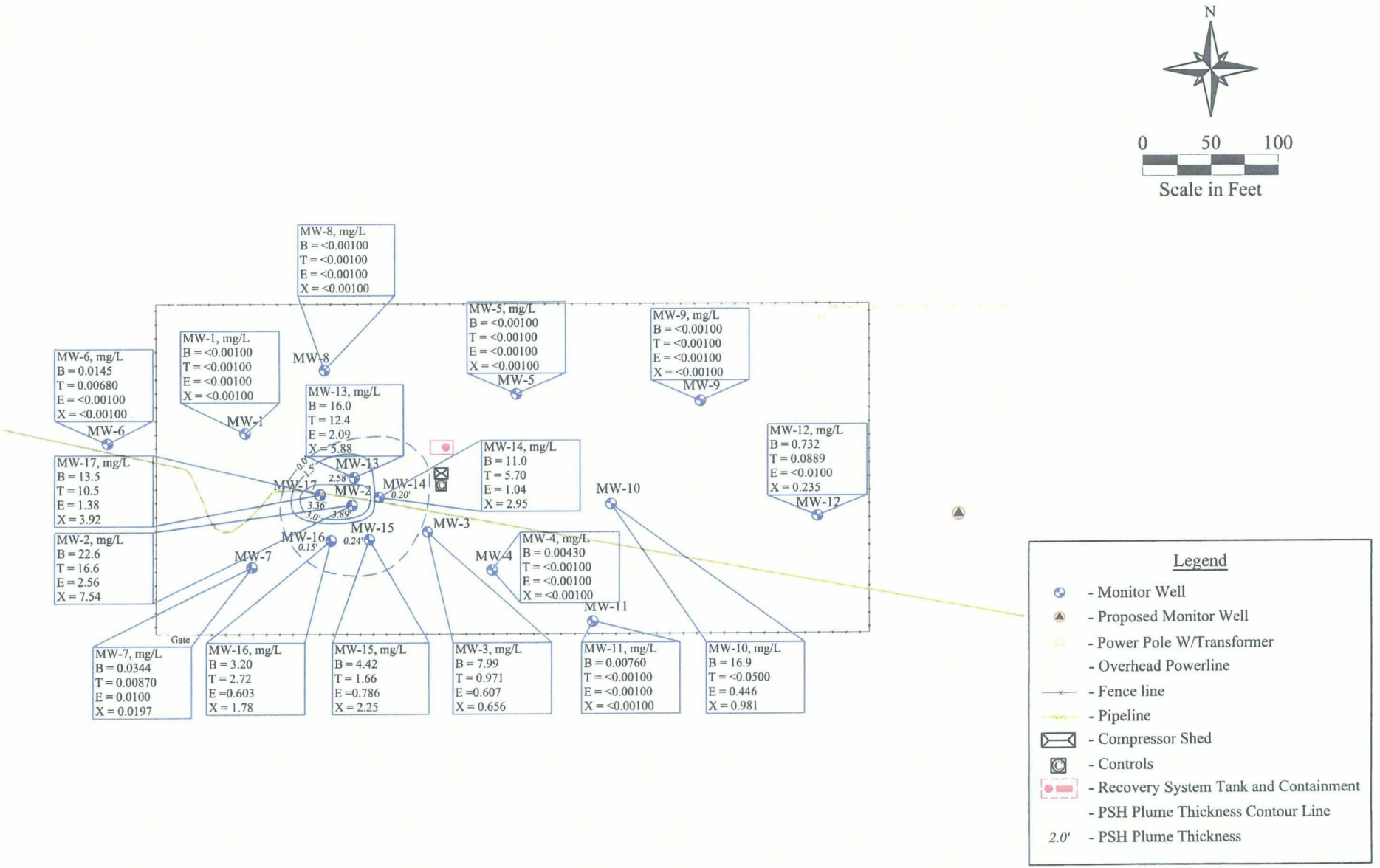
Date: 01/13/2010
Scale: 1" = 100'
Drawn By: TJS

Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. # AP-037

SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico

Figure 2c - Groundwater Gradient Map - 8/19/09



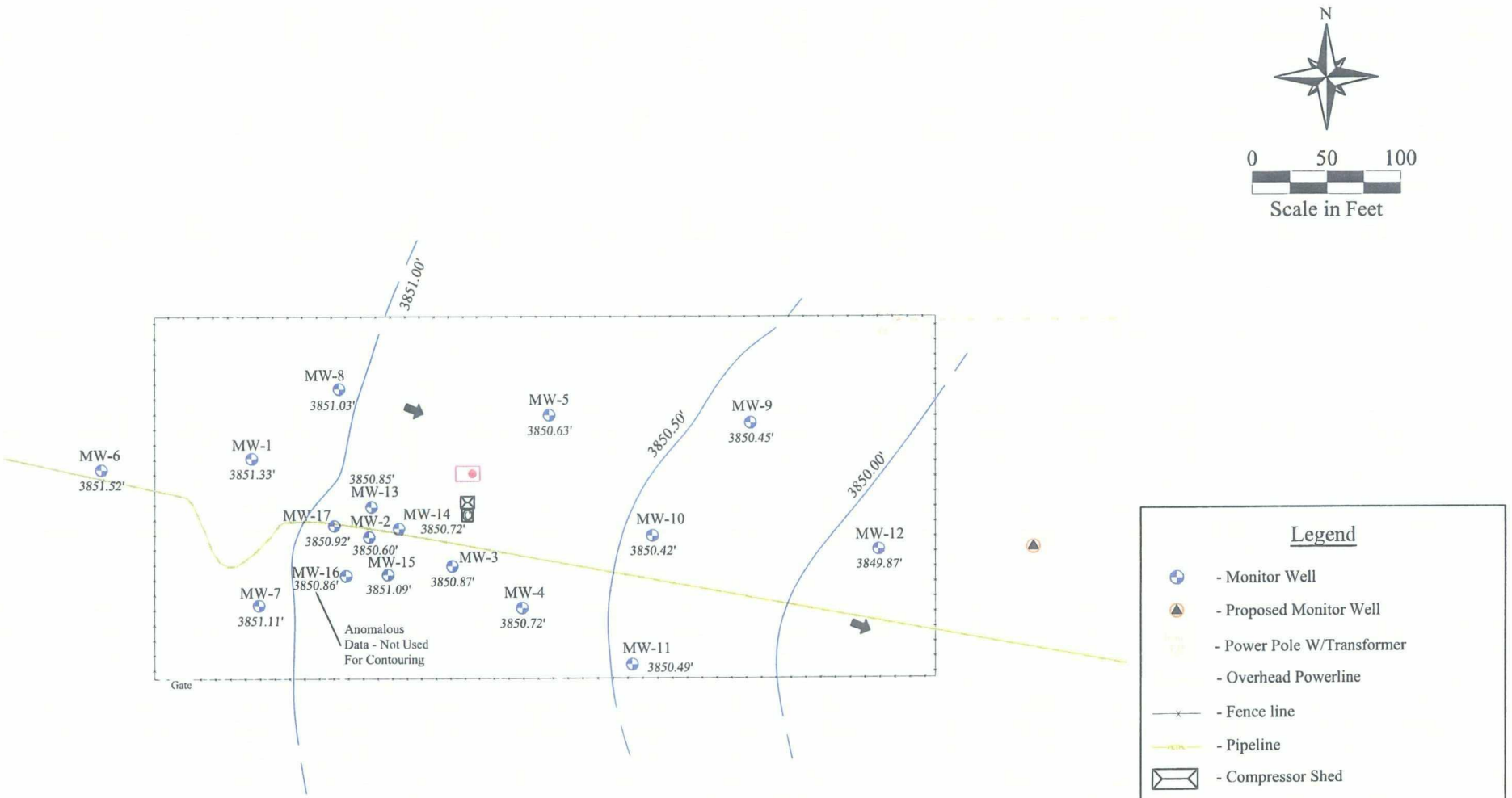
Talon/LPE # : 700376.051.01

TALON LPE

Date: 01/13/2010
Scale: 1" = 100'
Drawn By: TJS

Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. # AP-037
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico
Figure 3c - PSH Thickness & Groundwater Concentration Map - 8/19/09



Talon/LPE # : 700376.051.01

TALON LPE

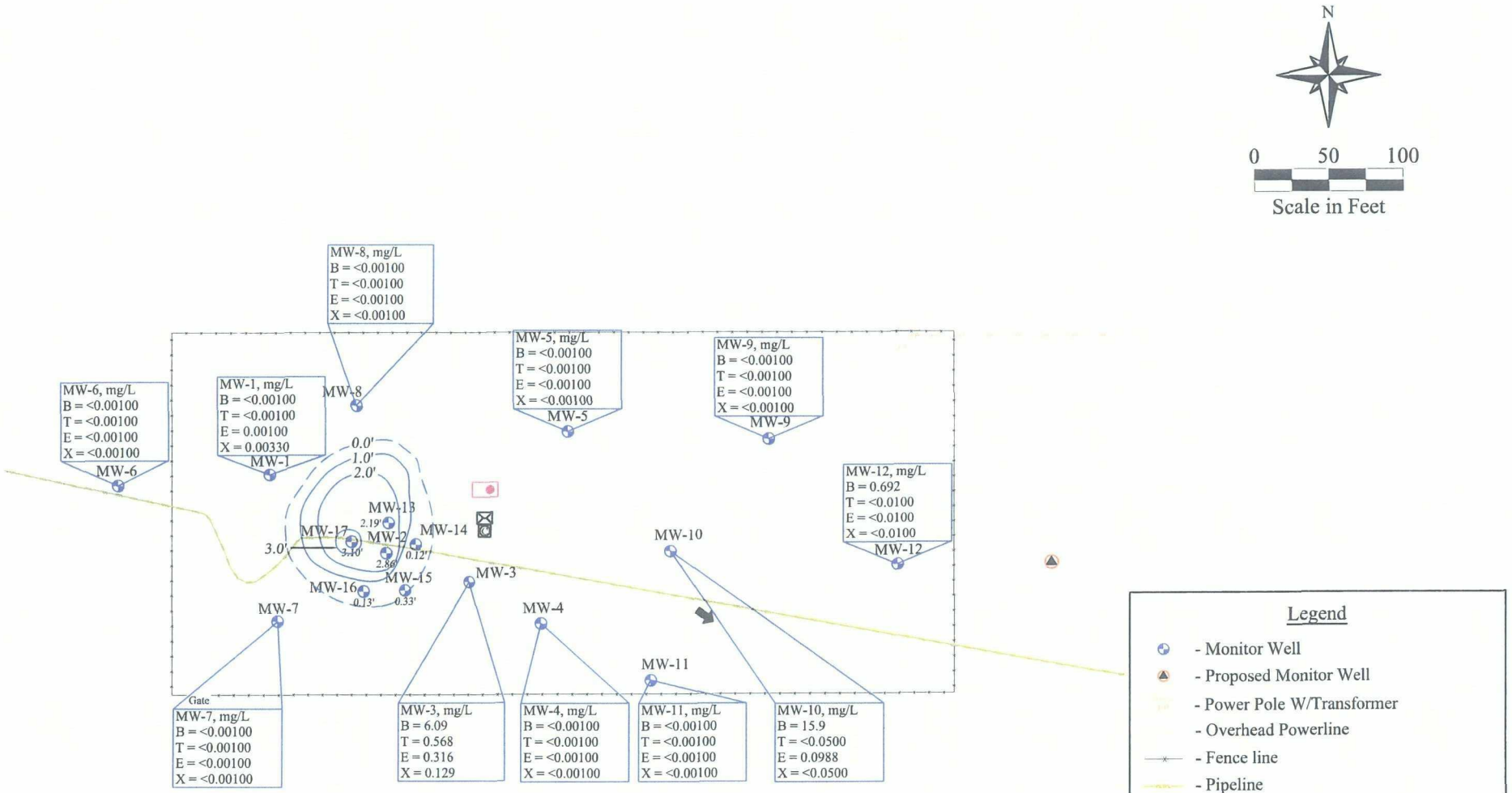
Date: 01/13/2010
Scale: 1" = 100'
Drawn By: TJS

Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. # AP-037

SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico

Figure 2d - Groundwater Gradient Map - (12/15/2009)



Talon/LPE # : 700376.051.01

Date:	01/13/2010
Scale:	1" = 100'
Drawn By:	TJS

Lovington Deep 6"

SRS # 2002-10312, NMOCD REF. # AP-037

SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico

Figure 3d - PSH Thickness & Groundwater Concentration Map 12/16/2009)

APPENDIX B

Tables

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-1	03/04/03	3,915.51		63.81		3,851.70
MW-1	09/18/03			63.95		3,851.56
MW-1	11/10/03			63.97		3,851.54
MW-1	04/14/04			64.04		3,851.47
MW-1	05/06/04			64.01		3,851.50
MW-1	06/04/04			64.04		3,851.47
MW-1	06/16/04			64.05		3,851.46
MW-1	07/09/04			64.03		3,851.48
MW-1	07/20/04			64.04		3,851.47
MW-1	09/10/04			64.08		3,851.43
MW-1	09/23/04			64.04		3,851.47
MW-1	10/01/04			63.43		3,852.08
MW-1	10/21/04			63.60		3,851.91
MW-1	11/03/04			63.70		3,851.81
MW-1	11/18/04			63.72		3,851.79
MW-1	12/13/04			63.50		3,852.01
MW-1	12/20/04			63.56		3,851.95
MW-1	01/10/05			63.51		3,852.00
MW-1	01/25/05			63.49		3,852.02
MW-1	02/18/05			63.51		3,852.00
MW-1	03/30/05			63.42		3,852.09
MW-1	05/03/05			63.43		3,852.08
MW-1	05/20/05			63.40		3,852.11
MW-1	08/23/05			63.38		3,852.13
MW-1	11/22/05			63.40		3,852.11
MW-1	01/16/06			63.38		3,852.13
MW-1	02/17/06			63.39		3,852.12
MW-1	03/17/06			63.33		3,852.18
MW-1	03/24/06			63.31		3,852.20
MW-1	05/12/06			63.54		3,851.97
MW-1	05/30/06			63.47		3,852.04
MW-1	06/09/06			63.31		3,852.20
MW-1	07/07/06			63.49		3,852.02
MW-1	07/14/06			63.49		3,852.02
MW-1	08/08/06			63.35		3,852.16
MW-1	08/25/06			63.58		3,851.93

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-1	09/15/06			63.41		3,852.10
MW-1	09/29/06			63.47		3,852.04
MW-1	10/13/06			63.41		3,852.10
MW-1	10/20/06			63.41		3,852.10
MW-1	10/27/06			63.49		3,852.02
MW-1	11/10/06			63.48		3,852.03
MW-1	11/20/06			63.48		3,852.03
MW-1	12/01/06			63.50		3,852.01
MW-1	12/08/06			63.50		3,852.01
MW-1	12/15/06			63.51		3,852.00
MW-1	12/27/06			63.57		3,851.94
MW-1	01/05/07			63.55		3,851.96
MW-1	01/15/07			63.58		3,851.93
MW-1	01/29/07			63.59		3,851.92
MW-1	02/08/07			63.33		3,852.18
MW-1	02/20/07			63.65		3,851.86
MW-1	03/06/07			63.05		3,852.46
MW-1	03/15/07			63.64		3,851.87
MW-1	04/04/07			63.44		3,852.07
MW-1	04/11/07			63.55		3,851.96
MW-1	04/18/07			63.55		3,851.96
MW-1	04/24/07			63.65		3,851.86
MW-1	05/22/07			63.67		3,851.84
MW-1	06/19/07			63.94		3,851.57
MW-1	08/08/07			63.65		3,851.86
MW-1	08/17/07			63.68		3,851.83
MW-1	08/24/07			63.67		3,851.84
MW-1	09/19/07			63.96		3,851.55
MW-1	10/03/07			63.98		3,851.53
MW-1	11/15/07			63.74		3,851.77
MW-1	12/04/07			63.80		3,851.71
MW-1	03/18/08			63.88		3,851.63
MW-1	04/11/08			63.88		3,851.63
MW-1	05/09/08			64.88		3,850.63
MW-1	06/03/08			63.90		3,851.61
MW-1	06/26/08			63.95		3,851.56

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-1	08/28/08			63.98		3,851.53
MW-1	09/20/08			64.03		3,851.48
MW-1	10/29/08			64.03		3,851.48
MW-1	12/23/08			64.04		3,851.47
MW-1	01/22/09			64.06		3,851.45
MW-1	02/25/09			64.07		3,851.44
MW-1	04/16/09			64.10		3,851.41
MW-1	06/04/09			64.11		3,851.40
MW-1	08/19/09			64.22		3,851.29
MW-1	12/15/09			64.18		3,851.33
MW-2	03/04/03	3,915.04				
MW-2	06/17/03		62.29	70.02	7.73	3,851.47
MW-2	08/14/03		62.34	70.04	7.70	3,851.43
MW-2	08/28/03		62.50	69.94	7.44	3,851.31
MW-2	09/18/03		62.51	69.95	7.44	3,851.30
MW-2	10/13/03		62.50	69.96	7.46	3,851.31
MW-2	10/24/03		62.35	70.05	7.70	3,851.42
MW-2	11/10/03		62.45	69.59	7.14	3,851.41
MW-2	11/17/03		62.38	69.98	7.60	3,851.41
MW-2	11/18/03		62.95	67.37	4.42	3,851.36
MW-2	12/04/03		62.57	69.75	7.18	3,851.29
MW-2	02/09/04		62.45	69.87	7.42	3,851.37
MW-2	03/15/04		62.42	69.95	7.53	3,851.38
MW-2	03/25/04		62.43	69.95	7.52	3,851.37
MW-2	04/14/04		62.68	69.42	6.74	3,851.25
MW-2	05/06/04		62.75	70.31	7.56	3,851.04
MW-2	06/04/04		62.77	70.33	7.56	3,851.02
MW-2	06/16/04		62.73	69.51	6.78	3,851.19
MW-2	07/09/04		62.40	69.97	7.57	3,851.39
MW-2	07/20/04		63.20	68.95	5.75	3,850.89
MW-2	09/10/04		62.52	69.70	7.18	3,851.34
MW-2	09/23/04		62.49	69.69	7.20	3,851.36
MW-2	10/01/04		60.50	71.07	10.57	3,852.80
MW-2	10/21/04		61.96	68.57	6.61	3,851.99
MW-2	11/03/04		62.27	68.22	5.95	3,851.79

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-2	11/18/04		62.43	67.81	5.38	3,851.72
MW-2	12/13/04		62.05	68.29	6.24	3,851.96
MW-2	12/20/04		62.04	68.31	6.27	3,851.97
MW-2	01/10/05		62.11	68.29	6.18	3,851.91
MW-2	01/25/05		62.10	68.21	6.11	3,851.93
MW-2	02/18/05		62.06	68.27	6.21	3,851.96
MW-2	03/30/05		62.02	68.30	6.28	3,851.98
MW-2	05/03/05		62.04	68.24	6.20	3,851.98
MW-2	05/20/05		62.03	68.16	6.13	3,852.00
MW-2	08/23/05		61.94	68.23	6.29	3,852.06
MW-2	11/22/05		62.05	68.20	6.15	3,851.98
MW-2	12/08/05		61.99	68.25	6.26	3,852.02
MW-2	01/16/06		62.00	68.20	6.20	3,852.02
MW-2	02/17/06		62.15	67.60	5.45	3,851.99
MW-2	03/03/06		62.06	68.00	5.94	3,852.00
MW-2	03/10/06		62.05	67.87	5.82	3,852.03
MW-2	03/17/06		62.12	67.71	5.59	3,852.00
MW-2	03/24/06		62.05	67.95	5.90	3,852.02
MW-2	03/31/06		62.07	67.91	5.84	3,852.01
MW-2	04/07/06		62.11	67.89	5.78	3,851.98
MW-2	04/13/06		62.11	67.80	5.69	3,851.99
MW-2	04/21/06		62.12	67.86	5.74	3,851.97
MW-2	04/28/06		62.09	67.91	5.82	3,851.99
MW-2	05/05/06		62.14	67.77	5.63	3,851.97
MW-2	05/12/06		62.14	67.81	5.67	3,851.96
MW-2	05/19/06		62.11	67.97	5.86	3,851.96
MW-2	05/30/06		62.01	67.99	5.98	3,852.04
MW-2	06/02/06		62.00	67.83	5.83	3,852.08
MW-2	06/09/06		62.04	67.81	5.77	3,852.05
MW-2	06/16/05		62.11	67.91	5.80	3,851.97
MW-2	06/30/06		62.05	67.97	5.92	3,852.01
MW-2	07/07/06		62.07	67.96	5.89	3,852.00
MW-2	07/14/06		62.08	67.96	5.88	3,851.99
MW-2	07/21/06		62.06	68.01	5.95	3,852.00
MW-2	07/28/06		62.15	67.98	5.83	3,851.93
MW-2	08/25/06		62.05	68.02	5.97	3,852.00

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-2	09/15/06		62.07	68.04	5.97	3,851.98
MW-2	09/22/06		62.10	68.11	6.01	3,851.95
MW-2	09/29/06		62.11	67.91	5.80	3,851.97
MW-2	10/06/06		62.16	67.91	5.75	3,851.93
MW-2	10/13/06		62.11	68.02	5.91	3,851.95
MW-2	10/20/06		62.25	67.87	5.62	3,851.86
MW-2	10/27/06		62.09	67.97	5.88	3,851.98
MW-2	11/03/06		62.09	67.97	5.88	3,851.98
MW-2	11/10/06		62.17	68.09	5.92	3,851.89
MW-2	11/20/06		62.17	67.95	5.78	3,851.92
MW-2	12/01/06		62.20	68.08	5.88	3,851.87
MW-2	12/08/06		62.20	68.08	5.88	3,851.87
MW-2	12/15/06		62.21	68.02	5.81	3,851.87
MW-2	12/27/06		62.19	68.27	6.08	3,851.85
MW-2	01/05/07		62.21	68.46	6.25	3,851.80
MW-2	01/15/07		62.21	68.91	6.70	3,851.72
MW-2	01/29/07		63.01	68.05	5.04	3,851.20
MW-2	02/08/07		62.25	68.07	5.82	3,851.83
MW-2	02/20/07		62.33	68.35	6.02	3,851.72
MW-2	03/06/07		62.37	68.41	6.04	3,851.67
MW-2	03/15/07		62.30	68.21	5.91	3,851.76
MW-2	04/04/07		63.58	68.25	4.67	3,850.69
MW-2	04/11/07		62.34	68.31	5.97	3,851.71
MW-2	04/18/07		62.34	68.31	5.97	3,851.71
MW-2	04/24/07		62.36	68.13	5.77	3,851.73
MW-2	05/22/07		62.33	63.28	0.95	3,852.55
MW-2	06/19/07		62.40	68.30	5.90	3,851.67
MW-2	08/08/07		62.36	68.32	5.96	3,851.70
MW-2	08/17/07		62.34	68.21	5.87	3,851.73
MW-2	08/24/07		62.37	68.12	5.75	3,851.72
MW-2	09/19/07		62.36	68.24	5.88	3,851.71
MW-2	10/03/07		62.41	68.32	5.91	3,851.65
MW-2	10/11/07		62.45	68.22	5.77	3,851.64
MW-2	10/18/07		62.44	68.17	5.73	3,851.65
MW-2	12/03/07		62.44	68.36	5.92	3,851.62
MW-2	01/02/08		62.59	68.46	5.87	3,851.48

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-2	02/07/08		62.63	68.58	5.95	3,851.43
MW-2	02/11/08		62.64	68.60	5.96	3,851.42
MW-2	03/18/08		63.03	66.88	3.85	3,851.37
MW-2	04/02/08		63.24	66.14	2.90	3,851.32
MW-2	04/11/08		63.56	63.93	0.37	3,851.42
MW-2	04/14/08		63.77	64.00	0.23	3,851.23
MW-2	04/29/08		63.78	64.04	0.26	3,851.22
MW-2	05/07/08		63.82	64.03	0.21	3,851.19
MW-2	05/12/08		63.81	64.03	0.22	3,851.19
MW-2	06/03/08		63.92	64.18	0.26	3,851.08
MW-2	06/26/08		64.07	64.31	0.24	3,850.93
MW-2	07/23/08		63.76	64.02	0.26	3,851.24
MW-2	08/28/08		63.71	63.95	0.24	3,851.29
MW-2	09/20/08		63.74	63.99	0.25	3,851.26
MW-2	10/29/08		63.35	65.79	2.44	3,851.29
MW-2	12/23/08		63.53	64.96	1.43	3,851.27
MW-2	01/22/09		63.56	64.98	1.42	3,851.25
MW-2	02/25/09		63.77	64.03	0.26	3,851.23
MW-2	04/16/09		63.44	65.75	2.31	3,851.22
MW-2	06/04/09		63.17	67.07	3.90	3,851.23
MW-2	08/19/09		63.25	67.14	3.89	3,851.15
MW-2	12/15/09		63.97	66.83	2.86	3,850.60
MW-3	03/04/03	3,915.24		64.01		3,851.23
MW-3	09/18/03			64.14		3,851.10
MW-3	11/10/03			64.15		3,851.09
MW-3	04/14/04			64.20		3,851.04
MW-3	05/06/04			64.20		3,851.04
MW-3	06/04/04			64.23		3,851.01
MW-3	06/16/04			64.24		3,851.00
MW-3	07/09/04			64.23		3,851.01
MW-3	07/20/04			64.23		3,851.01
MW-3	09/10/04			64.25		3,850.99
MW-3	09/23/04			64.25		3,850.99
MW-3	10/01/04			63.41		3,851.83
MW-3	10/21/04			63.71		3,851.53

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-3	11/03/04			63.83		3,851.41
MW-3	11/18/04			63.84		3,851.40
MW-3	12/13/04			63.65		3,851.59
MW-3	12/20/04			63.73		3,851.51
MW-3	01/10/05			63.70		3,851.54
MW-3	01/25/05			63.64		3,851.60
MW-3	02/18/05			63.67		3,851.57
MW-3	03/30/05			63.54		3,851.70
MW-3	05/03/05			63.59		3,851.65
MW-3	05/20/05			63.56		3,851.68
MW-3	08/23/05			63.51		3,851.73
MW-3	11/22/05			63.50		3,851.74
MW-3	01/16/06			63.55		3,851.69
MW-3	02/17/06			63.58		3,851.66
MW-3	03/17/06			63.58		3,851.66
MW-3	03/24/06			63.59		3,851.65
MW-3	04/13/06			63.60		3,851.64
MW-3	05/12/06			63.62		3,851.62
MW-3	05/30/06			63.68		3,851.56
MW-3	06/09/06			63.58		3,851.66
MW-3	07/07/06			63.69		3,851.55
MW-3	07/14/06			63.70		3,851.54
MW-3	08/08/06			63.49		3,851.75
MW-3	08/25/06			63.79		3,851.45
MW-3	09/15/06			63.54		3,851.70
MW-3	09/29/06			63.61		3,851.63
MW-3	10/13/06			63.59		3,851.65
MW-3	10/20/06			63.55		3,851.69
MW-3	10/27/06			63.64		3,851.60
MW-3	11/10/06			62.63		3,852.61
MW-3	11/20/06			63.64		3,851.60
MW-3	12/01/06			63.74		3,851.50
MW-3	12/08/06			63.72		3,851.52
MW-3	12/15/06			63.75		3,851.49
MW-3	12/27/06			63.77		3,851.47
MW-3	01/05/07			63.77		3,851.47

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-3	01/15/07			63.78		3,851.46
MW-3	01/29/07			63.76		3,851.48
MW-3	02/08/07			63.48		3,851.76
MW-3	02/20/07			63.79		3,851.45
MW-3	03/06/07			63.79		3,851.45
MW-3	03/15/07			63.78		3,851.46
MW-3	04/04/07			63.50		3,851.74
MW-3	04/11/07			63.78		3,851.46
MW-3	04/18/07			63.85		3,851.39
MW-3	04/24/07			63.82		3,851.42
MW-3	05/22/07			63.83		3,851.41
MW-3	06/19/07			63.79		3,851.45
MW-3	08/08/07			63.80		3,851.44
MW-3	08/17/07			63.82		3,851.42
MW-3	08/24/07			63.82		3,851.42
MW-3	09/19/07			63.84		3,851.40
MW-3	10/03/07			63.81		3,851.43
MW-3	12/03/07			63.98		3,851.26
MW-3	03/18/08			64.04		3,851.20
MW-3	04/11/08			64.05		3,851.19
MW-3	05/09/08			64.06		3,851.18
MW-3	06/03/08			64.08		3,851.16
MW-3	06/26/08			64.13		3,851.11
MW-3	08/28/08			64.16		3,851.08
MW-3	09/20/08			64.21		3,851.03
MW-3	10/29/08			64.20		3,851.04
MW-3	12/23/08			64.21		3,851.03
MW-3	01/22/09			64.22		3,851.02
MW-3	02/25/09			64.23		3,851.01
MW-3	04/16/09			64.25		3,850.99
MW-3	06/04/09			64.28		3,850.96
MW-3	08/19/09			64.37		3,850.87
MW-3	12/15/09			64.37		3,850.87
MW-4	03/04/03	3,915.30		64.25		3,851.05
MW-4	09/18/03			64.35		3,850.95

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-4	11/10/03			64.38		3,850.92
MW-4	04/14/04			64.43		3,850.87
MW-4	05/06/04			64.41		3,850.89
MW-4	06/04/04			64.47		3,850.83
MW-4	06/16/04			64.47		3,850.83
MW-4	07/09/04			64.47		3,850.83
MW-4	07/20/04			64.45		3,850.85
MW-4	09/10/04			64.48		3,850.82
MW-4	09/23/04			64.53		3,850.77
MW-4	10/01/04			63.95		3,851.35
MW-4	10/21/04			64.05		3,851.25
MW-4	11/03/04			64.11		3,851.19
MW-4	11/18/04			64.13		3,851.17
MW-4	12/13/04			63.93		3,851.37
MW-4	12/20/04			64.01		3,851.29
MW-4	01/10/05			63.96		3,851.34
MW-4	01/25/05			63.92		3,851.38
MW-4	02/18/05			63.95		3,851.35
MW-4	03/30/05			63.85		3,851.45
MW-4	05/03/05			63.82		3,851.48
MW-4	05/20/05			63.82		3,851.48
MW-4	08/23/05			63.48		3,851.82
MW-4	11/22/05			63.72		3,851.58
MW-4	01/16/06			63.81		3,851.49
MW-4	02/17/06			63.80		3,851.50
MW-4	03/17/06			63.81		3,851.49
MW-4	03/24/06			63.80		3,851.50
MW-4	05/12/06			63.79		3,851.51
MW-4	05/30/06			63.84		3,851.46
MW-4	06/09/06			63.81		3,851.49
MW-4	07/07/06			63.87		3,851.43
MW-4	07/14/06			63.87		3,851.43
MW-4	08/08/06			63.72		3,851.58
MW-4	08/25/06			63.96		3,851.34
MW-4	09/15/06			63.81		3,851.49
MW-4	09/29/06			63.84		3,851.46

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-4	10/13/06			63.81		3,851.49
MW-4	10/20/06			63.77		3,851.53
MW-4	10/27/06			63.90		3,851.40
MW-4	11/10/06			63.88		3,851.42
MW-4	11/20/06			63.89		3,851.41
MW-4	12/01/06			63.94		3,851.36
MW-4	12/08/06			63.93		3,851.37
MW-4	12/15/06			63.93		3,851.37
MW-4	12/27/06			63.98		3,851.32
MW-4	01/05/07			63.98		3,851.32
MW-4	01/15/07			64.02		3,851.28
MW-4	01/29/07			63.98		3,851.32
MW-4	02/08/07			63.70		3,851.60
MW-4	02/20/07			64.02		3,851.28
MW-4	03/06/07			63.96		3,851.34
MW-4	03/15/07			64.05		3,851.25
MW-4	04/04/07			63.82		3,851.48
MW-4	04/11/07			64.05		3,851.25
MW-4	04/18/07			64.05		3,851.25
MW-4	04/24/07			64.04		3,851.26
MW-4	05/22/07			64.05		3,851.25
MW-4	06/19/07			64.04		3,851.26
MW-4	08/08/07			64.02		3,851.28
MW-4	08/17/07			64.04		3,851.26
MW-4	08/24/07			64.03		3,851.27
MW-4	09/19/07			64.06		3,851.24
MW-4	10/03/07			64.08		3,851.22
MW-4	12/03/07			64.18		3,851.12
MW-4	03/18/08			64.27		3,851.03
MW-4	04/11/08			64.26		3,851.04
MW-4	05/09/08			64.27		3,851.03
MW-4	06/03/08			64.28		3,851.02
MW-4	06/26/08			64.36		3,850.94
MW-4	08/28/08			64.37		3,850.93
MW-4	09/20/08			64.43		3,850.87
MW-4	10/29/08			64.41		3,850.89

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-4	12/23/08			64.42		3,850.88
MW-4	01/22/09			64.45		3,850.85
MW-4	02/25/09			64.45		3,850.85
MW-4	04/16/09			64.48		3,850.82
MW-4	06/04/09			64.52		3,850.78
MW-4	08/19/09			64.59		3,850.71
MW-4	12/15/09			64.58		3,850.72
MW-5	03/04/03	3,915.26		64.21		3,851.05
MW-5	09/18/03			64.39		3,850.87
MW-5	11/10/03			64.42		3,850.84
MW-5	04/14/04			64.46		3,850.80
MW-5	05/06/04			64.45		3,850.81
MW-5	06/04/04			64.46		3,850.80
MW-5	06/16/04			64.49		3,850.77
MW-5	07/09/04			64.45		3,850.81
MW-5	07/20/04			64.47		3,850.79
MW-5	09/10/04			64.51		3,850.75
MW-5	09/23/04			64.53		3,850.73
MW-5	10/01/04			64.02		3,851.24
MW-5	10/21/04			64.04		3,851.22
MW-5	11/03/04			64.13		3,851.13
MW-5	11/18/04			64.19		3,851.07
MW-5	12/13/04			63.91		3,851.35
MW-5	12/20/04			63.94		3,851.32
MW-5	01/10/05			63.94		3,851.32
MW-5	01/25/05			63.88		3,851.38
MW-5	02/18/05			63.90		3,851.36
MW-5	03/30/05			63.81		3,851.45
MW-5	05/03/05			63.83		3,851.43
MW-5	05/20/05			63.79		3,851.47
MW-5	08/23/05			63.75		3,851.51
MW-5	11/22/05			63.80		3,851.46
MW-5	01/16/06			63.80		3,851.46
MW-5	02/17/06			63.83		3,851.43
MW-5	03/17/06			63.78		3,851.48

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-5	03/24/05			63.77		3,851.49
MW-5	04/13/06			63.81		3,851.45
MW-5	05/12/06			63.81		3,851.45
MW-5	05/30/06			63.82		3,851.44
MW-5	06/09/06			63.77		3,851.49
MW-5	07/07/06			63.86		3,851.40
MW-5	07/14/06			63.87		3,851.39
MW-5	08/08/06			63.77		3,851.49
MW-5	08/25/06			63.95		3,851.31
MW-5	09/15/06			63.81		3,851.45
MW-5	09/29/06			63.87		3,851.39
MW-5	10/13/06			63.85		3,851.41
MW-5	10/20/06			63.81		3,851.45
MW-5	10/27/06			63.91		3,851.35
MW-5	11/10/06			63.90		3,851.36
MW-5	11/20/06			63.88		3,851.38
MW-5	12/01/06			63.92		3,851.34
MW-5	12/08/06			63.90		3,851.36
MW-5	12/15/06			63.93		3,851.33
MW-5	12/27/06			63.95		3,851.31
MW-5	01/05/07			63.96		3,851.30
MW-5	01/15/07			63.99		3,851.27
MW-5	01/29/07			63.99		3,851.27
MW-5	02/08/07			63.75		3,851.51
MW-5	02/20/07			64.09		3,851.17
MW-5	03/06/07			64.02		3,851.24
MW-5	03/15/07			64.05		3,851.21
MW-5	04/04/07			63.86		3,851.40
MW-5	04/11/07			64.06		3,851.20
MW-5	04/18/07			64.07		3,851.19
MW-5	04/24/07			63.82		3,851.44
MW-5	05/22/07			64.08		3,851.18
MW-5	06/19/07			64.04		3,851.22
MW-5	08/08/07			64.04		3,851.22
MW-5	08/17/07			64.08		3,851.18
MW-5	08/24/07			64.08		3,851.18

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-5	09/19/07			64.09		3,851.17
MW-5	10/03/07			64.11		3,851.15
MW-5	11/15/07			64.21		3,851.05
MW-5	12/03/07			64.22		3,851.04
MW-5	03/18/08			64.31		3,850.95
MW-5	04/11/08			64.31		3,850.95
MW-5	05/09/08			64.33		3,850.93
MW-5	06/03/08			64.33		3,850.93
MW-5	06/26/08			64.39		3,850.87
MW-5	08/28/08			64.42		3,850.84
MW-5	09/20/08			64.46		3,850.80
MW-5	10/29/08			64.47		3,850.79
MW-5	12/23/08			64.47		3,850.79
MW-5	01/22/09			64.50		3,850.76
MW-5	02/25/09			64.51		3,850.75
MW-5	04/16/09			64.52		3,850.74
MW-5	06/04/09			64.56		3,850.70
MW-5	08/19/09			64.61		3,850.65
MW-5	12/15/09			64.63		3,850.63
MW-6	11/18/04	3,915.45				
MW-6	12/13/04			63.26		3,852.19
MW-6	12/20/04			63.32		3,852.13
MW-6	01/10/05			63.30		3,852.15
MW-6	01/25/05			63.23		3,852.22
MW-6	02/18/05			63.27		3,852.18
MW-6	03/30/05			63.18		3,852.27
MW-6	05/03/05			63.19		3,852.26
MW-6	05/20/05			63.14		3,852.31
MW-6	08/23/05			63.12		3,852.33
MW-6	11/22/05			63.14		3,852.31
MW-6	01/16/06			63.15		3,852.30
MW-6	02/17/06			63.15		3,852.30
MW-6	03/17/06			63.12		3,852.33
MW-6	03/24/06			63.11		3,852.34
MW-6	04/13/06			63.15		3,852.30

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-6	05/12/06			63.19		3,852.26
MW-6	05/30/06			63.19		3,852.26
MW-6	06/09/06			63.10		3,852.35
MW-6	07/07/06			63.20		3,852.25
MW-6	07/14/06			63.21		3,852.24
MW-6	08/08/06			63.08		3,852.37
MW-6	08/25/06			63.28		3,852.17
MW-6	09/15/06			63.17		3,852.28
MW-6	09/29/06			63.20		3,852.25
MW-6	10/13/06			63.14		3,852.31
MW-6	10/20/06			63.15		3,852.30
MW-6	10/27/06			63.22		3,852.23
MW-6	11/10/06			63.22		3,852.23
MW-6	11/20/06			63.23		3,852.22
MW-6	12/01/06			63.29		3,852.16
MW-6	12/08/06			63.29		3,852.16
MW-6	12/27/06			63.33		3,852.12
MW-6	01/05/07			63.35		3,852.10
MW-6	01/15/07			63.37		3,852.08
MW-6	01/29/07			63.35		3,852.10
MW-6	02/08/07			63.07		3,852.38
MW-6	02/20/07			63.34		3,852.11
MW-6	03/06/07			63.35		3,852.10
MW-6	03/15/07			63.38		3,852.07
MW-6	04/04/07			63.18		3,852.27
MW-6	04/11/07			63.40		3,852.05
MW-6	04/18/07			63.40		3,852.05
MW-6	04/24/07			63.40		3,852.05
MW-6	05/22/07			63.40		3,852.05
MW-6	06/19/07			63.39		3,852.06
MW-6	08/08/07			63.39		3,852.06
MW-6	08/17/07			63.41		3,852.04
MW-6	08/24/07			63.39		3,852.06
MW-6	09/19/07			63.43		3,852.02
MW-6	10/03/07			63.42		3,852.03
MW-6	11/15/07			63.50		3,851.95

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-6	12/03/07			63.52		3,851.93
MW-6	03/18/08			63.61		3,851.84
MW-6	04/11/08			63.62		3,851.83
MW-6	05/09/08			63.64		3,851.81
MW-6	06/03/08			63.64		3,851.81
MW-6	06/26/08			63.69		3,851.76
MW-6	08/28/08			63.72		3,851.73
MW-6	09/20/08			63.77		3,851.68
MW-6	10/29/08			63.79		3,851.66
MW-6	12/23/08			63.78		3,851.67
MW-6	01/22/09			63.80		3,851.65
MW-6	02/25/09			63.81		3,851.64
MW-6	04/16/09			63.82		3,851.63
MW-6	06/04/09			63.86		3,851.59
MW-6	08/19/09			63.94		3,851.51
MW-6	12/15/09			63.93		3,851.52
MW-7	11/18/04	3,914.73				
MW-7	12/13/04			62.94		3,851.79
MW-7	12/20/04			63.00		3,851.73
MW-7	01/10/05			62.98		3,851.75
MW-7	01/25/05			62.92		3,851.81
MW-7	02/18/05			62.94		3,851.79
MW-7	03/30/05			62.85		3,851.88
MW-7	05/03/05			62.84		3,851.89
MW-7	05/20/05			62.81		3,851.92
MW-7	08/23/05			62.80		3,851.93
MW-7	11/22/05			62.78		3,851.95
MW-7	01/16/06			62.81		3,851.92
MW-7	02/17/06			62.81		3,851.92
MW-7	03/17/06			62.80		3,851.93
MW-7	03/24/06			62.81		3,851.92
MW-7	04/13/06			62.81		3,851.92
MW-7	05/12/06			63.84		3,850.89
MW-7	05/30/06			62.85		3,851.88
MW-7	06/09/06			62.80		3,851.93

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-7	07/07/06			62.89		3,851.84
MW-7	07/14/06			62.90		3,851.83
MW-7	08/08/06			62.76		3,851.97
MW-7	08/25/06			62.99		3,851.74
MW-7	09/15/06			62.85		3,851.88
MW-7	09/29/06			62.87		3,851.86
MW-7	10/13/06			62.78		3,851.95
MW-7	10/20/06			62.81		3,851.92
MW-7	10/27/06			63.10		3,851.63
MW-7	11/10/06			62.89		3,851.84
MW-7	11/20/06			62.88		3,851.85
MW-7	12/01/06			63.05		3,851.68
MW-7	12/08/06			63.91		3,850.82
MW-7	12/15/06			62.93		3,851.80
MW-7	12/27/06			63.98		3,850.75
MW-7	01/05/07			63.98		3,850.75
MW-7	01/15/07			62.99		3,851.74
MW-7	01/29/07			63.00		3,851.73
MW-7	02/08/07			62.74		3,851.99
MW-7	02/20/07			63.02		3,851.71
MW-7	03/06/07			63.10		3,851.63
MW-7	03/15/07			63.02		3,851.71
MW-7	04/01/07			62.86		3,851.87
MW-7	04/11/07			63.03		3,851.70
MW-7	04/18/07			63.06		3,851.67
MW-7	04/24/07			63.05		3,851.68
MW-7	05/22/07			63.08		3,851.65
MW-7	06/19/07			63.05		3,851.68
MW-7	08/08/07			63.06		3,851.67
MW-7	08/17/07			63.02		3,851.71
MW-7	08/24/07			63.06		3,851.67
MW-7	09/19/07			63.08		3,851.65
MW-7	10/03/07			63.10		3,851.63
MW-7	11/15/07			63.17		3,851.56
MW-7	12/03/07			63.19		3,851.54
MW-7	03/18/08			63.29		3,851.44

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-7	04/11/08			63.30		3,851.43
MW-7	05/09/08			63.30		3,851.43
MW-7	06/03/08			63.33		3,851.40
MW-7	06/26/08			63.37		3,851.36
MW-7	08/28/08			63.40		3,851.33
MW-7	09/20/08			63.45		3,851.28
MW-7	10/29/08			63.47		3,851.26
MW-7	12/23/08			63.46		3,851.27
MW-7	01/22/09			63.48		3,851.25
MW-7	02/25/09			63.49		3,851.24
MW-7	04/16/09			63.51		3,851.22
MW-7	08/19/09			63.61		3,851.12
MW-7	12/15/09			63.62		3,851.11
MW-8	11/18/04	3,915.19		63.64		3,851.55
MW-8	12/13/04			63.45		3,851.74
MW-8	12/20/04			63.50		3,851.69
MW-8	01/10/05			63.49		3,851.70
MW-8	01/25/05			63.43		3,851.76
MW-8	02/18/05			63.47		3,851.72
MW-8	03/30/05			63.37		3,851.82
MW-8	05/03/05			63.38		3,851.81
MW-8	05/20/05			63.36		3,851.83
MW-8	08/23/05			63.34		3,851.85
MW-8	11/22/05			63.35		3,851.84
MW-8	01/16/06			63.37		3,851.82
MW-8	02/17/06			63.38		3,851.81
MW-8	03/17/06			63.35		3,851.84
MW-8	03/24/06			63.34		3,851.85
MW-8	04/13/06			63.39		3,851.80
MW-8	05/12/06			63.35		3,851.84
MW-8	05/30/06			63.40		3,851.79
MW-8	06/09/06			63.34		3,851.85
MW-8	07/07/06			63.44		3,851.75
MW-8	07/14/06			63.43		3,851.76
MW-8	08/08/06			63.31		3,851.88

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-8	08/25/06			63.56		3,851.63
MW-8	09/15/06			63.38		3,851.81
MW-8	09/22/06			63.42		3,851.77
MW-8	10/13/06			63.41		3,851.78
MW-8	10/20/06			67.37		3,847.82
MW-8	10/27/06			63.46		3,851.73
MW-8	11/10/06			63.46		3,851.73
MW-8	11/20/06			62.44		3,852.75
MW-8	12/01/06			63.48		3,851.71
MW-8	12/08/06			63.46		3,851.73
MW-8	12/15/06			63.48		3,851.71
MW-8	12/27/06			63.51		3,851.68
MW-8	01/05/07			63.51		3,851.68
MW-8	01/15/07			63.54		3,851.65
MW-8	01/29/07			63.56		3,851.63
MW-8	02/08/07			63.30		3,851.89
MW-8	02/20/07			63.57		3,851.62
MW-8	03/06/07			63.58		3,851.61
MW-8	03/15/07			63.60		3,851.59
MW-8	04/04/07			63.40		3,851.79
MW-8	04/11/07			63.90		3,851.29
MW-8	04/18/07			63.62		3,851.57
MW-8	04/24/07			63.62		3,851.57
MW-8	05/22/07			63.64		3,851.55
MW-8	06/19/07			63.60		3,851.59
MW-8	08/08/07			63.60		3,851.59
MW-8	08/17/07			63.64		3,851.55
MW-8	08/24/07			63.63		3,851.56
MW-8	09/19/07			63.66		3,851.53
MW-8	10/03/07			63.67		3,851.52
MW-8	11/15/07			63.41		3,851.78
MW-8	12/03/07			63.76		3,851.43
MW-8	03/18/08			63.85		3,851.34
MW-8	04/11/08			63.85		3,851.34
MW-8	05/09/08			63.86		3,851.33
MW-8	06/03/08			63.88		3,851.31

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-8	06/26/08			63.93		3,851.26
MW-8	08/28/08			63.95		3,851.24
MW-8	09/20/08			64.00		3,851.19
MW-8	10/29/08			64.02		3,851.17
MW-8	12/23/08			64.02		3,851.17
MW-8	01/22/09			64.03		3,851.16
MW-8	02/25/09			64.03		3,851.16
MW-8	04/16/09			64.06		3,851.13
MW-8	06/04/09			64.09		3,851.10
MW-8	08/19/09			64.17		3,851.02
MW-8	12/15/09			64.16		3,851.03
MW-9	11/18/04	3,913.92		63.48		3,850.44
MW-9	12/13/04			63.29		3,850.63
MW-9	12/20/04			63.32		3,850.60
MW-9	01/10/05			63.30		3,850.62
MW-9	01/25/05			63.27		3,850.65
MW-9	02/18/05			63.23		3,850.69
MW-9	03/30/05			63.19		3,850.73
MW-9	05/03/05			63.21		3,850.71
MW-9	05/20/05			63.18		3,850.74
MW-9	08/23/05			63.13		3,850.79
MW-9	11/22/05			63.20		3,850.72
MW-9	01/16/06			63.17		3,850.75
MW-9	02/17/06			62.68		3,851.24
MW-9	03/17/06			62.65		3,851.27
MW-9	03/24/06			62.66		3,851.26
MW-9	04/13/06			63.19		3,850.73
MW-9	05/12/06			63.22		3,850.70
MW-9	05/30/06			63.14		3,850.78
MW-9	06/09/06			62.64		3,851.28
MW-9	07/07/06			63.26		3,850.66
MW-9	07/14/06			63.27		3,850.65
MW-9	08/08/06			63.16		3,850.76
MW-9	08/25/06			63.37		3,850.55
MW-9	09/15/06			63.19		3,850.73

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-9	09/29/06			63.25		3,850.67
MW-9	10/13/06			63.23		3,850.69
MW-9	10/20/06			63.20		3,850.72
MW-9	10/27/06			63.29		3,850.63
MW-9	11/10/06			62.79		3,851.13
MW-9	11/20/06			63.27		3,850.65
MW-9	12/01/06			63.31		3,850.61
MW-9	12/08/06			63.29		3,850.63
MW-9	12/15/06			63.31		3,850.61
MW-9	12/27/06			63.37		3,850.55
MW-9	01/05/07			63.33		3,850.59
MW-9	01/15/07			63.36		3,850.56
MW-9	01/29/07			63.37		3,850.55
MW-9	02/08/07			63.12		3,850.80
MW-9	02/20/07			63.41		3,850.51
MW-9	03/06/07			63.02		3,850.90
MW-9	03/15/07			62.92		3,851.00
MW-9	03/15/07			62.94		3,850.98
MW-9	04/04/07			62.70		3,851.22
MW-9	04/11/07			62.94		3,850.98
MW-9	04/18/07			62.92		3,851.00
MW-9	04/24/07			62.96		3,850.96
MW-9	05/22/07			62.96		3,850.96
MW-9	06/19/07			62.91		3,851.01
MW-9	08/08/07			62.91		3,851.01
MW-9	08/17/07			62.94		3,850.98
MW-9	08/24/07			62.69		3,851.23
MW-9	09/19/07			62.98		3,850.94
MW-9	10/03/07			62.98		3,850.94
MW-9	11/15/07			63.13		3,850.79
MW-9	12/03/07			63.08		3,850.84
MW-9	03/18/08			63.21		3,850.71
MW-9	04/11/08			63.19		3,850.73
MW-9	05/09/08			63.19		3,850.73
MW-9	06/03/08			63.19		3,850.73
MW-9	06/26/08			63.26		3,850.66

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-9	08/28/08			63.28		3,850.64
MW-9	09/20/08			63.32		3,850.60
MW-9	10/29/08			63.32		3,850.60
MW-9	12/23/08			63.33		3,850.59
MW-9	01/22/09			63.35		3,850.57
MW-9	02/25/09			63.35		3,850.57
MW-9	04/16/09			63.38		3,850.54
MW-9	06/04/09			64.40		3,849.52
MW-9	08/19/09			63.48		3,850.44
MW-9	12/15/09			63.47		3,850.45
MW-10	11/18/04	3,914.96		63.73		3,851.23
MW-10	12/13/04			63.89		3,851.07
MW-10	12/20/04			63.92		3,851.04
MW-10	01/10/05			63.89		3,851.07
MW-10	01/25/05			63.86		3,851.10
MW-10	02/18/05			63.82		3,851.14
MW-10	03/30/05			63.75		3,851.21
MW-10	05/03/05			63.74		3,851.22
MW-10	05/20/05			63.72		3,851.24
MW-10	08/23/05			63.68		3,851.28
MW-10	11/22/05			63.40		3,851.56
MW-10	01/16/06			63.73		3,851.23
MW-10	02/17/06			63.75		3,851.21
MW-10	03/17/06			63.71		3,851.25
MW-10	03/24/06			63.70		3,851.26
MW-10	04/13/06			63.72		3,851.24
MW-10	05/12/06			63.74		3,851.22
MW-10	05/30/06			63.75		3,851.21
MW-10	06/09/06			63.69		3,851.27
MW-10	07/07/06			63.79		3,851.17
MW-10	07/14/06			63.78		3,851.18
MW-10	08/08/06			63.68		3,851.28
MW-10	08/25/06			63.92		3,851.04
MW-10	09/15/06			63.72		3,851.24
MW-10	09/29/06			63.77		3,851.19

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-10	10/13/06			63.71		3,851.25
MW-10	10/20/06			63.72		3,851.24
MW-10	10/27/06			63.81		3,851.15
MW-10	11/10/06			63.80		3,851.16
MW-10	12/01/06			63.83		3,851.13
MW-10	12/08/06			63.81		3,851.15
MW-10	12/15/06			63.84		3,851.12
MW-10	12/27/06			63.84		3,851.12
MW-10	01/05/07			63.86		3,851.10
MW-10	01/15/07			63.90		3,851.06
MW-10	01/29/07			63.90		3,851.06
MW-10	02/08/07			63.65		3,851.31
MW-10	02/20/07			63.95		3,851.01
MW-10	03/06/07			63.92		3,851.04
MW-10	03/15/07			63.96		3,851.00
MW-10	04/04/07			63.75		3,851.21
MW-10	04/11/07			63.96		3,851.00
MW-10	04/18/07			63.96		3,851.00
MW-10	04/24/07			63.97		3,850.99
MW-10	05/22/07			63.99		3,850.97
MW-10	06/19/07			63.96		3,851.00
MW-10	08/08/07			63.97		3,850.99
MW-10	08/17/07			63.98		3,850.98
MW-10	08/24/07			63.99		3,850.97
MW-10	09/19/07			63.99		3,850.97
MW-10	10/03/07			64.02		3,850.94
MW-10	11/15/07			64.09		3,850.87
MW-10	12/03/07			64.12		3,850.84
MW-10	03/18/08			64.21		3,850.75
MW-10	04/11/08			64.21		3,850.75
MW-10	05/09/08			64.23		3,850.73
MW-10	06/03/08			64.24		3,850.72
MW-10	06/26/08			64.30		3,850.66
MW-10	08/28/08			64.34		3,850.62
MW-10	09/20/08			64.38		3,850.58
MW-10	10/29/08			64.36		3,850.60

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-10	12/23/08			64.37		3,850.59
MW-10	01/22/09			64.40		3,850.56
MW-10	02/25/09			64.46		3,850.50
MW-10	04/16/09			64.43		3,850.53
MW-10	06/04/09			64.48		3,850.48
MW-10	08/19/09			64.55		3,850.41
MW-10	12/15/09			64.54		3,850.42
MW-11	11/18/04	3,914.40				
MW-11	12/13/04			63.31		3,851.09
MW-11	12/20/04			63.33		3,851.07
MW-11	01/10/05			63.31		3,851.09
MW-11	01/25/05			63.29		3,851.11
MW-11	02/18/05			63.32		3,851.08
MW-11	03/30/05			63.16		3,851.24
MW-11	05/03/05			63.19		3,851.21
MW-11	05/20/05			63.14		3,851.26
MW-11	08/23/05			63.11		3,851.29
MW-11	11/22/05			63.05		3,851.35
MW-11	01/16/06			63.11		3,851.29
MW-11	02/17/06			63.12		3,851.28
MW-11	03/17/06			63.10		3,851.30
MW-11	03/24/06			63.11		3,851.29
MW-11	04/13/06			63.13		3,851.27
MW-11	05/12/06			63.11		3,851.29
MW-11	05/30/06			63.15		3,851.25
MW-11	06/09/06			63.10		3,851.30
MW-11	07/07/06			63.20		3,851.20
MW-11	07/14/06			63.21		3,851.19
MW-11	08/08/06			63.05		3,851.35
MW-11	08/25/06			63.29		3,851.11
MW-11	09/15/06			63.12		3,851.28
MW-11	09/29/06			63.19		3,851.21
MW-11	10/13/06			63.16		3,851.24
MW-11	10/20/06			67.09		3,847.31
MW-11	10/27/06			63.41		3,850.99

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-11	11/10/06			63.21		3,851.19
MW-11	11/20/06			63.19		3,851.21
MW-11	12/01/05			63.25		3,851.15
MW-11	12/08/06			63.24		3,851.16
MW-11	12/15/06			63.26		3,851.14
MW-11	12/27/06			63.29		3,851.11
MW-11	01/05/07			63.23		3,851.17
MW-11	01/15/07			63.28		3,851.12
MW-11	01/29/07			63.28		3,851.12
MW-11	02/08/07			63.02		3,851.38
MW-11	02/20/07			63.31		3,851.09
MW-11	03/06/07			63.36		3,851.04
MW-11	03/15/07			63.31		3,851.09
MW-11	04/04/07			63.11		3,851.29
MW-11	04/11/07			63.35		3,851.05
MW-11	04/18/07			63.35		3,851.05
MW-11	04/24/07			63.35		3,851.05
MW-11	05/22/07			63.36		3,851.04
MW-11	06/19/07			63.33		3,851.07
MW-11	08/08/07			63.34		3,851.06
MW-11	08/17/07			63.36		3,851.04
MW-11	08/24/07			63.36		3,851.04
MW-11	09/19/07			63.88		3,850.52
MW-11	10/03/07			63.39		3,851.01
MW-11	11/15/07			63.47		3,850.93
MW-11	12/03/07			63.52		3,850.88
MW-11	03/18/08			63.59		3,850.81
MW-11	04/11/08			63.59		3,850.81
MW-11	05/09/08			63.61		3,850.79
MW-11	06/03/08			63.62		3,850.78
MW-11	06/26/08			63.68		3,850.72
MW-11	08/28/08			63.70		3,850.70
MW-11	09/20/08			63.76		3,850.64
MW-11	10/29/08			63.74		3,850.66
MW-11	12/23/08			63.75		3,850.65
MW-11	01/22/09			63.78		3,850.62

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-11	02/25/09			63.79		3,850.61
MW-11	04/16/09			63.81		3,850.59
MW-11	06/04/09			63.86		3,850.54
MW-11	08/19/09			63.93		3,850.47
MW-11	121/15			63.91		3,850.49
MW-12	07/07/06			63.34		
MW-12	07/14/06			63.35		
MW-12	07/21/06			63.37		
MW-12	07/27/06			63.33		
MW-12	08/08/06			63.21		
MW-12	08/25/06			63.48		
MW-12	09/15/06			63.27		
MW-12	10/13/06			63.31		
MW-12	10/20/06			63.28		
MW-12	10/27/06			63.37		
MW-12	11/10/06			63.36		
MW-12	11/20/06			63.34		
MW-12	12/01/06			63.40		
MW-12	12/08/06			63.35		
MW-12	12/15/06			63.38		
MW-12	12/27/06			63.40		
MW-12	01/05/07			63.41		
MW-12	01/15/07			63.48		
MW-12	01/29/07			63.46		
MW-12	02/08/07			63.22		
MW-12	02/20/07			63.50		
MW-12	03/06/07			63.47		
MW-12	03/15/07			63.51		
MW-12	04/04/07			63.32		
MW-12	04/11/07			63.54		
MW-12	04/18/07			63.52		
MW-12	04/24/07			63.53		
MW-12	05/22/07			63.55		
MW-12	06/19/07			63.52		
MW-12	08/08/07	3,913.97		63.53		3,850.44

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-12	08/17/07			63.57		3,850.40
MW-12	08/24/07			63.55		3,850.42
MW-12	09/19/07			63.57		3,850.40
MW-12	10/03/07			63.57		3,850.40
MW-12	11/15/07			63.68		3,850.29
MW-12	12/03/07			63.67		3,850.30
MW-12	03/18/08			63.78		3,850.19
MW-12	04/11/08			63.79		3,850.18
MW-12	05/09/08			63.79		3,850.18
MW-12	06/03/08			63.80		3,850.17
MW-12	06/26/08			63.86		3,850.11
MW-12	08/28/08			63.98		3,849.99
MW-12	09/20/08			63.94		3,850.03
MW-12	10/29/08			63.93		3,850.04
MW-12	12/23/08			63.94		3,850.03
MW-12	01/22/09			63.97		3,850.00
MW-12	02/25/09			63.98		3,849.99
MW-12	04/16/09			64.00		3,849.97
MW-12	06/04/09			64.04		3,849.93
MW-12	08/19/09			64.11		3,849.86
MW-12	12/15/09			64.10		3,849.87
MW-13	07/07/06		63.35	67.01	3.66	
MW-13	07/14/06		63.37	67.00	3.63	
MW-13	07/21/06		63.31	67.06	3.75	
MW-13	07/28/06		63.28	67.23	3.95	
MW-13	08/25/06		63.51	67.09	3.58	
MW-13	09/15/06		62.79	68.96	6.17	
MW-13	09/29/06		62.90	67.05	4.15	
MW-13	10/06/06		63.10	68.07	4.97	
MW-13	10/13/06		62.93	68.81	5.88	
MW-13	10/20/06		63.00	67.90	4.90	
MW-13	10/27/06		62.97	67.77	4.80	
MW-13	11/03/06		63.39	67.09	3.70	
MW-13	11/10/06		62.97	67.80	4.83	
MW-13	11/20/06		63.01	68.47	5.46	

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-13	12/01/06		62.94	68.90	5.96	
MW-13	12/08/06		62.92	67.68	4.76	
MW-13	12/15/06		63.11	68.33	5.22	
MW-13	12/27/06		62.86	67.81	4.95	
MW-13	01/05/07		62.87	67.79	4.92	
MW-13	01/15/07		63.03	68.11	5.08	
MW-13	01/29/07		63.08	69.00	5.92	
MW-13	02/08/07		63.03	68.89	5.86	
MW-13	02/20/07		63.10	69.09	5.99	
MW-13	03/06/07		63.09	68.41	5.32	
MW-13	03/15/07		63.06	69.05	5.99	
MW-13	04/04/07		63.12	69.05	5.93	
MW-13	04/11/07		63.11	69.14	6.03	
MW-13	04/18/07		63.10	69.09	5.99	
MW-13	04/24/07		63.96	68.02	4.06	
MW-13	05/22/07		63.15	69.14	5.99	
MW-13	06/19/07		63.16	69.60	6.44	
MW-13	08/08/07	3,915.83	63.08	69.13	6.05	3,851.75
MW-13	08/17/07		63.14	68.96	5.82	3,851.73
MW-13	08/24/07		63.21	68.57	5.36	3,851.74
MW-13	09/19/07		63.10	69.12	6.02	3,851.74
MW-13	10/03/07		63.19	69.14	5.95	3,851.66
MW-13	10/11/07		63.24	68.81	5.57	3,851.67
MW-13	10/18/07		63.29	68.56	5.27	3,851.67
MW-13	12/03/07		63.17	69.22	6.05	3,851.66
MW-13	01/02/08		61.59	69.37	7.78	3,852.96
MW-13	02/07/08		63.36	69.46	6.10	3,851.46
MW-13	02/11/08		63.35	68.47	5.12	3,851.64
MW-13	03/18/08		63.45	69.36	5.91	3,851.40
MW-13	04/02/08		63.47	69.46	5.99	3,851.37
MW-13	04/11/08		63.31	69.47	6.16	3,851.50
MW-13	04/14/08		63.75	68.22	4.47	3,851.34
MW-13	04/29/08		64.34	65.65	1.31	3,851.27
MW-13	05/07/08		64.41	65.63	1.22	3,851.22
MW-13	05/12/08		64.30	66.07	1.77	3,851.24
MW-13	06/03/08		64.54	65.71	1.17	3,851.10

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-13	06/26/08		64.69	65.96	1.27	3,850.93
MW-13	08/28/08		63.96	67.14	3.18	3,851.35
MW-13	09/20/08		64.06	66.88	2.82	3,851.30
MW-13	10/29/08		64.26	65.87	1.61	3,851.30
MW-13	12/23/08		64.41	65.30	0.89	3,851.27
MW-13	01/22/09		63.75	68.45	4.70	3,851.30
MW-13	02/25/09		64.55	64.78	0.23	3,851.24
MW-13	04/16/09		64.08	64.31	0.23	3,851.71
MW-13	06/04/09		63.91	67.85	3.94	3,851.27
MW-13	08/19/09		64.24	66.82	2.58	3,851.16
MW-13	12/15/09		64.62	66.81	2.19	3,850.85
MW-14	07/07/06		63.97	64.15	0.18	
MW-14	07/14/06		63.96	64.16	0.20	
MW-14	07/21/06		63.87	64.45	0.58	
MW-14	07/28/06		63.80	64.64	0.84	
MW-14	08/25/06		64.09	64.81	0.72	
MW-14	09/15/06		63.45	65.92	2.47	
MW-14	09/29/06		63.45	66.56	3.11	
MW-14	10/06/06		63.68	65.29	1.61	
MW-14	10/13/06		63.56	65.15	1.59	
MW-14	10/20/06		63.92	65.66	1.74	
MW-14	10/27/06		63.62	65.59	1.97	
MW-14	11/03/06		63.97	66.99	3.02	
MW-14	11/10/06		63.42	66.39	2.97	
MW-14	11/20/06		63.77	65.51	1.74	
MW-14	12/01/06		63.51	66.21	2.70	
MW-14	12/08/06		63.43	65.66	2.23	
MW-14	12/15/06		63.39	66.96	3.57	
MW-14	12/27/06		63.37	65.79	2.42	
MW-14	01/05/07		63.41	65.72	2.31	
MW-14	01/15/07		63.18	67.39	4.21	
MW-14	01/29/07		63.71	66.20	2.49	
MW-14	02/08/07		63.64	65.64	2.00	
MW-14	02/20/07		62.30	68.28	5.98	
MW-14	03/06/07		63.09	68.41	5.32	

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-14	03/15/07		63.50	66.93	3.43	
MW-14	04/04/07		63.73	66.40	2.67	
MW-14	04/11/07		63.55	66.86	3.31	
MW-14	04/18/07		64.44	67.35	2.91	
MW-14	04/24/07		63.81	65.67	1.86	
MW-14	05/22/07		63.61	66.68	3.07	
MW-14	06/19/07		63.32	68.28	4.96	
MW-14	08/08/07	3,915.72	63.06	69.04	5.98	3,851.67
MW-14	08/17/07		63.45	67.34	3.89	3,851.63
MW-14	08/24/07		63.87	65.34	1.47	3,851.61
MW-14	09/19/07		63.63	66.91	3.28	3,851.55
MW-14	10/03/07		63.50	67.46	3.96	3,851.57
MW-14	10/11/07		63.92	65.47	1.55	3,851.54
MW-14	10/18/07		63.80	65.98	2.18	3,851.56
MW-14	12/03/07		63.31	68.60	5.29	3,851.54
MW-14	01/02/08		63.33	69.28	5.95	3,851.41
MW-14	02/07/08		63.63	68.03	4.40	3,851.36
MW-14	02/11/08		63.63	68.02	4.39	3,851.37
MW-14	03/18/08		63.92	66.85	2.93	3,851.32
MW-14	04/02/08		64.04	66.84	2.80	3,851.22
MW-14	04/11/08		64.34	64.42	0.08	3,851.37
MW-14	04/14/08		64.50	64.69	0.19	3,851.19
MW-14	04/29/08		64.54	64.73	0.19	3,851.15
MW-14	05/07/08		64.56	64.72	0.16	3,851.13
MW-14	05/12/08		64.54	64.70	0.16	3,851.15
MW-14	06/03/08		64.66	64.84	0.18	3,851.03
MW-14	06/26/08		64.82	64.98	0.16	3,850.87
MW-14	07/23/08		64.52	64.68	0.16	3,851.17
MW-14	08/28/08		64.45	64.50	0.05	3,851.26
MW-14	09/20/08		64.51	64.66	0.15	3,851.19
MW-14	10/29/08		64.46	64.79	0.33	3,851.21
MW-14	12/23/08		64.48	64.73	0.25	3,851.20
MW-14	01/22/09		64.41	65.20	0.79	3,851.18
MW-14	02/25/09		64.54	64.57	0.03	3,851.18
MW-14	04/16/09		64.56	64.67	0.11	3,851.14
MW-14	06/04/09		64.56	64.94	0.38	3,851.10

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-14	08/19/09		64.68	64.88	0.20	3,851.01
MW-14	12/15/09		64.98	65.10	0.12	3,850.72
MW-15	07/07/06			63.75		
MW-15	07/14/06			63.76		
MW-15	07/21/06			63.74		
MW-15	08/08/06			63.61		
MW-15	08/25/06			63.88		
MW-15	09/15/06			63.68		
MW-15	09/29/06			64.73		
MW-15	10/06/06			63.73		
MW-15	10/13/06			63.71		
MW-15	10/20/06			63.66		
MW-15	10/27/06			63.74		
MW-15	11/10/06			63.74		
MW-15	11/20/06			63.74		
MW-15	12/01/06			63.78		
MW-15	12/08/06			63.78		
MW-15	12/15/06			63.79		
MW-15	12/27/06			63.85		
MW-15	01/05/07			63.81		
MW-15	01/15/07			63.86		
MW-15	01/29/07			63.87		
MW-15	02/08/07		63.76	63.77	0.01	
MW-15	02/20/07			63.88		
MW-15	03/06/07		62.27	68.14	5.87	
MW-15	03/15/07		63.88	63.93	0.05	
MW-15	04/04/07		63.94	64.02	0.08	
MW-15	04/11/07		63.90	64.01	0.11	
MW-15	04/18/07		63.91	63.98	0.07	
MW-15	04/24/07		63.90	63.97	0.07	
MW-15	05/22/07		63.91	64.01	0.10	
MW-15	06/19/07		63.96	64.10	0.14	
MW-15	08/08/07	3,915.84	63.84	64.06	0.22	3,851.96
MW-15	08/17/07		63.90	64.10	0.20	3,851.91
MW-15	08/24/07		63.88	64.10	0.22	3,851.92

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-15	09/19/07		63.90	64.10	0.20	3,851.91
MW-15	10/03/07		63.93	64.20	0.27	3,851.87
MW-15	10/11/07		63.88	64.17	0.29	3,851.91
MW-15	10/18/07		63.87	64.23	0.36	3,851.91
MW-15	12/03/07		63.94	64.41	0.47	3,851.82
MW-15	01/02/08		64.06	64.64	0.58	3,851.68
MW-15	02/07/08		64.06	64.79	0.73	3,851.66
MW-15	02/11/08		64.06	67.78	3.72	3,851.17
MW-15	03/18/08		64.08	64.94	0.86	3,851.62
MW-15	04/02/08		64.27	64.37	0.10	3,851.55
MW-15	04/11/08		64.12	64.30	0.18	3,851.69
MW-15	04/14/08		64.29	69.43	5.14	3,850.70
MW-15	04/29/08		64.29	64.56	0.27	3,851.51
MW-15	05/07/08		64.31	64.62	0.31	3,851.48
MW-15	05/12/08		64.29	64.63	0.34	3,851.49
MW-15	06/03/08		64.41	64.85	0.44	3,851.36
MW-15	06/26/08		64.54	65.07	0.53	3,851.21
MW-15	08/28/08		64.12	64.92	0.80	3,851.59
MW-15	09/20/08		64.15	65.03	0.88	3,851.54
MW-15	10/29/08		64.28	64.38	0.10	3,851.54
MW-15	12/23/08		64.26	64.51	0.25	3,851.54
MW-15	01/22/09		64.31	64.43	0.12	3,851.51
MW-15	02/25/09		64.30	64.51	0.21	3,851.51
MW-15	04/16/09		64.34	64.46	0.12	3,851.48
MW-15	06/04/09		64.36	64.50	0.14	3,851.46
MW-15	08/19/09		64.45	64.69	0.24	3,851.35
MW-15	12/15/09		64.70	65.03	0.33	3,851.09
MW-16	07/07/06			63.60		
MW-16	07/14/06			63.62		
MW-16	07/21/06			63.57		
MW-16	08/08/06			63.47		
MW-16	09/15/06		63.56	63.58	0.06	
MW-16	09/29/06		63.54	63.64	0.10	
MW-16	10/06/06		63.53	63.68	0.15	
MW-16	10/13/06		63.50	63.59	0.09	

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-16	10/20/06		63.67	64.19	0.52	
MW-16	10/27/06		63.55	63.77	0.22	
MW-16	11/10/06		63.51	63.79	0.28	
MW-16	11/20/06		63.51	63.62	0.11	
MW-16	12/01/06		63.54	63.64	0.10	
MW-16	12/08/06		63.60	63.62	0.02	
MW-16	12/15/06			63.63		
MW-16	12/27/06			63.69		
MW-16	01/05/07			63.69		
MW-16	01/15/07			63.76		
MW-16	01/29/07			63.89		
MW-16	02/08/07		63.55	63.91	0.36	
MW-16	02/20/07		63.62	64.10	0.48	
MW-16	03/06/07		63.61	64.28	0.67	
MW-16	03/15/07		63.60	64.33	0.73	
MW-16	04/04/07		63.58	64.59	1.01	
MW-16	04/11/07		63.55	64.59	1.04	
MW-16	04/18/07		63.56	64.67	1.11	
MW-16	04/24/07		63.55	64.72	1.17	
MW-16	05/22/07		63.31	64.96	1.65	
MW-16	06/19/07		63.52	65.28	1.76	
MW-16	08/08/07	3,915.43	63.39	65.59	2.20	3,851.68
MW-16	08/17/07		63.44	65.28	1.84	3,851.69
MW-16	08/24/07		63.42	65.30	1.88	3,851.70
MW-16	09/19/07		63.57	64.76	1.19	3,851.66
MW-16	10/03/07		63.57	64.99	1.42	3,851.63
MW-16	10/11/07		63.72	64.26	0.54	3,851.62
MW-16	10/18/07		63.69	64.37	0.68	3,851.63
MW-16	12/03/07		63.57	65.21	1.64	3,851.59
MW-16	01/02/08		63.59	65.87	2.28	3,851.46
MW-16	02/07/08		63.69	65.67	1.98	3,851.41
MW-16	02/11/08		63.68	65.66	1.98	3,851.42
MW-16	03/18/08		64.03	64.20	0.17	3,851.37
MW-16	04/02/08		64.02	64.68	0.66	3,851.30
MW-16	04/11/08		63.83	64.77	0.94	3,851.44
MW-16	04/14/08		64.14	64.27	0.13	3,851.27

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-16	04/29/08		64.16	64.30	0.14	3,851.25
MW-16	05/07/08		64.17	64.31	0.14	3,851.24
MW-16	05/12/08		64.16	64.31	0.15	3,851.25
MW-16	06/03/08		64.30	64.44	0.14	3,851.11
MW-16	06/26/08		64.45	64.59	0.14	3,850.96
MW-16	07/23/08		64.12	64.28	0.16	3,851.28
MW-16	08/28/08		64.09	64.23	0.14	3,851.32
MW-16	09/20/08		64.11	64.22	0.11	3,851.30
MW-16	10/29/08		63.97	64.95	0.98	3,851.30
MW-16	12/23/08		64.11	64.29	0.18	3,851.29
MW-16	01/22/09		64.11	64.46	0.35	3,851.26
MW-16	02/25/09		64.17	64.29	0.12	3,851.24
MW-16	04/16/09		64.06	64.91	0.85	3,851.23
MW-16	06/04/09		63.99	65.41	1.42	3,851.21
MW-16	08/19/09		64.30	64.45	0.15	3,851.11
MW-16	12/15/09		64.55	64.68	0.13	3,850.86
MW-17	07/07/06		63.30	65.54	2.24	
MW-17	07/14/06		63.29	65.55	2.26	
MW-17	07/21/06		63.28	65.56	2.28	
MW-17	07/28/06		63.21	65.87	2.66	
MW-17	08/25/06		63.39	65.69	2.30	
MW-17	09/15/06		62.66	68.07	5.41	
MW-17	09/29/06		62.75	67.95	5.20	
MW-17	10/06/06		63.02	66.70	3.68	
MW-17	10/13/06		62.80	67.78	4.98	
MW-17	10/20/06		63.34	66.72	3.38	
MW-17	10/27/06		62.82	67.74	4.92	
MW-17	11/03/06		63.62	65.91	2.29	
MW-17	11/10/06		62.88	66.89	4.01	
MW-17	11/20/06		62.85	67.47	4.62	
MW-17	12/01/06		62.74	68.20	5.46	
MW-17	12/08/06		62.74	67.25	4.51	
MW-17	12/15/06		63.01	67.05	4.04	
MW-17	12/27/06		62.66	67.41	4.75	
MW-17	01/05/07		62.71	67.46	4.75	

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-17	01/15/07		62.81	67.21	4.40	
MW-17	01/29/07		62.85	68.26	5.41	
MW-17	02/08/07		62.82	67.92	5.10	
MW-17	02/20/07		62.82	68.39	5.57	
MW-17	03/06/07		62.82	68.38	5.56	
MW-17	03/15/07		62.87	68.38	5.51	
MW-17	04/04/07		62.93	68.38	5.45	
MW-17	04/11/07		62.81	68.45	5.64	
MW-17	04/18/07		62.90	68.44	5.54	
MW-17	04/24/07		63.24	68.49	5.25	
MW-17	05/22/07		62.91	68.28	5.37	
MW-17	06/19/07		62.92	68.84	5.92	
MW-17	08/08/07	3,915.59	62.89	68.42	5.53	3,851.79
MW-17	08/17/07		62.92	68.26	5.34	3,851.79
MW-17	08/24/07		62.97	68.01	5.04	3,851.79
MW-17	09/19/07		62.90	68.39	5.49	3,851.78
MW-17	10/03/07		62.95	68.47	5.52	3,851.73
MW-17	10/11/07		62.98	68.27	5.29	3,851.74
MW-17	10/18/07		63.03	68.11	5.08	3,851.72
MW-17	12/03/07		62.97	68.49	5.52	3,851.71
MW-17	01/02/08		63.11	68.64	5.53	3,851.57
MW-17	02/07/08		63.11	68.74	5.63	3,851.55
MW-17	03/18/08		63.48	67.44	3.96	3,851.46
MW-17	04/02/08		63.62	67.05	3.43	3,851.40
MW-17	04/11/08		63.58	63.58	0.00	3,852.01
MW-17	04/14/08		63.46	67.91	4.45	3,851.40
MW-17	04/29/08		64.24	64.46	0.22	3,851.31
MW-17	05/07/08		64.30	64.36	0.06	3,851.28
MW-17	05/12/08		64.30	64.34	0.04	3,851.28
MW-17	06/03/08		64.42	64.52	0.10	3,851.15
MW-17	06/26/08		64.56	64.73	0.17	3,851.00
MW-17	07/23/08		64.24	64.41	0.17	3,851.32
MW-17	08/28/08		64.18	64.38	0.20	3,851.38
MW-17	09/20/08		64.22	64.41	0.19	3,851.34
MW-17	10/29/08		63.92	65.71	1.79	3,851.37
MW-17	12/23/08		64.08	65.10	1.02	3,851.34

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 70037.051.01

Monitor Well	Date Gauged	Relative Top of Casing Elevation (ft amsl)	Depth to PSH Below Top of Casing (ft btoc)	Depth to Water Below Top of Casing (ft btoc)	Phase Separated Hydrocarbon Thickness (feet)	Corrected Relative Groundwater Elevation (ft amsl)
MW-17	01/22/09		64.10	65.09	0.99	3,851.33
MW-17	02/25/09		64.25	64.47	0.22	3,851.30
MW-17	04/16/09		63.98	65.80	1.82	3,851.31
MW-17	06/04/09		63.70	67.18	3.48	3,851.32
MW-17	08/19/09		63.81	67.17	3.36	3,851.23
MW-17	12/15/09		64.16	67.26	3.10	3,850.92

Corrected Groundwater Elevation = Top of Casing Elevation - (Depth to Water Below Top of Casing - (SG)(PSH Thickness)).
SG=0.835
amsl = above mean sea level
btoc = below top of casing

TALON LPE

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS# 2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
Talon/LPE Project Number 700376.051.01

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes
MW-1	02/26/09	**0.150**	0.0114	0.0131	0.0259
	06/04/09	**0.0174**	<0.00100	0.00670	<0.00100
	08/19/09	<0.00100	<0.00100	<0.00100	<0.00100
	12/16/09	<0.00100	<0.00100	0.00100	0.00330
MW-2	02/26/09	**Not Sampled Due to Presence of Phase Separated Hydrocarbons**			
	06/04/09	**Not Sampled Due to Presence of Phase Separated Hydrocarbons**			
	08/19/09	**22.6**	**16.6**	**2.56**	**7.54**
	12/16/09	**Not Sampled Due to Presence of Phase Separated Hydrocarbons**			
MW-3	02/26/09	**9.87**	**1.02**	**0.990**	**1.38**
	06/04/09	**6.39**	0.515	0.380	<0.0500
	08/19/09	**7.99**	**0.971**	0.607	**0.656**
	12/16/09	**6.09**	0.568	0.316	0.129
MW-4	02/26/09	**0.0168**	<0.00100	<0.00100	<0.00100
	06/04/09	<0.00100	<0.00100	<0.00100	<0.00100
	08/19/09	0.00430	<0.00100	<0.00100	<0.00100
	12/16/09	<0.00100	<0.00100	<0.00100	<0.00100
MW-5	02/26/09	**0.0114**	<0.00100	<0.00100	0.0271
	06/04/09	<0.00100	<0.00100	<0.00100	<0.00100
	08/19/09	<0.00100	<0.00100	<0.00100	<0.00100
	12/16/09	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	02/26/09	<0.00100	<0.00100	<0.00100	<0.00100
	06/04/09	<0.00100	<0.00100	<0.00100	<0.00100
	08/19/09	**0.0145**	0.00680	<0.00100	<0.00100
	12/16/09	<0.00100	<0.00100	<0.00100	<0.00100

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS# 2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
Talon/LPE Project Number 700376.051.01

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes
MW-7	02/26/09	<0.00100	<0.00100	<0.00100	<0.00100
	06/04/09	<0.00100	<0.00100	<0.00100	<0.00100
	08/19/09	**0.0344**	0.00870	0.0100	0.0197
	12/16/09	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	02/26/09	<0.00100	<0.00100	<0.00100	<0.00100
	06/04/09	<0.00100	<0.00100	<0.00100	<0.00100
	08/19/09	<0.00100	<0.00100	<0.00100	<0.00100
	12/16/09	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	02/26/09	<0.00100	<0.00100	<0.00100	<0.00100
	06/04/09	<0.00100	<0.00100	<0.00100	<0.00100
	08/19/09	<0.00100	<0.00100	<0.00100	<0.00100
	12/16/09	<0.00100	<0.00100	<0.00100	<0.00100
MW-10	02/26/09	**14.0**	<0.0500	<0.0500	**1.21**
	06/04/09	**18.6**	<0.0500	0.233	<0.0500
	08/19/09	**16.9**	<0.0500	0.446	**0.981**
	12/16/09	**15.9**	<0.0500	0.0988	<0.0500
MW-11	02/26/09	<0.00100	<0.00100	<0.00100	<0.00100
	06/04/09	<0.00100	<0.00100	<0.00100	<0.00100
	08/19/09	0.00760	<0.00100	<0.00100	<0.00100
	12/16/10	<0.00100	<0.00100	<0.00100	<0.00100
MW-12	02/26/09	**0.880**	<0.0100	<0.0100	0.247
	06/04/09	**0.781**	<0.0100	<0.0100	0.0563
	08/19/09	**0.732**	0.0889	<0.0100	0.235
	12/16/09	**0.692**	<0.00100	<0.00100	<0.00100

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS# 2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
Talon/LPE Project Number 700376.051.01

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes
MW-13	02/26/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	06/04/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	08/19/09	**16.0**	**12.4**	**2.09**	**5.88**
	12/16/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
MW-14	02/26/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	06/04/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	08/19/09	**11.0**	**5.70**	**1.04**	**2.95**
	12/16/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
MW-15	02/26/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	06/04/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	08/19/09	**4.42**	**1.66**	**0.786**	**2.25**
	12/16/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
MW-16	02/26/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	06/04/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	08/19/09	**3.20**	**2.72**	0.603	**1.78**
	12/16/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
MW-17	02/26/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	06/04/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	08/19/09	**13.5**	**10.5**	**1.38**	**3.92**
	12/16/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
NMWQCC Remedial Limits		0.010	0.750	0.750	0.620

[1] ***Bolded*** *values are in excess of the NMWQCC Remediation Thresholds*
BTEX analyzed by EPA Method 8021

TABLE 3
SUMMARY OF GROUNDWATER POLY-AROMATIC HYDROCARBON (PAH) ANALYTICAL RESULTS
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 700376.051.01

All concentrations are in mg/L

Sample Location	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]-anthracene	Benzo[a]-pyrene	Benzo[b]-fluoranthene	Benzo[g,h,i]-perylene	Benzo[k]-fluoranthene	Chrysene	Dibenz[a,h]-anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno[1,2,3-cd]-pyrene	1-Methylnaphthalene	2-Methylnaphthalene	aphthalene	Phenanthrene	Pyrene
MW-1	08/19/09	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943	<0.000943
MW-3	08/19/09	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	0.000638	<0.000188	0.00215	<0.000188	0.0226	0.0200	0.0230	0.000922	<0.000188
MW-4	08/19/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
MW-5	08/19/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
MW-6	08/19/09	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190
MW-7	08/19/09	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190
MW-8	08/19/09	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190
MW-9	08/19/09	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191	<0.000191
MW-10	08/19/09	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	0.000303	<0.000188	0.000920	<0.000188	0.00737	0.00137	0.00288	0.000483	<0.000188
MW-11	08/19/09	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193
MW-12	08/19/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
NMWQCC Remedial Limits						0.007												0.030		

[1] ***Bolded*** *values are in excess of the NMWQCC Remediation Thresholds*

TABLE 4
SUMMARY GROUNDWATER ANALYTICAL RESULTS (Monitor Wells Impacted with PAH)
POLY-AROMATIC HYDROCARBON (PAH)
TOTAL PETROLEUM HYDROCARBONS (TPH)
PLAINS PIPELINE, L.P.
LOVINGTON DEEP 6" - SRS#2002-10312
NMOCD REF. # AP-037
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 700376.051.01

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Xylene	TPH DRO	TPH GRO	Total TPH	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]-anthracene	Benzo[a]-pyrene	Benzo[b]-fluoranthene	Benzo[g,h,i]-perylene	Benzo[k]-fluoranthene	Chrysene	Dibenzo[a,h]-anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno[1,2,3-cd]-pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
MW-2	09/20/08	**22.6**	**16.6**	**2.56**	**7.54**	120	152	272	<0.000952	<0.000952	<0.000952	<0.000952	<0.000952	<0.000952	<0.000952	<0.000952	0.100	<0.000952	0.159	<0.000952	0.599	<0.000952	5.29	6.22	**2.25**	0.483	<0.000952
MW-13	09/20/08	**16.0**	**12.4**	**2.09**	**5.88**	55.7	96.2	151.9	<0.000913	<0.000913	<0.000913	<0.000913	<0.000913	<0.000913	<0.000913	<0.000913	0.0334	<0.000913	0.0655	<0.000913	0.218	<0.000913	1.96	2.41	**0.828**	0.234	<0.000913
MW-14	09/20/08	**11.0**	**5.70**	**1.04**	**2.95**	9.27	52.4	61.67	<0.000930	<0.000930	<0.000930	<0.000930	<0.000930	<0.000930	<0.000930	<0.000930	0.168	<0.000930	0.0323	<0.000930	0.108	<0.000930	0.822	1.02	**0.332**	0.113	<0.000930
MW-15	09/20/08	**4.42**	**1.66**	**0.786**	**2.25**	<5.00	18.4	18.4	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	0.00242	<0.000186	0.00484	<0.000186	0.0168	<0.000186	0.124	0.140	**0.0596**	0.0163	<0.000186
MW-16	09/20/08	**3.20**	**2.72**	0.603	**1.78**	<5.00	21.4	21.4	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00103	<0.000184	0.00230	<0.000184	0.00727	<0.000184	0.0576	0.0670	**0.0308**	0.00708	<0.000184
MW-17	09/20/08	**13.5**	**10.50**	**1.38**	**3.92**	45.10	76.8	121.90	<0.000957	<0.000957	<0.000957	<0.000957	<0.000957	<0.000957	<0.000957	<0.000957	0.0216	<0.000957	0.0458	<0.000957	0.152	<0.000957	1.23	1.49	**0.480**	0.159	<0.000957
NMWQCC Remedial Limits		0.01	0.75	0.75	0.62								0.0007												0.030		

[1] ***Bolded*** *values are in excess of the NMWQCC Remediation Thresholds*
BTEX, TPH and PAH analysis per the NMOCD in monitor wells that contain PSH

APPENDIX C

Laboratory Analytical Data Reports and Chains of Custody Documentation

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

Shanna Smith
Talon LPE-Amarillo
921 North Bivins
Amarillo, TX, 79107

Report Date: March 3, 2009

Work Order: 9022701

Project Location: Lovington, NM
Project Name: Lovington Deep 6 inch
Project Number: Plains046SPL
SRS #: 2002-10312

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
188579	MW-1	water	2009-02-26	00:00	2009-02-27
188580	MW-3	water	2009-02-26	00:00	2009-02-27
188581	MW-4	water	2009-02-26	00:00	2009-02-27
188582	MW-5	water	2009-02-26	00:00	2009-02-27
188583	MW-6	water	2009-02-26	00:00	2009-02-27
188584	MW-7	water	2009-02-26	00:00	2009-02-27
188585	MW-8	water	2009-02-26	00:00	2009-02-27
188586	MW-9	water	2009-02-26	00:00	2009-02-27
188587	MW-10	water	2009-02-26	00:00	2009-02-27

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
188588	MW-11	water	2009-02-26	00:00	2009-02-27
188589	MW 12	water	2009-02-26	00:00	2009-02-27

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project Lovington Deep 6 inch were received by TraceAnalysis, Inc. on 2009-02-27 and assigned to work order 9022701. Samples for work order 9022701 were received intact without headspace and at a temperature of 3.9 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	48906	2009-03-02 at 09:15	57261	2009-03-02 at 09:15

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9022701 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 188579 - MW-1

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	57261	Date Analyzed:	2009-03-02	Analyzed By:	ME
Prep Batch:	48906	Sample Preparation:	2009-03-02	Prepared By:	ME

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		**0.150**		mg/L	1	0.00100
Toluene		**0.0114**		mg/L	1	0.00100
Ethylbenzene		**0.0131**		mg/L	1	0.00100
Xylene		**0.0259**		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0989	mg/L	1	0.100	99	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0754	mg/L	1	0.100	75	40.1 - 136

Sample: 188580 - MW-3

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	57261	Date Analyzed:	2009-03-02	Analyzed By:	ME
Prep Batch:	48906	Sample Preparation:	2009-03-02	Prepared By:	ME

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		**9.87**		mg/L	50	0.00100
Toluene		**1.02**		mg/L	50	0.00100
Ethylbenzene		**0.990**		mg/L	50	0.00100
Xylene		**1.38**		mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.15	mg/L	50	5.00	103	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		3.97	mg/L	50	5.00	79	40.1 - 136

Sample: 188581 - MW-4

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	57261	Date Analyzed:	2009-03-02	Analyzed By:	ME
Prep Batch:	48906	Sample Preparation:	2009-03-02	Prepared By:	ME

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		**0.0168**		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.100	mg/L	1	0.100	100	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0806	mg/L	1	0.100	81	40.1 - 136

Sample: 188582 - MW-5

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	57261	Date Analyzed:	2009-03-02	Analyzed By:	ME
Prep Batch:	48906	Sample Preparation:	2009-03-02	Prepared By:	ME

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		**0.0114**		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		**0.0271**		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0997	mg/L	1	0.100	100	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0813	mg/L	1	0.100	81	40.1 - 136

Sample: 188583 - MW-6

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	57261	Date Analyzed:	2009-03-02	Analyzed By:	ME
Prep Batch:	48906	Sample Preparation:	2009-03-02	Prepared By:	ME

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0998	mg/L	1	0.100	100	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0793	mg/L	1	0.100	79	40.1 - 136

Sample: 188584 - MW-7

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	57261	Date Analyzed:	2009-03-02	Analyzed By:	ME
Prep Batch:	48906	Sample Preparation:	2009-03-02	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0984	mg/L	1	0.100	98	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0860	mg/L	1	0.100	86	40.1 - 136

Sample: 188585 - MW-8

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	57261	Date Analyzed:	2009-03-02	Analyzed By:	ME
Prep Batch:	48906	Sample Preparation:	2009-03-02	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0998	mg/L	1	0.100	100	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0803	mg/L	1	0.100	80	40.1 - 136

Sample: 188586 - MW-9

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	57261	Date Analyzed:	2009-03-02	Analyzed By:	ME
Prep Batch:	48906	Sample Preparation:	2009-03-02	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0999	mg/L	1	0.100	100	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0831	mg/L	1	0.100	83	40.1 - 136

Sample: 188587 - MW-10

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	57261	Date Analyzed:	2009-03-02	Analyzed By:	ME
Prep Batch:	48906	Sample Preparation:	2009-03-02	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**14.0**	mg/L	50	0.00100
Toluene		<0.0500	mg/L	50	0.00100
Ethylbenzene		<0.0500	mg/L	50	0.00100
Xylene		**1.21**	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.04	mg/L	50	5.00	101	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		4.22	mg/L	50	5.00	84	40.1 - 136

Sample: 188588 - MW-11

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	57261	Date Analyzed:	2009-03-02	Analyzed By:	ME
Prep Batch:	48906	Sample Preparation:	2009-03-02	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0996	mg/L	1	0.100	100	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0829	mg/L	1	0.100	83	40.1 - 136

Sample: 188589 - MW 12

Laboratory: Midland
Analysis: BTEX | Analytical Method: S 8021B | Prep Method: S 5030B
QC Batch: 57261 | Date Analyzed: 2009-03-02 | Analyzed By: ME
Prep Batch: 48906 | Sample Preparation: 2009-03-02 | Prepared By: ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.880**	mg/L	10	0.00100
Toluene		<0.0100	mg/L	10	0.00100
Ethylbenzene		<0.0100	mg/L	10	0.00100
Xylene		**0.247**	mg/L	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.989	mg/L	10	1.00	99	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.828	mg/L	10	1.00	83	40.1 - 136

Method Blank (1) QC Batch: 57261

QC Batch: 57261 | Date Analyzed: 2009-03-02 | Analyzed By: ME
Prep Batch: 48906 | QC Preparation: 2009-03-02 | Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000300	mg/L	0.001
Toluene		<0.000200	mg/L	0.001
Ethylbenzene		<0.000500	mg/L	0.001
Xylene		<0.000400	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.101	mg/L	1	0.100	101	77.2 - 129.1
4-Bromofluorobenzene (4-BFB)		0.0832	mg/L	1	0.100	83	69.1 - 132.3

Laboratory Control Spike (LCS-1)

QC Batch: 57261 | Date Analyzed: 2009-03-02 | Analyzed By: ME
Prep Batch: 48906 | QC Preparation: 2009-03-02 | Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.102	mg/L	1	0.100	<0.00110	102	84 - 119.7
Toluene	0.113	mg/L	1	0.100	<0.00100	113	84.9 - 118.2
Ethylbenzene	0.117	mg/L	1	0.100	<0.00100	117	84.4 - 118.6
Xylene	0.352	mg/L	1	0.300	<0.00290	117	84.8 - 117.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.100	mg/L	1	0.100	<0.00110	100	84 - 119.7	2	20
Toluene	0.111	mg/L	1	0.100	<0.00100	111	84.9 - 118.2	2	20
Ethylbenzene	0.117	mg/L	1	0.100	<0.00100	117	84.4 - 118.6	0	20
Xylene	0.350	mg/L	1	0.300	<0.00290	117	84.8 - 117.8	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.102	0.0966	mg/L	1	0.100	102	97	80 - 128.3
4-Bromofluorobenzene (4-BFB)	0.0918	0.0920	mg/L	1	0.100	92	92	59.7 - 136.3

Matrix Spike (MS-1) Spiked Sample: 188589

QC Batch: 57261 | Date Analyzed: 2009-03-02 | Analyzed By: ME
Prep Batch: 48906 | QC Preparation: 2009-03-02 | Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.71	mg/L	10	1.00	0.88	83	77.5 - 121.1
Toluene	1.09	mg/L	10	1.00	<0.0100	109	78.8 - 119.6
Ethylbenzene	1.15	mg/L	10	1.00	<0.0100	115	77.9 - 120.5
Xylene	3.36	mg/L	10	3.00	0.2471	104	78 - 119.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.72	mg/L	10	1.00	0.88	84	77.5 - 121.1	1	20
Toluene	1.12	mg/L	10	1.00	<0.0100	112	78.8 - 119.6	3	20
Ethylbenzene	1.19	mg/L	10	1.00	<0.0100	119	77.9 - 120.5	3	20
Xylene	3.51	mg/L	10	3.00	0.2471	109	78 - 119.4	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.986	1.02	mg/L	10	1	99	102	86.6 - 118.9
4-Bromofluorobenzene (4-BFB)	0.838	0.869	mg/L	10	1	84	87	59.4 - 127.3

Standard (ICV-1)

QC Batch: 57261 Date Analyzed: 2009-03-02 Analyzed By: ME

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0851	85	85 - 115	2009-03-02
Toluene		mg/L	0.100	0.0922	92	85 - 115	2009-03-02
Ethylbenzene		mg/L	0.100	0.0965	96	85 - 115	2009-03-02
Xylene		mg/L	0.300	0.281	94	85 - 115	2009-03-02

Standard (CCV-1)

QC Batch: 57261 Date Analyzed: 2009-03-02 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.104	104	85 - 115	2009-03-02
Toluene		mg/L	0.100	0.115	115	85 - 115	2009-03-02
Ethylbenzene		mg/L	0.100	0.113	113	85 - 115	2009-03-02
Xylene		mg/L	0.300	0.345	115	85 - 115	2009-03-02

Standard (CCV-2)

QC Batch: 57261 Date Analyzed: 2009-03-02 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0983	98	85 - 115	2009-03-02

continued ...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.100	0.108	108	85 - 115	2009-03-02
Ethylbenzene		mg/L	0.100	0.115	115	85 - 115	2009-03-02
Xylene		mg/L	0.300	0.340	113	85 - 115	2009-03-02

LAB Order ID # 4022701 Page ____ of ____

TraceAnalysis, Inc.

email: lab@traceanalysis.com

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Company Name: Talon LPE
Phone #: 432-522-2133
Address: (Street, City, Zip) 2901 Rankin Hwy
Fax #: 522-2180
Contact Person: Shanna Smith
E-mail: ssmith@talonlpe.com
Invoice to: (If different from above) PLAINS
Project #: PLAINS 046 SP
Project Name: Lovington Deep 6"
Project Location (including state):
Sampler Signature: Cinto Cly

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
188579	MW-1	3	V	✓				✓				✓		2-26-09	
580	MW-3	3	V	✓										2-26-09	
581	MW-4	3	V	✓											
582	MW-5	3	V	✓											
583	MW-6	3	V	✓											
584	MW-7	3	V	✓											
585	MW-8	3	V	✓											
586	MW-9	3	V	✓											
587	MW-10	3	V	✓											
588	MW-11	3	V	✓											
589	MW-12	3	V	✓											

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
X	X																	
X	X																	
X	X																	
X	X																	
X	X																	
X	X																	
X	X																	
X	X																	
X	X																	
X	X																	

Relinquished by: Cinto Cly Date: 2-27-09 Time: 08:00
Received by: Scott Comm Date: 2-27-09 Time: 08:00

Relinquished by: Scott Comm Date: 2-27-09 Time: 08:22
Received by: Lindsey Vela Date: 2-28-09 Time: 8:20

Relinquished by: Date: Time:
Received at Laboratory by: Date: Time:

LAB USE ONLY

Intact Y / N
Headspace Y / N
Temp 3.9°
Log-in-Review

REMARKS: All tests Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Carry-in

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

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TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

Shanna Smith
Talon LPE-Amarillo
921 North Bivins
Amarillo, TX, 79107

Report Date: June 15, 2009

Work Order: 9060524

Project Location: Lovington, NM
Project Name: Lovington Deep 6 inch
Project Number: PLAINS046SPL
SRS #: 2002-10312

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
197992	MW-12	water	2009-06-04	13:40	2009-06-05
197993	MW-9	water	2009-06-04	14:00	2009-06-05
197994	MW-10	water	2009-06-04	14:15	2009-06-05
197995	MW-11	water	2009-06-04	15:05	2009-06-05
197996	MW-6	water	2009-06-04	15:05	2009-06-05
197997	MW-8	water	2009-06-04	15:25	2009-06-05
197998	MW-7	water	2009-06-04	15:45	2009-06-05
197999	MW-4	water	2009-06-04	16:00	2009-06-05
198000	MW-5	water	2009-06-04	13:40	2009-06-05

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
198001	MW-3	water	2009-06-05	09:55	2009-06-05
198002	MW-1	water	2009-06-05	10:15	2009-06-05

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Dr. Blair Leftwich, Director

Standard Flags

B - *The sample contains less than ten times the concentration found in the method blank.*

Case Narrative

Samples for project Lovington Deep 6 inch were received by TraceAnalysis, Inc. on 2009-06-05 and assigned to work order 9060524. Samples for work order 9060524 were received intact without headspace and at a temperature of 7.0 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	51455	2009-06-10 at 10:11	60301	2009-06-10 at 10:11
BTEX	S 8021B	51483	2009-06-11 at 14:42	60340	2009-06-11 at 14:42
BTEX	S 8021B	51530	2009-06-12 at 12:36	60400	2009-06-12 at 12:36

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9060524 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 197992 - MW-12

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	60301	Date Analyzed:	2009-06-10	Analyzed By:	ME
Prep Batch:	51455	Sample Preparation:	2009-06-10	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.781**	mg/L	10	0.00100
Toluene		<0.0100	mg/L	10	0.00100
Ethylbenzene		<0.0100	mg/L	10	0.00100
Xylene		**0.0563**	mg/L	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/L	10	1.00	102	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		1.04	mg/L	10	1.00	104	40.1 - 136

Sample: 197993 - MW-9

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	60301	Date Analyzed:	2009-06-10	Analyzed By:	ME
Prep Batch:	51455	Sample Preparation:	2009-06-10	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		**0.00800**	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0996	mg/L	1	0.100	100	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0992	mg/L	1	0.100	99	40.1 - 136

Sample: 197994 - MW-10

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	60340	Date Analyzed:	2009-06-11	Analyzed By:	ME
Prep Batch:	51483	Sample Preparation:	2009-06-11	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**18.6**	mg/L	50	0.00100
Toluene		<0.0500	mg/L	50	0.00100
Ethylbenzene		**0.233**	mg/L	50	0.00100
Xylene		<0.0500	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.82	mg/L	50	5.00	96	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		5.12	mg/L	50	5.00	102	40.1 - 136

Sample: 197995 - MW-11

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	60400	Date Analyzed:	2009-06-12	Analyzed By:	ME
Prep Batch:	51530	Sample Preparation:	2009-06-12	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0986	mg/L	1	0.100	99	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.109	mg/L	1	0.100	109	40.1 - 136

Sample: 197996 - MW-6

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	60340	Date Analyzed:	2009-06-11	Analyzed By:	ME
Prep Batch:	51483	Sample Preparation:	2009-06-11	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0946	mg/L	1	0.100	95	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.102	mg/L	1	0.100	102	40.1 - 136

Sample: 197997 - MW-8

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	60340	Date Analyzed:	2009-06-11	Analyzed By:	ME
Prep Batch:	51483	Sample Preparation:	2009-06-11	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0974	mg/L	1	0.100	97	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0986	mg/L	1	0.100	99	40.1 - 136

Sample: 197998 - MW-7

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	60340	Date Analyzed:	2009-06-11	Analyzed By:	ME
Prep Batch:	51483	Sample Preparation:	2009-06-11	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0968	mg/L	1	0.100	97	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.102	mg/L	1	0.100	102	40.1 - 136

Sample: 197999 - MW-4

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	60340	Date Analyzed:	2009-06-11	Analyzed By:	ME
Prep Batch:	51483	Sample Preparation:	2009-06-11	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0958	mg/L	1	0.100	96	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.100	mg/L	1	0.100	100	40.1 - 136

Sample: 198000 - MW-5

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	60340	Date Analyzed:	2009-06-11	Analyzed By:	ME
Prep Batch:	51483	Sample Preparation:	2009-06-11	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0957	mg/L	1	0.100	96	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0962	mg/L	1	0.100	96	40.1 - 136

Sample: 198001 - MW-3

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	60340	Date Analyzed:	2009-06-11	Analyzed By:	ME
Prep Batch:	51483	Sample Preparation:	2009-06-11	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**6.39**	mg/L	50	0.00100
Toluene		**0.515**	mg/L	50	0.00100
Ethylbenzene		**0.380**	mg/L	50	0.00100
Xylene		<0.0500	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.85	mg/L	50	5.00	97	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		5.04	mg/L	50	5.00	101	40.1 - 136

Sample: 198002 - MW-1

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	60340	Date Analyzed:	2009-06-11	Analyzed By:	ME
Prep Batch:	51483	Sample Preparation:	2009-06-11	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.0174**	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		**0.00670**	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0967	mg/L	1	0.100	97	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.101	mg/L	1	0.100	101	40.1 - 136

Method Blank (1) QC Batch: 60301

QC Batch:	60301	Date Analyzed:	2009-06-10	Analyzed By:	ME
Prep Batch:	51455	QC Preparation:	2009-06-10	Prepared By:	ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000300	mg/L	0.001
Toluene		<0.000200	mg/L	0.001
Ethylbenzene		<0.000500	mg/L	0.001
Xylene		<0.000400	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0971	mg/L	1	0.100	97	77.2 - 129.1
4-Bromofluorobenzene (4-BFB)		0.108	mg/L	1	0.100	108	69.1 - 132.3

Method Blank (1) QC Batch: 60340

QC Batch: 60340 Date Analyzed: 2009-06-11 Analyzed By: ME
Prep Batch: 51483 QC Preparation: 2009-06-11 Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000300	mg/L	0.001
Toluene		<0.000200	mg/L	0.001
Ethylbenzene		<0.000500	mg/L	0.001
Xylene		<0.000400	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0951	mg/L	1	0.100	95	77.2 - 129.1
4-Bromofluorobenzene (4-BFB)		0.102	mg/L	1	0.100	102	69.1 - 132.3

Method Blank (1) QC Batch: 60400

QC Batch: 60400 Date Analyzed: 2009-06-12 Analyzed By: ME
Prep Batch: 51530 QC Preparation: 2009-06-12 Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000300	mg/L	0.001
Toluene		<0.000200	mg/L	0.001
Ethylbenzene		<0.000500	mg/L	0.001
Xylene		<0.000400	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0987	mg/L	1	0.100	99	77.2 - 129.1
4-Bromofluorobenzene (4-BFB)		0.0996	mg/L	1	0.100	100	69.1 - 132.3

Laboratory Control Spike (LCS-1)

QC Batch: 60301 Date Analyzed: 2009-06-10 Analyzed By: ME
Prep Batch: 51455 QC Preparation: 2009-06-10 Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.111	mg/L	1	0.100	<0.00110	111	84 - 119.7
Toluene	0.112	mg/L	1	0.100	<0.00100	112	84.9 - 118.2
Ethylbenzene	0.108	mg/L	1	0.100	<0.00100	108	84.4 - 118.6
Xylene	0.331	mg/L	1	0.300	<0.00290	110	84.8 - 117.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.112	mg/L	1	0.100	<0.00110	112	84 - 119.7	1	20
Toluene	0.111	mg/L	1	0.100	<0.00100	111	84.9 - 118.2	1	20
Ethylbenzene	0.113	mg/L	1	0.100	<0.00100	113	84.4 - 118.6	4	20
Xylene	0.346	mg/L	1	0.300	<0.00290	115	84.8 - 117.8	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.102	0.102	mg/L	1	0.100	102	102	80 - 128.3
4-Bromofluorobenzene (4-BFB)	0.109	0.110	mg/L	1	0.100	109	110	59.7 - 136.3

Laboratory Control Spike (LCS-1)

QC Batch: 60340 | Date Analyzed: 2009-06-11 | Analyzed By: ME
Prep Batch: 51483 | QC Preparation: 2009-06-11 | Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.110	mg/L	1	0.100	<0.00110	110	84 - 119.7
Toluene	0.109	mg/L	1	0.100	<0.00100	109	84.9 - 118.2
Ethylbenzene	0.107	mg/L	1	0.100	<0.00100	107	84.4 - 118.6
Xylene	0.330	mg/L	1	0.300	<0.00290	110	84.8 - 117.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.108	mg/L	1	0.100	<0.00110	108	84 - 119.7	2	20
Toluene	0.108	mg/L	1	0.100	<0.00100	108	84.9 - 118.2	1	20
Ethylbenzene	0.108	mg/L	1	0.100	<0.00100	108	84.4 - 118.6	1	20
Xylene	0.336	mg/L	1	0.300	<0.00290	112	84.8 - 117.8	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0994	0.0969	mg/L	1	0.100	99	97	80 - 128.3

continued ...

control spikes continued ...

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	0.112	0.107	mg/L	1	0.100	112	107	59.7 - 136.3

Laboratory Control Spike (LCS-1)

QC Batch: 60400 | Date Analyzed: 2009-06-12 | Analyzed By: ME
Prep Batch: 51530 | QC Preparation: 2009-06-12 | Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.105	mg/L	1	0.100	<0.00110	105	84 - 119.7
Toluene	0.105	mg/L	1	0.100	<0.00100	105	84.9 - 118.2
Ethylbenzene	0.104	mg/L	1	0.100	<0.00100	104	84.4 - 118.6
Xylene	0.318	mg/L	1	0.300	<0.00290	106	84.8 - 117.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.109	mg/L	1	0.100	<0.00110	109	84 - 119.7	4	20
Toluene	0.109	mg/L	1	0.100	<0.00100	109	84.9 - 118.2	4	20
Ethylbenzene	0.110	mg/L	1	0.100	<0.00100	110	84.4 - 118.6	6	20
Xylene	0.343	mg/L	1	0.300	<0.00290	114	84.8 - 117.8	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0980	0.0981	mg/L	1	0.100	98	98	80 - 128.3
4-Bromofluorobenzene (4-BFB)	0.104	0.105	mg/L	1	0.100	104	105	59.7 - 136.3

Matrix Spike (MS-1) Spiked Sample: 197992

QC Batch: 60301 | Date Analyzed: 2009-06-10 | Analyzed By: ME
Prep Batch: 51455 | QC Preparation: 2009-06-10 | Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.89	mg/L	10	1.00	0.7806	111	77.5 - 121.1
Toluene	1.08	mg/L	10	1.00	<0.0100	108	78.8 - 119.6
Ethylbenzene	1.08	mg/L	10	1.00	<0.0100	108	77.9 - 120.5
Xylene	3.30	mg/L	10	3.00	0.0563	108	78 - 119.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.98	mg/L	10	1.00	0.7806	120	77.5 - 121.1	5	20
Toluene	1.16	mg/L	10	1.00	<0.0100	116	78.8 - 119.6	7	20
Ethylbenzene	1.19	mg/L	10	1.00	<0.0100	119	77.9 - 120.5	10	20
Xylene [1]	3.66	mg/L	10	3.00	0.0563	120	78 - 119.4	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.998	1.02	mg/L	10	1	100	102	86.6 - 118.9
4-Bromofluorobenzene (4-BFB)	1.07	1.10	mg/L	10	1	107	110	59.4 - 127.3

Matrix Spike (MS-1) Spiked Sample: 198001

QC Batch: 60340 | Date Analyzed: 2009-06-11 | Analyzed By: ME
Prep Batch: 51483 | QC Preparation: 2009-06-11 | Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	11.8	mg/L	50	5.00	6.3949	108	77.5 - 121.1
Toluene	5.72	mg/L	50	5.00	0.515	104	78.8 - 119.6
Ethylbenzene	5.56	mg/L	50	5.00	0.3798	104	77.9 - 120.5
Xylene	16.2	mg/L	50	15.0	<0.145	108	78 - 119.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	11.7	mg/L	50	5.00	6.3949	106	77.5 - 121.1	1	20
Toluene	5.67	mg/L	50	5.00	0.515	103	78.8 - 119.6	1	20
Ethylbenzene	5.70	mg/L	50	5.00	0.3798	106	77.9 - 120.5	2	20
Xylene	16.6	mg/L	50	15.0	<0.145	111	78 - 119.4	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	4.98	5.10	mg/L	50	5	100	102	86.6 - 118.9
4-Bromofluorobenzene (4-BFB)	5.28	5.25	mg/L	50	5	106	105	59.4 - 127.3

Standard (CCV-2)

QC Batch: 60301 | Date Analyzed: 2009-06-10 | Analyzed By: ME

[1] Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.104	104	80 - 120	2009-06-10
Toluene		mg/L	0.100	0.107	107	80 - 120	2009-06-10
Ethylbenzene		mg/L	0.100	0.106	106	80 - 120	2009-06-10
Xylene		mg/L	0.300	0.322	107	80 - 120	2009-06-10

Standard (CCV-3)

QC Batch: 60301 Date Analyzed: 2009-06-10 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.112	112	80 - 120	2009-06-10
Toluene		mg/L	0.100	0.115	115	80 - 120	2009-06-10
Ethylbenzene		mg/L	0.100	0.115	115	80 - 120	2009-06-10
Xylene		mg/L	0.300	0.353	118	80 - 120	2009-06-10

Standard (CCV-1)

QC Batch: 60340 Date Analyzed: 2009-06-11 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.108	108	80 - 120	2009-06-11
Toluene		mg/L	0.100	0.112	112	80 - 120	2009-06-11
Ethylbenzene		mg/L	0.100	0.112	112	80 - 120	2009-06-11
Xylene		mg/L	0.300	0.343	114	80 - 120	2009-06-11

Standard (CCV-2)

QC Batch: 60340 Date Analyzed: 2009-06-11 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.106	106	80 - 120	2009-06-11
Toluene		mg/L	0.100	0.105	105	80 - 120	2009-06-11
Ethylbenzene		mg/L	0.100	0.105	105	80 - 120	2009-06-11
Xylene		mg/L	0.300	0.322	107	80 - 120	2009-06-11

Standard (CCV-3)

QC Batch: 60340 Date Analyzed: 2009-06-11 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.108	108	80 - 120	2009-06-11
Toluene		mg/L	0.100	0.107	107	80 - 120	2009-06-11
Ethylbenzene		mg/L	0.100	0.120	120	80 - 120	2009-06-11
Xylene		mg/L	0.300	0.330	110	80 - 120	2009-06-11

Standard (CCV-2)

QC Batch: 60400 Date Analyzed: 2009-06-12 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.110	110	80 - 120	2009-06-12
Toluene		mg/L	0.100	0.109	109	80 - 120	2009-06-12
Ethylbenzene		mg/L	0.100	0.108	108	80 - 120	2009-06-12
Xylene		mg/L	0.300	0.331	110	80 - 120	2009-06-12

Standard (CCV-3)

QC Batch: 60400 Date Analyzed: 2009-06-12 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.111	111	80 - 120	2009-06-12
Toluene		mg/L	0.100	0.112	112	80 - 120	2009-06-12
Ethylbenzene		mg/L	0.100	0.114	114	80 - 120	2009-06-12
Xylene		mg/L	0.300	0.354	118	80 - 120	2009-06-12

LAB ORDER ID # 9060524 Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

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Company Name: Talon LPE
Phone #: (432) 522-2133
Address: (Street, City, Zip) 2901 Rankin Hwy Midland
Fax #: (432) 522-2180
Contact Person: Shanna Smith
E-mail:
Invoice to: (If different from above)
Project #: PLAINS046SAL (SRS 2002-10312)
Project Name: Lovington Deep 6"
Project Location (including state): Hobbs, N. M.
Sampler Signature: [signature]

ANALYSIS REQUEST (Circle or Specify Method No.): MTBE 8021B / 602 / 8260B / 624; BTEX (8021B circled) / 602 / 8260B / 624; TPH 418.1 / TX1005 / TX1005 Ext(C35); TPH 8015 GRO / DRO / TVHC; PAH 8270C / 625; Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7; TCLP Metals Ag As Ba Cd Cr Pb Se Hg; TCLP Volatiles; TCLP Semi Volatiles; TCLP Pesticides; RCI; GC/MS Vol. 8260B / 624; GC/MS Semi. Vol. 8270C / 625; PCB's 8082 / 608; Pesticides 8081A / 608; BOD, TSS, pH; Moisture Content; Turn Around Time if different from standard; Hold

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	WATER	SOIL	AIR	SLUDGE	HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	DATE	TIME	MTBE	BTEX 8021B
197992	MW-12	3	40 VOA	✓				✓				✓		6-4-09	1340		✓
993	MW-9	3	40 VOA	✓				✓				✓		6-4-09	1400		✓
994	MW-10	3	40 VOA	✓				✓				✓		6-4-09	1415		✓
995	MW-11	3	40 VOA	✓				✓				✓		6-4-09	1505		✓
996	MW-6	3	40 VOA	✓				✓				✓		6-4-09	1505		✓
997	MW-8	3	40 VOA	✓				✓				✓		6-4-09	1525		✓
998	MW-7	3	40 VOA	✓				✓				✓		6-4-09	1545		✓
999	MW-4	3	40 VOA	✓				✓				✓		6-4-09	1600		✓
198000	MW-5	3	40 VOA	✓				✓				✓		6-4-09	1615		✓
198001	MW-3	3	40 VOA	✓				✓				✓		6-5-09	0955		✓
002	MW-1	3	40 VOA	✓				✓				✓		6-5-09	1015		✓

Relinquished by	Company	Date	Time	Received by	Company	Date	Time	Temp °C
[signature]	TALON LPE	6-5-09	1408	[signature]	Trace	6/5/09	14:08	7.0°C

LAB USE ONLY Intact: Y / N (Y circled) Headspace: Y / N / NA (N circled) Log-in-Review

REMARKS: ALL TESTS MIDLAND

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier #

ORIGINAL COPY

TRACEANALYSIS, INC.

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Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

Shanna Smith
Talon LPE-Midland
2901 State Highway 349
Midland, TX, 79706

Report Date: August 31, 2009

Work Order: 9082009

Project Location: Lovington, NM
Project Name: Lovington Deep 6
Project Number: 700376.017.01
SRS #: 2002-10312

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206705	MW-1	water	2009-08-19	14:42	2009-08-20
206706	MW-2	water	2009-08-19	16:50	2009-08-20
206707	MW-3	water	2009-08-19	15:50	2009-08-20
206708	MW-4	water	2009-08-19	15:45	2009-08-20
206709	MW-5	water	2009-08-19	15:16	2009-08-20
206710	MW-6	water	2009-08-19	14:57	2009-08-20
206711	MW-7	water	2009-08-19	16:00	2009-08-20
206712	MW-8	water	2009-08-19	15:06	2009-08-20
206713	MW-9	water	2009-08-19	15:19	2009-08-20

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206714	MW-10	water	2009-08-19	15:40	2009-08-20
206715	MW-11	water	2009-08-19	15:33	2009-08-20
206716	MW-12	water	2009-08-19	15:27	2009-08-20
206717	MW-13	water	2009-08-19	16:35	2009-08-20
206718	MW-14	water	2009-08-19	16:26	2009-08-20
206719	MW-15	water	2009-08-19	16:19	2009-08-20
206720	MW-16	water	2009-08-19	16:12	2009-08-20
206721	MW-17	water	2009-08-19	16:40	2009-08-20

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project Lovington Deep 6 were received by TraceAnalysis, Inc. on 2009-08-20 and assigned to work order 9082009. Samples for work order 9082009 were received intact without headspace and at a temperature of 2.1 deg C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	53658	2009-08-25 at 09:13	62869	2009-08-25 at 09:13
BTEX	S 8021B	53711	2009-08-26 at 08:45	62932	2009-08-26 at 08:25
PAH	S 8270C	53804	2009-08-25 at 15:00	63034	2009-08-28 at 16:36
TPH DRO	Mod. 8015B	53539	2009-08-21 at 09:38	62741	2009-08-21 at 09:38
TPH GRO	S 8015B	53711	2009-08-26 at 08:45	62933	2009-08-26 at 08:25

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9082009 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 206705 - MW-1

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62869	Date Analyzed:	2009-08-25	Analyzed By:	ME
Prep Batch:	53658	Sample Preparation:	2009-08-25	Prepared By:	ME

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0969	mg/L	1	0.100	97	87 - 105.2
4-Bromofluorobenzene (4-BFB)		0.0694	mg/L	1	0.100	69	49.8 - 130.8

Sample: 206705 - MW-1

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	Result	RL	Units	Dilution	RL
Naphthalene	[1]	<0.000943		mg/L	4.717	0.000200
2-Methylnaphthalene		<0.000943		mg/L	4.717	0.000200
1-Methylnaphthalene		<0.000943		mg/L	4.717	0.000200
Acenaphthylene		<0.000943		mg/L	4.717	0.000200
Acenaphthene		<0.000943		mg/L	4.717	0.000200
Dibenzofuran		<0.000943		mg/L	4.717	0.000200
Fluorene		<0.000943		mg/L	4.717	0.000200
Anthracene		<0.000943		mg/L	4.717	0.000200
Phenanthrene		<0.000943		mg/L	4.717	0.000200
Fluoranthene		<0.000943		mg/L	4.717	0.000200
Pyrene		<0.000943		mg/L	4.717	0.000200
Benzo(a)anthracene		<0.000943		mg/L	4.717	0.000200
Chrysene		<0.000943		mg/L	4.717	0.000200
Benzo(b)fluoranthene		<0.000943		mg/L	4.717	0.000200
Benzo(k)fluoranthene		<0.000943		mg/L	4.717	0.000200

continued ...

[1]Dilution due to matrix difficulty. •

sample 206705 continued ...

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzo(a)pyrene		<0.000943		mg/L	4.717	0.000200
Indeno(1,2,3-cd)pyrene		<0.000943		mg/L	4.717	0.000200
Dibenzo(a,h)anthracene		<0.000943		mg/L	4.717	0.000200
Benzo(g,h,i)perylene		<0.000943		mg/L	4.717	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5	[2]	0.00430	mg/L	4.717	0.0800	5	25.9 - 97.5
2-Fluorobiphenyl		0.0184	mg/L	4.717	0.0800	23	13.9 - 100
Terphenyl-d14		0.0791	mg/L	4.717	0.0800	99	37.7 - 114

Sample: 206706 - MW-2

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62932	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		**22.6**		mg/L	50	0.00100
Toluene		**16.6**		mg/L	50	0.00100
Ethylbenzene		**2.56**		mg/L	50	0.00100
Xylene		**7.54**		mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.07	mg/L	50	5.00	101	87 - 105.2
4-Bromofluorobenzene (4-BFB)		5.54	mg/L	50	5.00	111	49.8 - 130.8

Sample: 206706 - MW-2

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	Result	RL	Units	Dilution	RL
Naphthalene	[3]	**2.25**		mg/L	4.762	0.000200

continued ...

[2]8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.
[3]Estimated concentration value greater than standard range.

sample 206706 continued ...

Parameter	Flag	Result	RL	Units	Dilution	RL
2-Methylnaphthalene	[4]	**6.22**		mg/L	4.762	0.000200
1-Methylnaphthalene	[5]	**5.29**		mg/L	4.762	0.000200
Acenaphthylene		<0.000952		mg/L	4.762	0.000200
Acenaphthene		<0.000952		mg/L	4.762	0.000200
Dibenzofuran		**0.159**		mg/L	4.762	0.000200
Fluorene	[6]	**0.599**		mg/L	4.762	0.000200
Anthracene		<0.000952		mg/L	4.762	0.000200
Phenanthrene		**0.483**		mg/L	4.762	0.000200
Fluoranthene		<0.000952		mg/L	4.762	0.000200
Pyrene		<0.000952		mg/L	4.762	0.000200
Benzo(a)anthracene		<0.000952		mg/L	4.762	0.000200
Chrysene		**0.100**		mg/L	4.762	0.000200
Benzo(b)fluoranthene		<0.000952		mg/L	4.762	0.000200
Benzo(k)fluoranthene		<0.000952		mg/L	4.762	0.000200
Benzo(a)pyrene		<0.000952		mg/L	4.762	0.000200
Indeno(1,2,3-cd)pyrene		<0.000952		mg/L	4.762	0.000200
Dibenzo(a,h)anthracene		<0.000952		mg/L	4.762	0.000200
Benzo(g,h,i)perylene		<0.000952		mg/L	4.762	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5	[7]	0.377	mg/L	4.762	0.0800	471	25.9 - 97.5
2-Fluorobiphenyl		0.0446	mg/L	4.762	0.0800	56	13.9 - 100
Terphenyl-d14		0.0508	mg/L	4.762	0.0800	64	37.7 - 114

Sample: 206706 - MW-2

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	62741	Date Analyzed:	2009-08-21	Analyzed By:	kg
Prep Batch:	53539	Sample Preparation:	2009-08-21	Prepared By:	kg

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		**120**		mg/L	1	5.00

[4]Estimated concentration value greater than standard range.
[5]Estimated concentration value greater than standard range.
[6]Estimated concentration value greater than standard range.
[7]High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[8]	13.8	mg/L	1	10.0	138	70 - 130

Sample: 206706 - MW-2

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	62933	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**152**	mg/L	50	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.90	mg/L	50	5.00	98	70 - 130
4-Bromofluorobenzene (4-BFB)	[9]	6.72	mg/L	50	5.00	134	70 - 130

Sample: 206707 - MW-3

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62869	Date Analyzed:	2009-08-25	Analyzed By:	ME
Prep Batch:	53658	Sample Preparation:	2009-08-25	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**7.99**	mg/L	50	0.00100
Toluene		**0.971**	mg/L	50	0.00100
Ethylbenzene		**0.607**	mg/L	50	0.00100
Xylene		**0.656**	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.74	mg/L	50	5.00	95	87 - 105.2
4-Bromofluorobenzene (4-BFB)		3.26	mg/L	50	5.00	65	49.8 - 130.8

Sample: 206707 - MW-3

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

[8]High surrogate recovery due to peak interference.
[9]High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		**0.0230**	mg/L	0.939	0.000200
2-Methylnaphthalene		**0.0200**	mg/L	0.939	0.000200
1-Methylnaphthalene		**0.0226**	mg/L	0.939	0.000200
Acenaphthylene		<0.000188	mg/L	0.939	0.000200
Acenaphthene		<0.000188	mg/L	0.939	0.000200
Dibenzofuran		**0.000638**	mg/L	0.939	0.000200
Fluorene		**0.00215**	mg/L	0.939	0.000200
Anthracene		<0.000188	mg/L	0.939	0.000200
Phenanthrene		**0.000922**	mg/L	0.939	0.000200
Fluoranthene		<0.000188	mg/L	0.939	0.000200
Pyrene		<0.000188	mg/L	0.939	0.000200
Benzo(a)anthracene		<0.000188	mg/L	0.939	0.000200
Chrysene		<0.000188	mg/L	0.939	0.000200
Benzo(b)fluoranthene		<0.000188	mg/L	0.939	0.000200
Benzo(k)fluoranthene		<0.000188	mg/L	0.939	0.000200
Benzo(a)pyrene		<0.000188	mg/L	0.939	0.000200
Indeno(1,2,3-cd)pyrene		<0.000188	mg/L	0.939	0.000200
Dibenzo(a,h)anthracene		<0.000188	mg/L	0.939	0.000200
Benzo(g,h,i)perylene		<0.000188	mg/L	0.939	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0380	mg/L	0.939	0.0800	48	25.9 - 97.5
2-Fluorobiphenyl		0.0385	mg/L	0.939	0.0800	48	13.9 - 100
Terphenyl-d14		0.0459	mg/L	0.939	0.0800	57	37.7 - 114

Sample: 206708 - MW-4

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62869	Date Analyzed:	2009-08-25	Analyzed By:	ME
Prep Batch:	53658	Sample Preparation:	2009-08-25	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.00430**	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0956	mg/L	1	0.100	96	87 - 105.2

continued ...

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		0.0658	mg/L	1	0.100	66	49.8 - 130.8

Sample: 206708 - MW-4

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.000184	mg/L	0.922	0.000200
2-Methylnaphthalene		<0.000184	mg/L	0.922	0.000200
1-Methylnaphthalene		<0.000184	mg/L	0.922	0.000200
Acenaphthylene		<0.000184	mg/L	0.922	0.000200
Acenaphthene		<0.000184	mg/L	0.922	0.000200
Dibenzofuran		<0.000184	mg/L	0.922	0.000200
Fluorene		<0.000184	mg/L	0.922	0.000200
Anthracene		<0.000184	mg/L	0.922	0.000200
Phenanthrene		<0.000184	mg/L	0.922	0.000200
Fluoranthene		<0.000184	mg/L	0.922	0.000200
Pyrene		<0.000184	mg/L	0.922	0.000200
Benzo(a)anthracene		<0.000184	mg/L	0.922	0.000200
Chrysene		<0.000184	mg/L	0.922	0.000200
Benzo(b)fluoranthene		<0.000184	mg/L	0.922	0.000200
Benzo(k)fluoranthene		<0.000184	mg/L	0.922	0.000200
Benzo(a)pyrene		<0.000184	mg/L	0.922	0.000200
Indeno(1,2,3-cd)pyrene		<0.000184	mg/L	0.922	0.000200
Dibenzo(a,h)anthracene		<0.000184	mg/L	0.922	0.000200
Benzo(g,h,i)perylene		<0.000184	mg/L	0.922	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0433	mg/L	0.922	0.0800	54	25.9 - 97.5
2-Fluorobiphenyl		0.0396	mg/L	0.922	0.0800	50	13.9 - 100
Terphenyl-d14		0.0447	mg/L	0.922	0.0800	56	37.7 - 114

Sample: 206709 - MW-5

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62932	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.101	mg/L	1	0.100	101	87 - 105.2
4-Bromofluorobenzene (4-BFB)		0.110	mg/L	1	0.100	110	49.8 - 130.8

Sample: 206709 - MW-5

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.000184	mg/L	0.922	0.000200
2-Methylnaphthalene		<0.000184	mg/L	0.922	0.000200
1-Methylnaphthalene		<0.000184	mg/L	0.922	0.000200
Acenaphthylene		<0.000184	mg/L	0.922	0.000200
Acenaphthene		<0.000184	mg/L	0.922	0.000200
Dibenzofuran		<0.000184	mg/L	0.922	0.000200
Fluorene		<0.000184	mg/L	0.922	0.000200
Anthracene		<0.000184	mg/L	0.922	0.000200
Phenanthrene		<0.000184	mg/L	0.922	0.000200
Fluoranthene		<0.000184	mg/L	0.922	0.000200
Pyrene		<0.000184	mg/L	0.922	0.000200
Benzo(a)anthracene		<0.000184	mg/L	0.922	0.000200
Chrysene		<0.000184	mg/L	0.922	0.000200
Benzo(b)fluoranthene		<0.000184	mg/L	0.922	0.000200
Benzo(k)fluoranthene		<0.000184	mg/L	0.922	0.000200
Benzo(a)pyrene		<0.000184	mg/L	0.922	0.000200
Indeno(1,2,3-cd)pyrene		<0.000184	mg/L	0.922	0.000200
Dibenzo(a,h)anthracene		<0.000184	mg/L	0.922	0.000200

continued ...

sample 206709 continued ...

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzo(g,h,i)perylene		<0.000184		mg/L	0.922	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0385	mg/L	0.922	0.0800	48	25.9 - 97.5
2-Fluorobiphenyl		0.0359	mg/L	0.922	0.0800	45	13.9 - 100
Terphenyl-d14		0.0450	mg/L	0.922	0.0800	56	37.7 - 114

Sample: 206710 - MW-6

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62932	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		**0.0145**		mg/L	1	0.00100
Toluene		**0.00680**		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.102	mg/L	1	0.100	102	87 - 105.2
4-Bromofluorobenzene (4-BFB)		0.106	mg/L	1	0.100	106	49.8 - 130.8

Sample: 206710 - MW-6

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	Result	RL	Units	Dilution	RL
Naphthalene		<0.000190		mg/L	0.952	0.000200
2-Methylnaphthalene		<0.000190		mg/L	0.952	0.000200
1-Methylnaphthalene		<0.000190		mg/L	0.952	0.000200
Acenaphthylene		<0.000190		mg/L	0.952	0.000200
Acenaphthene		<0.000190		mg/L	0.952	0.000200

continued ...

sample 206710 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Dibenzofuran		<0.000190	mg/L	0.952	0.000200
Fluorene		<0.000190	mg/L	0.952	0.000200
Anthracene		<0.000190	mg/L	0.952	0.000200
Phenanthrene		<0.000190	mg/L	0.952	0.000200
Fluoranthene		<0.000190	mg/L	0.952	0.000200
Pyrene		<0.000190	mg/L	0.952	0.000200
Benzo(a)anthracene		<0.000190	mg/L	0.952	0.000200
Chrysene		<0.000190	mg/L	0.952	0.000200
Benzo(b)fluoranthene		<0.000190	mg/L	0.952	0.000200
Benzo(k)fluoranthene		<0.000190	mg/L	0.952	0.000200
Benzo(a)pyrene		<0.000190	mg/L	0.952	0.000200
Indeno(1,2,3-cd)pyrene		<0.000190	mg/L	0.952	0.000200
Dibenzo(a,h)anthracene		<0.000190	mg/L	0.952	0.000200
Benzo(g,h,i)perylene		<0.000190	mg/L	0.952	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0462	mg/L	0.952	0.0800	58	25.9 - 97.5
2-Fluorobiphenyl		0.0419	mg/L	0.952	0.0800	52	13.9 - 100
Terphenyl-d14		0.0448	mg/L	0.952	0.0800	56	37.7 - 114

Sample: 206711 - MW-7

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62932	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.0344**	mg/L	1	0.00100
Toluene		**0.00870**	mg/L	1	0.00100
Ethylbenzene		**0.0100**	mg/L	1	0.00100
Xylene		**0.0197**	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0991	mg/L	1	0.100	99	87 - 105.2
4-Bromofluorobenzene (4-BFB)		0.0864	mg/L	1	0.100	86	49.8 - 130.8

Sample: 206711 - MW-7

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.000190	mg/L	0.952	0.000200
2-Methylnaphthalene		<0.000190	mg/L	0.952	0.000200
1-Methylnaphthalene		<0.000190	mg/L	0.952	0.000200
Acenaphthylene		<0.000190	mg/L	0.952	0.000200
Acenaphthene		<0.000190	mg/L	0.952	0.000200
Dibenzofuran		<0.000190	mg/L	0.952	0.000200
Fluorene		<0.000190	mg/L	0.952	0.000200
Anthracene		<0.000190	mg/L	0.952	0.000200
Phenanthrene		<0.000190	mg/L	0.952	0.000200
Fluoranthene		<0.000190	mg/L	0.952	0.000200
Pyrene		<0.000190	mg/L	0.952	0.000200
Benzo(a)anthracene		<0.000190	mg/L	0.952	0.000200
Chrysene		<0.000190	mg/L	0.952	0.000200
Benzo(b)fluoranthene		<0.000190	mg/L	0.952	0.000200
Benzo(k)fluoranthene		<0.000190	mg/L	0.952	0.000200
Benzo(a)pyrene		<0.000190	mg/L	0.952	0.000200
Indeno(1,2,3-cd)pyrene		<0.000190	mg/L	0.952	0.000200
Dibenzo(a,h)anthracene		<0.000190	mg/L	0.952	0.000200
Benzo(g,h,i)perylene		<0.000190	mg/L	0.952	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0511	mg/L	0.952	0.0800	64	25.9 - 97.5
2-Fluorobiphenyl		0.0450	mg/L	0.952	0.0800	56	13.9 - 100
Terphenyl-d14		0.0493	mg/L	0.952	0.0800	62	37.7 - 114

Sample: 206712 - MW-8

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62932	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100

continued ...

sample 206712 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0981	mg/L	1	0.100	98	87 - 105.2
4-Bromofluorobenzene (4-BFB)		0.0849	mg/L	1	0.100	85	49.8 - 130.8

Sample: 206712 - MW-8

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.000190	mg/L	0.952	0.000200
2-Methylnaphthalene		<0.000190	mg/L	0.952	0.000200
1-Methylnaphthalene		<0.000190	mg/L	0.952	0.000200
Acenaphthylene		<0.000190	mg/L	0.952	0.000200
Acenaphthene		<0.000190	mg/L	0.952	0.000200
Dibenzofuran		<0.000190	mg/L	0.952	0.000200
Fluorene		<0.000190	mg/L	0.952	0.000200
Anthracene		<0.000190	mg/L	0.952	0.000200
Phenanthrene		<0.000190	mg/L	0.952	0.000200
Fluoranthene		<0.000190	mg/L	0.952	0.000200
Pyrene		<0.000190	mg/L	0.952	0.000200
Benzo(a)anthracene		<0.000190	mg/L	0.952	0.000200
Chrysene		<0.000190	mg/L	0.952	0.000200
Benzo(b)fluoranthene		<0.000190	mg/L	0.952	0.000200
Benzo(k)fluoranthene		<0.000190	mg/L	0.952	0.000200
Benzo(a)pyrene		<0.000190	mg/L	0.952	0.000200
Indeno(1,2,3-cd)pyrene		<0.000190	mg/L	0.952	0.000200
Dibenzo(a,h)anthracene		<0.000190	mg/L	0.952	0.000200
Benzo(g,h,i)perylene		<0.000190	mg/L	0.952	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0458	mg/L	0.952	0.0800	57	25.9 - 97.5
2-Fluorobiphenyl		0.0398	mg/L	0.952	0.0800	50	13.9 - 100
Terphenyl-d14		0.0513	mg/L	0.952	0.0800	64	37.7 - 114

Sample: 206713 - MW-9

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62932	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0972	mg/L	1	0.100	97	87 - 105.2
4-Bromofluorobenzene (4-BFB)		0.0822	mg/L	1	0.100	82	49.8 - 130.8

Sample: 206713 - MW-9

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	Result	RL	Units	Dilution	RL
Naphthalene		<0.000191		mg/L	0.957	0.000200
2-Methylnaphthalene		<0.000191		mg/L	0.957	0.000200
1-Methylnaphthalene		<0.000191		mg/L	0.957	0.000200
Acenaphthylene		<0.000191		mg/L	0.957	0.000200
Acenaphthene		<0.000191		mg/L	0.957	0.000200
Dibenzofuran		<0.000191		mg/L	0.957	0.000200
Fluorene		<0.000191		mg/L	0.957	0.000200
Anthracene		<0.000191		mg/L	0.957	0.000200
Phenanthrene		<0.000191		mg/L	0.957	0.000200
Fluoranthene		<0.000191		mg/L	0.957	0.000200
Pyrene		<0.000191		mg/L	0.957	0.000200
Benzo(a)anthracene		<0.000191		mg/L	0.957	0.000200
Chrysene		<0.000191		mg/L	0.957	0.000200
Benzo(b)fluoranthene		<0.000191		mg/L	0.957	0.000200
Benzo(k)fluoranthene		<0.000191		mg/L	0.957	0.000200
Benzo(a)pyrene		<0.000191		mg/L	0.957	0.000200
Indeno(1,2,3-cd)pyrene		<0.000191		mg/L	0.957	0.000200
Dibenzo(a,h)anthracene		<0.000191		mg/L	0.957	0.000200

continued ...

sample 206713 continued ...

Parameter	Flag	Result	RL Result	Units	Dilution	RL
Benzo(g,h,i)perylene			<0.000191	mg/L	0.957	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0350	mg/L	0.957	0.0800	44	25.9 - 97.5
2-Fluorobiphenyl		0.0300	mg/L	0.957	0.0800	38	13.9 - 100
Terphenyl-d14		0.0505	mg/L	0.957	0.0800	63	37.7 - 114

Sample: 206714 - MW-10

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62932	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	Result	RL Result	Units	Dilution	RL
Benzene			**16.9**	mg/L	50	0.00100
Toluene			<0.0500	mg/L	50	0.00100
Ethylbenzene			**0.446**	mg/L	50	0.00100
Xylene			**0.981**	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.91	mg/L	50	5.00	98	87 - 105.2
4-Bromofluorobenzene (4-BFB)		4.25	mg/L	50	5.00	85	49.8 - 130.8

Sample: 206714 - MW-10

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	Result	RL Result	Units	Dilution	RL
Naphthalene			**0.00288**	mg/L	0.939	0.000200
2-Methylnaphthalene			**0.00137**	mg/L	0.939	0.000200
1-Methylnaphthalene			**0.00737**	mg/L	0.939	0.000200
Acenaphthylene			<0.000188	mg/L	0.939	0.000200
Acenaphthene			<0.000188	mg/L	0.939	0.000200

continued ...

sample 206714 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Dibenzofuran		**0.000303**	mg/L	0.939	0.000200
Fluorene		**0.000920**	mg/L	0.939	0.000200
Anthracene		<0.000188	mg/L	0.939	0.000200
Phenanthrene		**0.000483**	mg/L	0.939	0.000200
Fluoranthene		<0.000188	mg/L	0.939	0.000200
Pyrene		<0.000188	mg/L	0.939	0.000200
Benzo(a)anthracene		<0.000188	mg/L	0.939	0.000200
Chrysene		<0.000188	mg/L	0.939	0.000200
Benzo(b)fluoranthene		<0.000188	mg/L	0.939	0.000200
Benzo(k)fluoranthene		<0.000188	mg/L	0.939	0.000200
Benzo(a)pyrene		<0.000188	mg/L	0.939	0.000200
Indeno(1,2,3-cd)pyrene		<0.000188	mg/L	0.939	0.000200
Dibenzo(a,h)anthracene		<0.000188	mg/L	0.939	0.000200
Benzo(g,h,i)perylene		<0.000188	mg/L	0.939	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0238	mg/L	0.939	0.0800	30	25.9 - 97.5
2-Fluorobiphenyl		0.0248	mg/L	0.939	0.0800	31	13.9 - 100
Terphenyl-d14		0.0400	mg/L	0.939	0.0800	50	37.7 - 114

Sample: 206715 - MW-11

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62932	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.00760**	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0963	mg/L	1	0.100	96	87 - 105.2
4-Bromofluorobenzene (4-BFB)		0.0786	mg/L	1	0.100	79	49.8 - 130.8

Sample: 206715 - MW-11

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.000193	mg/L	0.966	0.000200
2-Methylnaphthalene		<0.000193	mg/L	0.966	0.000200
1-Methylnaphthalene		<0.000193	mg/L	0.966	0.000200
Acenaphthylene		<0.000193	mg/L	0.966	0.000200
Acenaphthene		<0.000193	mg/L	0.966	0.000200
Dibenzofuran		<0.000193	mg/L	0.966	0.000200
Fluorene		<0.000193	mg/L	0.966	0.000200
Anthracene		<0.000193	mg/L	0.966	0.000200
Phenanthrene		<0.000193	mg/L	0.966	0.000200
Fluoranthene		<0.000193	mg/L	0.966	0.000200
Pyrene		<0.000193	mg/L	0.966	0.000200
Benzo(a)anthracene		<0.000193	mg/L	0.966	0.000200
Chrysene		<0.000193	mg/L	0.966	0.000200
Benzo(b)fluoranthene		<0.000193	mg/L	0.966	0.000200
Benzo(k)fluoranthene		<0.000193	mg/L	0.966	0.000200
Benzo(a)pyrene		<0.000193	mg/L	0.966	0.000200
Indeno(1,2,3-cd)pyrene		<0.000193	mg/L	0.966	0.000200
Dibenzo(a,h)anthracene		<0.000193	mg/L	0.966	0.000200
Benzo(g,h,i)perylene		<0.000193	mg/L	0.966	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0432	mg/L	0.966	0.0800	54	25.9 - 97.5
2-Fluorobiphenyl		0.0409	mg/L	0.966	0.0800	51	13.9 - 100
Terphenyl-d14		0.0467	mg/L	0.966	0.0800	58	37.7 - 114

Sample: 206716 - MW-12

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62932	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.732**	mg/L	10	0.00100
Toluene		**0.0889**	mg/L	10	0.00100

continued ...

sample 206716 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Ethylbenzene		<0.0100	mg/L	10	0.00100
Xylene		**0.235**	mg/L	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.990	mg/L	10	1.00	99	87 - 105.2
4-Bromofluorobenzene (4-BFB)		1.01	mg/L	10	1.00	101	49.8 - 130.8

Sample: 206716 - MW-12

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.000184	mg/L	0.922	0.000200
2-Methylnaphthalene		<0.000184	mg/L	0.922	0.000200
1-Methylnaphthalene		<0.000184	mg/L	0.922	0.000200
Acenaphthylene		<0.000184	mg/L	0.922	0.000200
Acenaphthene		<0.000184	mg/L	0.922	0.000200
Dibenzofuran		<0.000184	mg/L	0.922	0.000200
Fluorene		<0.000184	mg/L	0.922	0.000200
Anthracene		<0.000184	mg/L	0.922	0.000200
Phenanthrene		<0.000184	mg/L	0.922	0.000200
Fluoranthene		<0.000184	mg/L	0.922	0.000200
Pyrene		<0.000184	mg/L	0.922	0.000200
Benzo(a)anthracene		<0.000184	mg/L	0.922	0.000200
Chrysene		<0.000184	mg/L	0.922	0.000200
Benzo(b)fluoranthene		<0.000184	mg/L	0.922	0.000200
Benzo(k)fluoranthene		<0.000184	mg/L	0.922	0.000200
Benzo(a)pyrene		<0.000184	mg/L	0.922	0.000200
Indeno(1,2,3-cd)pyrene		<0.000184	mg/L	0.922	0.000200
Dibenzo(a,h)anthracene		<0.000184	mg/L	0.922	0.000200
Benzo(g,h,i)perylene		<0.000184	mg/L	0.922	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0411	mg/L	0.922	0.0800	51	25.9 - 97.5
2-Fluorobiphenyl		0.0388	mg/L	0.922	0.0800	48	13.9 - 100
Terphenyl-d14		0.0543	mg/L	0.922	0.0800	68	37.7 - 114

Sample: 206717 - MW-13

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62932	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		**16.0**		mg/L	100	0.00100
Toluene		**12.4**		mg/L	100	0.00100
Ethylbenzene		**2.09**		mg/L	100	0.00100
Xylene		**5.88**		mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		10.0	mg/L	100	10.0	100	87 - 105.2
4-Bromofluorobenzene (4-BFB)		10.2	mg/L	100	10.0	102	49.8 - 130.8

Sample: 206717 - MW-13

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	Result	RL	Units	Dilution	RL
Naphthalene	[10]	**0.828**		mg/L	4.566	0.000200
2-Methylnaphthalene	[11]	**2.41**		mg/L	4.566	0.000200
1-Methylnaphthalene	[12]	**1.96**		mg/L	4.566	0.000200
Acenaphthylene		<0.000913		mg/L	4.566	0.000200
Acenaphthene		<0.000913		mg/L	4.566	0.000200
Dibenzofuran		**0.0655**		mg/L	4.566	0.000200
Fluorene		**0.218**		mg/L	4.566	0.000200
Anthracene		<0.000913		mg/L	4.566	0.000200
Phenanthrene		**0.234**		mg/L	4.566	0.000200
Fluoranthene		<0.000913		mg/L	4.566	0.000200
Pyrene		<0.000913		mg/L	4.566	0.000200
Benzo(a)anthracene		<0.000913		mg/L	4.566	0.000200
Chrysene		**0.0334**		mg/L	4.566	0.000200
Benzo(b)fluoranthene		<0.000913		mg/L	4.566	0.000200
Benzo(k)fluoranthene		<0.000913		mg/L	4.566	0.000200

continued ...

[10]Estimated concentration value greater than standard range.
[11]Estimated concentration value greater than standard range.
[12]Estimated concentration value greater than standard range.

sample 206717 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Benzo(a)pyrene		<0.000913	mg/L	4.566	0.000200
Indeno(1,2,3-cd)pyrene		<0.000913	mg/L	4.566	0.000200
Dibenzo(a,h)anthracene		<0.000913	mg/L	4.566	0.000200
Benzo(g,h,i)perylene		<0.000913	mg/L	4.566	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0577	mg/L	4.566	0.0800	72	25.9 - 97.5
2-Fluorobiphenyl		0.0343	mg/L	4.566	0.0800	43	13.9 - 100
Terphenyl-d14		0.0381	mg/L	4.566	0.0800	48	37.7 - 114

Sample: 206717 - MW-13

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	62741	Date Analyzed:	2009-08-21	Analyzed By:	kg
Prep Batch:	53539	Sample Preparation:	2009-08-21	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**55.7**	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		11.9	mg/L	1	10.0	119	70 - 130

Sample: 206717 - MW-13

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	62933	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**96.2**	mg/L	100	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		9.62	mg/L	100	10.0	96	70 - 130
4-Bromofluorobenzene (4-BFB)		11.3	mg/L	100	10.0	113	70 - 130

Sample: 206718 - MW-14

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62932	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**11.0**	mg/L	50	0.00100
Toluene		**5.70**	mg/L	50	0.00100
Ethylbenzene		**1.04**	mg/L	50	0.00100
Xylene		**2.95**	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.90	mg/L	50	5.00	98	87 - 105.2
4-Bromofluorobenzene (4-BFB)		5.06	mg/L	50	5.00	101	49.8 - 130.8

Sample: 206718 - MW-14

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		**0.332**	mg/L	4.651	0.000200
2-Methylnaphthalene	[13]	**1.02**	mg/L	4.651	0.000200
1-Methylnaphthalene	[14]	**0.822**	mg/L	4.651	0.000200
Acenaphthylene		<0.000930	mg/L	4.651	0.000200
Acenaphthene		<0.000930	mg/L	4.651	0.000200
Dibenzofuran		**0.0323**	mg/L	4.651	0.000200
Fluorene		**0.108**	mg/L	4.651	0.000200
Anthracene		<0.000930	mg/L	4.651	0.000200
Phenanthrene		**0.113**	mg/L	4.651	0.000200
Fluoranthene		<0.000930	mg/L	4.651	0.000200
Pyrene		<0.000930	mg/L	4.651	0.000200
Benzo(a)anthracene		<0.000930	mg/L	4.651	0.000200
Chrysene		**0.0168**	mg/L	4.651	0.000200
Benzo(b)fluoranthene		<0.000930	mg/L	4.651	0.000200
Benzo(k)fluoranthene		<0.000930	mg/L	4.651	0.000200
Benzo(a)pyrene		<0.000930	mg/L	4.651	0.000200

continued . . .

[13]Estimated concentration value greater than standard range.
[14]Estimated concentration value greater than standard range.

sample 206718 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Indeno(1,2,3-cd)pyrene		<0.000930	mg/L	4.651	0.000200
Dibenzo(a,h)anthracene		<0.000930	mg/L	4.651	0.000200
Benzo(g,h,i)perylene		<0.000930	mg/L	4.651	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0585	mg/L	4.651	0.0800	73	25.9 - 97.5
2-Fluorobiphenyl		0.0659	mg/L	4.651	0.0800	82	13.9 - 100
Terphenyl-d14		0.0632	mg/L	4.651	0.0800	79	37.7 - 114

Sample: 206718 - MW-14

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	62741	Date Analyzed:	2009-08-21	Analyzed By:	kg
Prep Batch:	53539	Sample Preparation:	2009-08-21	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**9.27**	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		11.1	mg/L	1	10.0	111	70 - 130

Sample: 206718 - MW-14

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	62933	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**52.4**	mg/L	50	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.81	mg/L	50	5.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)		5.64	mg/L	50	5.00	113	70 - 130

Sample: 206719 - MW-15

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62932	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**4.42**	mg/L	50	0.00100
Toluene		**1.66**	mg/L	50	0.00100
Ethylbenzene		**0.786**	mg/L	50	0.00100
Xylene		**2.25**	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.96	mg/L	50	5.00	99	87 - 105.2
4-Bromofluorobenzene (4-BFB)		4.94	mg/L	50	5.00	99	49.8 - 130.8

Sample: 206719 - MW-15

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		**0.0596**	mg/L	0.93	0.000200
2-Methylnaphthalene	[15]	**0.140**	mg/L	0.93	0.000200
1-Methylnaphthalene	[16]	**0.124**	mg/L	0.93	0.000200
Acenaphthylene		<0.000186	mg/L	0.93	0.000200
Acenaphthene		<0.000186	mg/L	0.93	0.000200
Dibenzofuran		**0.00484**	mg/L	0.93	0.000200
Fluorene		**0.0168**	mg/L	0.93	0.000200
Anthracene		<0.000186	mg/L	0.93	0.000200
Phenanthrene		**0.0163**	mg/L	0.93	0.000200
Fluoranthene		<0.000186	mg/L	0.93	0.000200
Pyrene		<0.000186	mg/L	0.93	0.000200
Benzo(a)anthracene		<0.000186	mg/L	0.93	0.000200
Chrysene		**0.00242**	mg/L	0.93	0.000200
Benzo(b)fluoranthene		<0.000186	mg/L	0.93	0.000200
Benzo(k)fluoranthene		<0.000186	mg/L	0.93	0.000200
Benzo(a)pyrene		<0.000186	mg/L	0.93	0.000200

continued ...

[15]Estimated concentration value greater than standard range.
[16]Estimated concentration value greater than standard range.

sample 206719 continued ...

Parameter	Flag	Result	RL	Units	Dilution	RL
Indeno(1,2,3-cd)pyrene		<0.000186		mg/L	0.93	0.000200
Dibenzo(a,h)anthracene		<0.000186		mg/L	0.93	0.000200
Benzo(g,h,i)perylene		<0.000186		mg/L	0.93	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0448	mg/L	0.93	0.0800	56	25.9 - 97.5
2-Fluorobiphenyl		0.0504	mg/L	0.93	0.0800	63	13.9 - 100
Terphenyl-d14		0.0513	mg/L	0.93	0.0800	64	37.7 - 114

Sample: 206719 - MW-15

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	62741	Date Analyzed:	2009-08-21	Analyzed By:	kg
Prep Batch:	53539	Sample Preparation:	2009-08-21	Prepared By:	kg

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		<5.00		mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		11.3	mg/L	1	10.0	113	70 - 130

Sample: 206719 - MW-15

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	62933	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		**18.4**		mg/L	50	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.80	mg/L	50	5.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)		5.49	mg/L	50	5.00	110	70 - 130

Sample: 206720 - MW-16

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62932	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**3.20**	mg/L	20	0.00100
Toluene		**2.72**	mg/L	20	0.00100
Ethylbenzene		**0.603**	mg/L	20	0.00100
Xylene		**1.78**	mg/L	20	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.98	mg/L	20	2.00	99	87 - 105.2
4-Bromofluorobenzene (4-BFB)		1.96	mg/L	20	2.00	98	49.8 - 130.8

Sample: 206720 - MW-16

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		**0.0308**	mg/L	0.922	0.000200
2-Methylnaphthalene		**0.0670**	mg/L	0.922	0.000200
1-Methylnaphthalene		**0.0576**	mg/L	0.922	0.000200
Acenaphthylene		<0.000184	mg/L	0.922	0.000200
Acenaphthene		<0.000184	mg/L	0.922	0.000200
Dibenzofuran		**0.00230**	mg/L	0.922	0.000200
Fluorene		**0.00727**	mg/L	0.922	0.000200
Anthracene		<0.000184	mg/L	0.922	0.000200
Phenanthrene		**0.00708**	mg/L	0.922	0.000200
Fluoranthene		<0.000184	mg/L	0.922	0.000200
Pyrene		<0.000184	mg/L	0.922	0.000200
Benzo(a)anthracene		<0.000184	mg/L	0.922	0.000200
Chrysene		**0.00103**	mg/L	0.922	0.000200
Benzo(b)fluoranthene		<0.000184	mg/L	0.922	0.000200
Benzo(k)fluoranthene		<0.000184	mg/L	0.922	0.000200
Benzo(a)pyrene		<0.000184	mg/L	0.922	0.000200
Indeno(1,2,3-cd)pyrene		<0.000184	mg/L	0.922	0.000200
Dibenzo(a,h)anthracene		<0.000184	mg/L	0.922	0.000200

continued . . .

sample 206720 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Benzo(g,h,i)perylene		<0.000184	mg/L	0.922	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0231	mg/L	0.922	0.0800	29	25.9 - 97.5
2-Fluorobiphenyl		0.0262	mg/L	0.922	0.0800	33	13.9 - 100
Terphenyl-d14	[17]	0.0274	mg/L	0.922	0.0800	34	37.7 - 114

Sample: 206720 - MW-16

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	62741	Date Analyzed:	2009-08-21	Analyzed By:	kg
Prep Batch:	53539	Sample Preparation:	2009-08-21	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		11.0	mg/L	1	10.0	110	70 - 130

Sample: 206720 - MW-16

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	62933	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**21.4**	mg/L	20	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.91	mg/L	20	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)		2.20	mg/L	20	2.00	110	70 - 130

[17] 8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

Sample: 206721 - MW-17

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	62932	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**13.5**	mg/L	50	0.00100
Toluene		**10.5**	mg/L	50	0.00100
Ethylbenzene		**1.38**	mg/L	50	0.00100
Xylene		**3.92**	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.98	mg/L	50	5.00	100	87 - 105.2
4-Bromofluorobenzene (4-BFB)		4.77	mg/L	50	5.00	95	49.8 - 130.8

Sample: 206721 - MW-17

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63034	Date Analyzed:	2009-08-28	Analyzed By:	MN
Prep Batch:	53804	Sample Preparation:	2009-08-25	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		**0.480**	mg/L	4.785	0.000200
2-Methylnaphthalene	[18]	**1.49**	mg/L	4.785	0.000200
1-Methylnaphthalene	[19]	**1.23**	mg/L	4.785	0.000200
Acenaphthylene		<0.000957	mg/L	4.785	0.000200
Acenaphthene		<0.000957	mg/L	4.785	0.000200
Dibenzofuran		**0.0458**	mg/L	4.785	0.000200
Fluorene		**0.152**	mg/L	4.785	0.000200
Anthracene		<0.000957	mg/L	4.785	0.000200
Phenanthrene		**0.159**	mg/L	4.785	0.000200
Fluoranthene		<0.000957	mg/L	4.785	0.000200
Pyrene		<0.000957	mg/L	4.785	0.000200
Benzo(a)anthracene		<0.000957	mg/L	4.785	0.000200
Chrysene		**0.0216**	mg/L	4.785	0.000200
Benzo(b)fluoranthene		<0.000957	mg/L	4.785	0.000200
Benzo(k)fluoranthene		<0.000957	mg/L	4.785	0.000200
Benzo(a)pyrene		<0.000957	mg/L	4.785	0.000200

continued ...

[18]Estimated concentration value greater than standard range.
[19]Estimated concentration value greater than standard range.

sample 206721 continued ...

Parameter	Flag	Result	RL	Units	Dilution	RL
Indeno(1,2,3-cd)pyrene		<0.000957		mg/L	4.785	0.000200
Dibenzo(a,h)anthracene		<0.000957		mg/L	4.785	0.000200
Benzo(g,h,i)perylene		<0.000957		mg/L	4.785	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0377	mg/L	4.785	0.0800	47	25.9 - 97.5
2-Fluorobiphenyl		0.0266	mg/L	4.785	0.0800	33	13.9 - 100
Terphenyl-d14	[20]	0.0291	mg/L	4.785	0.0800	36	37.7 - 114

Sample: 206721 - MW-17

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	62741	Date Analyzed:	2009-08-21	Analyzed By:	kg
Prep Batch:	53539	Sample Preparation:	2009-08-21	Prepared By:	kg

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		**45.1**		mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		11.0	mg/L	1	10.0	110	70 - 130

Sample: 206721 - MW-17

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	62933	Date Analyzed:	2009-08-26	Analyzed By:	ME
Prep Batch:	53711	Sample Preparation:	2009-08-26	Prepared By:	ME

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		**76.8**		mg/L	50	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.78	mg/L	50	5.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)		5.43	mg/L	50	5.00	109	70 - 130

[20] 8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

Method Blank (1) QC Batch: 62741

QC Batch: 62741 | Date Analyzed: 2009-08-21 | Analyzed By: kg
Prep Batch: 53539 | QC Preparation: 2009-08-21 | Prepared By: kg

Parameter	Flag	MDL Result	Units	RL
DRO		<0.801	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		12.3	mg/L	1	10.0	123	70 - 160

Method Blank (1) QC Batch: 62869

QC Batch: 62869 | Date Analyzed: 2009-08-25 | Analyzed By: ME
Prep Batch: 53658 | QC Preparation: 2009-08-25 | Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000300	mg/L	0.001
Toluene		<0.000200	mg/L	0.001
Ethylbenzene		<0.000500	mg/L	0.001
Xylene		<0.000400	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0972	mg/L	1	0.100	97	85.4 - 105.2
4-Bromofluorobenzene (4-BFB)		0.0991	mg/L	1	0.100	99	52.8 - 124.2

Method Blank (1) QC Batch: 62932

QC Batch: 62932 | Date Analyzed: 2009-08-26 | Analyzed By: ME
Prep Batch: 53711 | QC Preparation: 2009-08-26 | Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000300	mg/L	0.001
Toluene		<0.000200	mg/L	0.001
Ethylbenzene		<0.000500	mg/L	0.001
Xylene		<0.000400	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.102	mg/L	1	0.100	102	85.4 - 105.2
4-Bromofluorobenzene (4-BFB)		0.108	mg/L	1	0.100	108	52.8 - 124.2

Method Blank (1) QC Batch: 62933

QC Batch: 62933 | Date Analyzed: 2009-08-26 | Analyzed By: ME
Prep Batch: 53711 | QC Preparation: 2009-08-26 | Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
GRO		<0.0351	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0972	mg/L	1	0.100	97	70 - 130
4-Bromofluorobenzene (4-BFB)		0.117	mg/L	1	0.100	117	70 - 130

Method Blank (1) QC Batch: 63034

QC Batch: 63034 | Date Analyzed: 2009-08-28 | Analyzed By: MN
Prep Batch: 53804 | QC Preparation: 2009-08-25 | Prepared By: MN

Parameter	Flag	MDL Result	Units	RL
Naphthalene		<0.0000784	mg/L	0.0002
2-Methylnaphthalene		<0.0000747	mg/L	0.0002
1-Methylnaphthalene		<0.0000575	mg/L	0.0002
Acenaphthylene		<0.0000963	mg/L	0.0002
Acenaphthene		<0.0000617	mg/L	0.0002
Dibenzofuran		<0.0000952	mg/L	0.0002
Fluorene		<0.000134	mg/L	0.0002
Anthracene		<0.000441	mg/L	0.0002
Phenanthrene		<0.000435	mg/L	0.0002
Fluoranthene		<0.000476	mg/L	0.0002
Pyrene		<0.000590	mg/L	0.0002
Benzo(a)anthracene		<0.000118	mg/L	0.0002
Chrysene		<0.0000766	mg/L	0.0002
Benzo(b)fluoranthene		<0.000146	mg/L	0.0002
Benzo(k)fluoranthene		<0.000141	mg/L	0.0002
Benzo(a)pyrene		<0.000132	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0000702	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0000534	mg/L	0.0002

continued ...

method blank continued ...

Parameter	Flag	MDL Result	Units	RL
Benzo(g,h,i)perylene		<0.0000473	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0248	mg/L	1	0.0800	31	25.9 - 97.5
2-Fluorobiphenyl		0.0237	mg/L	1	0.0800	30	13.9 - 100
Terphenyl-d14		0.0409	mg/L	1	0.0800	51	37.7 - 114

Laboratory Control Spike (LCS-1)

QC Batch: 62741 | Date Analyzed: 2009-08-21 | Analyzed By: kg
Prep Batch: 53539 | QC Preparation: 2009-08-21 | Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	21.3	mg/L	1	25.0	<0.801	85	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	21.9	mg/L	1	25.0	<0.801	88	70 - 130	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	11.4	11.5	mg/L	1	10.0	114	115	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 62869 | Date Analyzed: 2009-08-25 | Analyzed By: ME
Prep Batch: 53658 | QC Preparation: 2009-08-25 | Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0906	mg/L	1	0.100	<0.00110	91	74.3 - 123.4
Toluene	0.0902	mg/L	1	0.100	<0.00100	90	70.1 - 126.2
Ethylbenzene	0.0907	mg/L	1	0.100	<0.00100	91	68.6 - 124.7
Xylene	0.272	mg/L	1	0.300	<0.00290	91	64.8 - 127.2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.102	mg/L	1	0.100	<0.00110	102	74.3 - 123.4	12	20
Toluene	0.103	mg/L	1	0.100	<0.00100	103	70.1 - 126.2	13	20
Ethylbenzene	0.105	mg/L	1	0.100	<0.00100	105	68.6 - 124.7	15	20
Xylene	0.315	mg/L	1	0.300	<0.00290	105	64.8 - 127.2	15	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0981	0.0994	mg/L	1	0.100	98	99	84.8 - 110.8
4-Bromofluorobenzene (4-BFB)	0.103	0.103	mg/L	1	0.100	103	103	51.7 - 134.7

Laboratory Control Spike (LCS-1)

QC Batch: 62932 | Date Analyzed: 2009-08-26 | Analyzed By: ME
Prep Batch: 53711 | QC Preparation: 2009-08-26 | Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.113	mg/L	1	0.100	<0.00110	113	74.3 - 123.4
Toluene	0.113	mg/L	1	0.100	<0.00100	113	70.1 - 126.2
Ethylbenzene	0.112	mg/L	1	0.100	<0.00100	112	68.6 - 124.7
Xylene	0.340	mg/L	1	0.300	<0.00290	113	64.8 - 127.2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.110	mg/L	1	0.100	<0.00110	110	74.3 - 123.4	3	20
Toluene	0.111	mg/L	1	0.100	<0.00100	111	70.1 - 126.2	2	20
Ethylbenzene	0.113	mg/L	1	0.100	<0.00100	113	68.6 - 124.7	1	20
Xylene	0.342	mg/L	1	0.300	<0.00290	114	64.8 - 127.2	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.104	0.103	mg/L	1	0.100	104	103	84.8 - 110.8
4-Bromofluorobenzene (4-BFB)	0.116	0.113	mg/L	1	0.100	116	113	51.7 - 134.7

Laboratory Control Spike (LCS-1)

QC Batch: 62933 | Date Analyzed: 2009-08-26 | Analyzed By: ME
Prep Batch: 53711 | QC Preparation: 2009-08-26 | Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	0.887	mg/L	1	1.00	<0.0351	89	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	0.925	mg/L	1	1.00	<0.0351	92	70 - 130	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0981	0.101	mg/L	1	0.100	98	101	70 - 130
4-Bromofluorobenzene (4-BFB)	0.129	0.128	mg/L	1	0.100	129	128	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 63034 | Date Analyzed: 2009-08-28 | Analyzed By: MN
Prep Batch: 53804 | QC Preparation: 2009-08-25 | Prepared By: MN

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene	0.0272	mg/L	1	0.0800	<0.0000784	34	22.2 - 87.9
2-Methylnaphthalene	0.0313	mg/L	1	0.0800	<0.0000747	39	23.3 - 86.1
1-Methylnaphthalene	0.0321	mg/L	1	0.0800	<0.0000575	40	24.6 - 87.8
Acenaphthylene	0.0408	mg/L	1	0.0800	<0.0000963	51	27.4 - 114
Acenaphthene	0.0403	mg/L	1	0.0800	<0.0000617	50	27.2 - 111
Dibenzofuran	0.0388	mg/L	1	0.0800	<0.0000952	48	27.3 - 100
Fluorene	0.0480	mg/L	1	0.0800	<0.000134	60	31.5 - 122
Anthracene	0.0512	mg/L	1	0.0800	<0.000441	64	32.4 - 115
Phenanthrene	0.0491	mg/L	1	0.0800	<0.000435	61	34.2 - 111
Fluoranthene	0.0561	mg/L	1	0.0800	<0.000476	70	40.1 - 114
Pyrene	0.0503	mg/L	1	0.0800	<0.000590	63	39.2 - 124
Benzo(a)anthracene	0.0497	mg/L	1	0.0800	<0.000118	62	39.4 - 114
Chrysene	0.0506	mg/L	1	0.0800	<0.0000766	63	38.2 - 116
Benzo(b)fluoranthene	0.0556	mg/L	1	0.0800	<0.000146	70	34.5 - 118
Benzo(k)fluoranthene	0.0631	mg/L	1	0.0800	<0.000141	79	38.7 - 133
Benzo(a)pyrene	0.0668	mg/L	1	0.0800	<0.000132	84	38 - 134
Indeno(1,2,3-cd)pyrene	0.0567	mg/L	1	0.0800	<0.0000702	71	34.6 - 124
Dibenzo(a,h)anthracene	0.0555	mg/L	1	0.0800	<0.0000534	69	33.9 - 120
Benzo(g,h,i)perylene	0.0562	mg/L	1	0.0800	<0.0000473	70	33.8 - 138

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Naphthalene	0.0265	mg/L	1	0.0800	<0.0000784	33	22.2 - 87.9	3	20
2-Methylnaphthalene	0.0303	mg/L	1	0.0800	<0.0000747	38	23.3 - 86.1	3	20
1-Methylnaphthalene	0.0312	mg/L	1	0.0800	<0.0000575	39	24.6 - 87.8	3	20
Acenaphthylene	0.0396	mg/L	1	0.0800	<0.0000963	50	27.4 - 114	3	20
Acenaphthene	0.0387	mg/L	1	0.0800	<0.0000617	48	27.2 - 111	4	20
Dibenzofuran	0.0378	mg/L	1	0.0800	<0.0000952	47	27.3 - 100	3	20
Fluorene	0.0460	mg/L	1	0.0800	<0.000134	58	31.5 - 122	4	20
Anthracene	0.0507	mg/L	1	0.0800	<0.000441	63	32.4 - 115	1	20
Phenanthrene	0.0484	mg/L	1	0.0800	<0.000435	60	34.2 - 111	1	20
Fluoranthene	0.0548	mg/L	1	0.0800	<0.000476	68	40.1 - 114	2	20
Pyrene	0.0501	mg/L	1	0.0800	<0.000590	63	39.2 - 124	0	20
Benzo(a)anthracene	0.0493	mg/L	1	0.0800	<0.000118	62	39.4 - 114	1	20
Chrysene	0.0504	mg/L	1	0.0800	<0.0000766	63	38.2 - 116	0	20
Benzo(b)fluoranthene	0.0540	mg/L	1	0.0800	<0.000146	68	34.5 - 118	3	20
Benzo(k)fluoranthene	0.0692	mg/L	1	0.0800	<0.000141	86	38.7 - 133	9	20
Benzo(a)pyrene	0.0659	mg/L	1	0.0800	<0.000132	82	38 - 134	1	20
Indeno(1,2,3-cd)pyrene	0.0560	mg/L	1	0.0800	<0.0000702	70	34.6 - 124	1	20
Dibenzo(a,h)anthracene	0.0553	mg/L	1	0.0800	<0.0000534	69	33.9 - 120	0	20
Benzo(g,h,i)perylene	0.0556	mg/L	1	0.0800	<0.0000473	70	33.8 - 138	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Nitrobenzene-d5	0.0325	0.0319	mg/L	1	0.0800	41	40	25.9 - 97.5
2-Fluorobiphenyl	0.0322	0.0311	mg/L	1	0.0800	40	39	13.9 - 100
Terphenyl-d14	0.0506	0.0505	mg/L	1	0.0800	63	63	37.7 - 114

Matrix Spike (MS-1) Spiked Sample: 206718

QC Batch: 62741 | Date Analyzed: 2009-08-21 | Analyzed By: kg
Prep Batch: 53539 | QC Preparation: 2009-08-21 | Prepared By: kg

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	32.4	mg/L	1	25.0	9.27	92	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	34.7	mg/L	1	25.0	9.27	102	70 - 130	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	10.8	10.6	mg/L	1	10	108	106	70 - 130

Matrix Spike (MS-1) Spiked Sample: 206707

QC Batch: 62869 | Date Analyzed: 2009-08-25 | Analyzed By: ME
Prep Batch: 53658 | QC Preparation: 2009-08-25 | Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	11.9	mg/L	50	5.00	7.99	78	61 - 130
Toluene	5.14	mg/L	50	5.00	0.971	83	69.2 - 121.4
Ethylbenzene	4.72	mg/L	50	5.00	0.6066	82	56.3 - 124.9
Xylene	12.2	mg/L	50	15.0	0.6562	77	60.2 - 122.9

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	12.3	mg/L	50	5.00	7.99	86	61 - 130	3	20
Toluene	5.18	mg/L	50	5.00	0.971	84	69.2 - 121.4	1	20
Ethylbenzene	4.84	mg/L	50	5.00	0.6066	85	56.3 - 124.9	2	20
Xylene	12.6	mg/L	50	15.0	0.6562	80	60.2 - 122.9	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	4.82	4.72	mg/L	50	5	96	94	85.6 - 108.1
4-Bromofluorobenzene (4-BFB)	3.34	3.36	mg/L	50	5	67	67	53.7 - 127.3

Matrix Spike (MS-1) Spiked Sample: 206721

QC Batch: 62932 | Date Analyzed: 2009-08-26 | Analyzed By: ME
Prep Batch: 53711 | QC Preparation: 2009-08-26 | Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene [21]	16.3	mg/L	50	5.00	13.5107	56	61 - 130
Toluene	14.9	mg/L	50	5.00	10.5172	88	69.2 - 121.4
Ethylbenzene	5.12	mg/L	50	5.00	1.3774	75	56.3 - 124.9
Xylene	15.4	mg/L	50	15.0	3.9157	76	60.2 - 122.9

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[21] Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	16.9	mg/L	50	5.00	13.5107	68	61 - 130	4	20
Toluene	14.3	mg/L	50	5.00	10.5172	76	69.2 - 121.4	4	20
Ethylbenzene	5.30	mg/L	50	5.00	1.3774	78	56.3 - 124.9	3	20
Xylene	15.7	mg/L	50	15.0	3.9157	78	60.2 - 122.9	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	5.02	5.01	mg/L	50	5	100	100	85.6 - 108.1
4-Bromofluorobenzene (4-BFB)	5.03	4.81	mg/L	50	5	101	96	53.7 - 127.3

Standard (CCV-1)

QC Batch: 62741 Date Analyzed: 2009-08-21 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	205	82	80 - 120	2009-08-21

Standard (CCV-2)

QC Batch: 62741 Date Analyzed: 2009-08-21 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	212	85	80 - 120	2009-08-21

Standard (CCV-2)

QC Batch: 62869 Date Analyzed: 2009-08-25 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0979	98	80 - 120	2009-08-25
Toluene		mg/L	0.100	0.0976	98	80 - 120	2009-08-25
Ethylbenzene		mg/L	0.100	0.0973	97	80 - 120	2009-08-25
Xylene		mg/L	0.300	0.283	94	80 - 120	2009-08-25

Standard (CCV-3)

QC Batch: 62869 Date Analyzed: 2009-08-25 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0910	91	80 - 120	2009-08-25
Toluene		mg/L	0.100	0.0908	91	80 - 120	2009-08-25
Ethylbenzene		mg/L	0.100	0.0913	91	80 - 120	2009-08-25
Xylene		mg/L	0.300	0.260	87	80 - 120	2009-08-25

Standard (CCV-1)

QC Batch: 62932 Date Analyzed: 2009-08-26 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.108	108	80 - 120	2009-08-26
Toluene		mg/L	0.100	0.108	108	80 - 120	2009-08-26
Ethylbenzene		mg/L	0.100	0.109	109	80 - 120	2009-08-26
Xylene		mg/L	0.300	0.333	111	80 - 120	2009-08-26

Standard (CCV-2)

QC Batch: 62932 Date Analyzed: 2009-08-26 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.100	100	80 - 120	2009-08-26
Toluene		mg/L	0.100	0.102	102	80 - 120	2009-08-26
Ethylbenzene		mg/L	0.100	0.100	100	80 - 120	2009-08-26
Xylene		mg/L	0.300	0.299	100	80 - 120	2009-08-26

Standard (CCV-3)

QC Batch: 62932 Date Analyzed: 2009-08-26 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0935	94	80 - 120	2009-08-26
Toluene		mg/L	0.100	0.0930	93	80 - 120	2009-08-26
Ethylbenzene		mg/L	0.100	0.0915	92	80 - 120	2009-08-26
Xylene		mg/L	0.300	0.266	89	80 - 120	2009-08-26

Standard (CCV-1)

QC Batch: 62933 Date Analyzed: 2009-08-26 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.06	106	80 - 120	2009-08-26

Standard (CCV-2)

QC Batch: 62933 Date Analyzed: 2009-08-26 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.990	99	80 - 120	2009-08-26

Standard (CCV-1)

QC Batch: 63034 Date Analyzed: 2009-08-28 Analyzed By: MN

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60.0	56.9	95	80 - 120	2009-08-28
2-Methylnaphthalene		mg/L	60.0	62.5	104	80 - 120	2009-08-28
1-Methylnaphthalene		mg/L	60.0	61.8	103	80 - 120	2009-08-28
Acenaphthylene		mg/L	60.0	58.5	98	80 - 120	2009-08-28
Acenaphthene		mg/L	60.0	58.6	98	80 - 120	2009-08-28
Dibenzofuran		mg/L	60.0	60.6	101	80 - 120	2009-08-28
Fluorene		mg/L	60.0	64.0	107	80 - 120	2009-08-28
Anthracene		mg/L	60.0	58.7	98	80 - 120	2009-08-28
Phenanthrene		mg/L	60.0	57.1	95	80 - 120	2009-08-28
Fluoranthene		mg/L	60.0	57.2	95	80 - 120	2009-08-28
Pyrene		mg/L	60.0	57.9	96	80 - 120	2009-08-28
Benzo(a)anthracene		mg/L	60.0	56.1	94	80 - 120	2009-08-28
Chrysene		mg/L	60.0	55.6	93	80 - 120	2009-08-28
Benzo(b)fluoranthene		mg/L	60.0	58.8	98	80 - 120	2009-08-28
Benzo(k)fluoranthene		mg/L	60.0	59.8	100	80 - 120	2009-08-28
Benzo(a)pyrene		mg/L	60.0	70.3	117	80 - 120	2009-08-28
Indeno(1,2,3-cd)pyrene		mg/L	60.0	59.4	99	80 - 120	2009-08-28
Dibenzo(a,h)anthracene		mg/L	60.0	59.5	99	80 - 120	2009-08-28
Benzo(g,h,i)perylene		mg/L	60.0	58.0	97	80 - 120	2009-08-28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5		61.4	mg/L	1	60.0	102	80 - 120
2-Fluorobiphenyl		56.3	mg/L	1	60.0	94	80 - 120
Terphenyl-d14		54.6	mg/L	1	60.0	91	80 - 120

Standard (CCV-2)

QC Batch: 63034 Date Analyzed: 2009-08-28 Analyzed By: MN

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60.0	58.8	98	80 - 120	2009-08-28
2-Methylnaphthalene		mg/L	60.0	71.0	118	80 - 120	2009-08-28
1-Methylnaphthalene		mg/L	60.0	71.3	119	80 - 120	2009-08-28
Acenaphthylene		mg/L	60.0	60.4	101	80 - 120	2009-08-28
Acenaphthene		mg/L	60.0	60.1	100	80 - 120	2009-08-28
Dibenzofuran		mg/L	60.0	61.4	102	80 - 120	2009-08-28
Fluorene		mg/L	60.0	64.8	108	80 - 120	2009-08-28
Anthracene		mg/L	60.0	59.9	100	80 - 120	2009-08-28
Phenanthrene		mg/L	60.0	57.1	95	80 - 120	2009-08-28
Fluoranthene		mg/L	60.0	55.5	92	80 - 120	2009-08-28
Pyrene		mg/L	60.0	60.7	101	80 - 120	2009-08-28
Benzo(a)anthracene		mg/L	60.0	55.3	92	80 - 120	2009-08-28
Chrysene		mg/L	60.0	56.2	94	80 - 120	2009-08-28
Benzo(b)fluoranthene		mg/L	60.0	56.6	94	80 - 120	2009-08-28
Benzo(k)fluoranthene		mg/L	60.0	69.3	116	80 - 120	2009-08-28
Benzo(a)pyrene		mg/L	60.0	67.5	112	80 - 120	2009-08-28
Indeno(1,2,3-cd)pyrene		mg/L	60.0	55.7	93	80 - 120	2009-08-28
Dibenzo(a,h)anthracene		mg/L	60.0	56.6	94	80 - 120	2009-08-28
Benzo(g,h,i)perylene		mg/L	60.0	55.0	92	80 - 120	2009-08-28

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5		61.6	mg/L	1	60.0	103	80 - 120
2-Fluorobiphenyl		58.8	mg/L	1	60.0	98	80 - 120
Terphenyl-d14		57.0	mg/L	1	60.0	95	80 - 120

LAB Order # 9082009 Page 1 of 2

TraceAnalysis, Inc.

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Company Name: TALON LPE
Phone #: 432-522-8122
Address: (Street, City, Zip) MIDLAND TX PLAINS Hwy
Fax #:
Contact Person: SHANNA Smith
E-mail: SSmith@TALONLPE.com
Invoice to: (If different from above) PLAINS JASON HENRY Lovington Deep6
Project #: 700376.017.01
Project Name: SRS# 2002-10312
Project Location (including state): Lovington, NM
Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
206705	MW-1	4		X				X				X		8/19/09	1442		X			X													
706	MW-2	7													1650		X		X	X													
707	MW-3	4													1550																		
708	MW-4														1545																		
709	MW-5														1516																		
710	MW-6														1457																		
711	MW-7														1600																		
712	MW-8														1506																		
713	MW-9														1519																		
714	MW-10														1540																		
715	MW-11														1533																		

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
	TALON LPE	8/20/09	830		TRACE	8/20/09	8:30	2.1°C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:

LAB USE ONLY
Intact Y N
Headspace Y N NA
Log-in-Review

REMARKS:
BTEX + TPH - Midland
PAH - Lubbock

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier #

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LAB ORDER # 9082009 Page 2 of 2

TraceAnalysis, Inc.

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Contact Person: Shanna Smith
E-mail: SSmith@TAlonLPC.com
Invoice to: (If different from above) Plains Jason Henry
Lovington Reap 6
Project #: 700376.017.01
Project Name: SRS# 2002-10312
Project Location (including state): Lovington, NM
Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
716	MW-12	4		X				X				X		8/18	1527		X			X														
717	MW-13	7		↓				↓				↓		8/19	1635		X		X	X														
718	MW-14	↓													1626		↓		↓	↓														
719	MW-15														1619																			
720	MW-16														1612																			
721	MW-17	↓		↓				↓				↓		↓	1640		↓		↓	↓														

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
	TAlon LPC	8/20/09	8:30		TRACE	8/21/09	8:30	2.1°C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:

LAB USE ONLY
Intact (Y) N NA
Headspace Y (N) NA
2-1
Log-in Review

REMARKS:
BTEX & TPH - Midland
PAH - Lubbock

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # courier

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LAB ID # 9082009 Page 1 2

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9, Lubbock, Texas 79424, Tel (806) 794-1296, Fax (806) 794-1298, 1 (800) 378-1296
5002 Basin Street, Suite A1, Midland, Texas 79703, Tel (432) 689-6301, Fax (432) 689-6313
200 East Sunset Rd., Suite E, El Paso, Texas 79922, Tel (915) 585-3443, Fax (915) 585-4944, 1 (888) 588-3443
8808 Camp Bowie Blvd. West, Suite 180, Ft. Worth, Texas 76116, Tel (817) 201-5260, Fax (817) 560-4336

Company Name: TALON LPE
Phone #: 432-522-1122
Address: (Street, City, Zip) MIDLAND TX PLANNING Hwy
Fax #:
Contact Person: SHANNA Smith
E-mail: SSmith@TALONLPE.com
Invoice to: (If different from above) PLAINS JASON Henry
Covington Deep 6
Project #: 700376.017.01
Project Name: SRS# 2002-10312
Project Location (including state): Covington, NM
Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content						Turn Around Time if different from standard	Hold
204-705	MW-1	4		X				X				X		8/19/09	1442		X			X																		
706	MW-2	7													1650		X		X	X																		
707	MW-3	4													1550																								
708	MW-4														1545																								
709	MW-5														1516																								
710	MW-6														1457																								
711	MW-7														1600																								
712	MW-8														1506																								
713	MW-9														1519																								
714	MW-10														1540																								
715	MW-11														1533																								

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
	TALON LPE	8/20/09	830		TRACE	8/20/09	8:30	2.1°C
	TRACE	8/21/09	17:00	Carol Fox	Trace LBK	8-21-09	11:00 AM	4.4 / 4.9

LAB USE ONLY
Intact Y N
Headspace Y N NA
Log-in-Review

REMARKS:
BTEX & TPH - Midland
PAH - Lubbock

- [ ] Dry Weight Basis Required
- [ ] TRRP Report Required
- [ ] Check If Special Reporting Limits Are Needed

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LAB ID # 9082009 Page 2 of 2

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9, Lubbock, Texas 79424, Tel (806) 794-1296, Fax (806) 794-1298, 1 (800) 378-1296
5002 Basin Street, Suite A1, Midland, Texas 79703, Tel (432) 689-6301, Fax (432) 689-6313
200 East Sunset Rd., Suite E, El Paso, Texas 79922, Tel (915) 585-3443, Fax (915) 585-4944, 1 (888) 588-3443
8808 Camp Bowie Blvd. West, Suite 180, Ft. Worth, Texas 76116, Tel (817) 201-5260, Fax (817) 560-4336

Company Name: TAlon LPC
Phone #: 432-522-2122
Address: (Street, City, Zip) Rankin Hwy Midland TX
Fax #:
Contact Person: Shanna Smith
E-mail: SSmith@TAlon-LPC.com
Invoice to: (If different from above) Plains Jason Henry
Lovington Reef 6
Project #: 700376.017.01
Project Name: SRSH 2007-10312
Project Location (including state): Lovington, NM
Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
716	MW-12	4		X				X				X		8/18/09	1527
717	MW-13	7												8/19	1635
718	MW-14														1626
719	MW-15														1619
720	MW-16														1612
721	MW-17	↓		↓				↓				↓		↓	1640

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
	X		X	X														
	X		X	X														
	↓		↓	↓														
	↓		↓	↓														

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
	TAlon LPC	8/20/09	8:30		TRACE	8/21/09	8:30	2.1°C
	TRACE	8/20/09	17:00	Carol Fox	Trace Lbk	8-21-09	11:00 AM	4.4 4.9

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-In-Review

REMARKS:
BTEX's TPH - Midland
PAH - Lubbock

- [ ] Dry Weight Basis Required
- [ ] TRRP Report Required
- [ ] Check If Special Reporting Limits Are Needed

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Carrier # courier (Brian - delivered)

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TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

Steve Killingsworth
Talon LPE-Midland
2901 State Highway 349
Midland, TX, 79706

Report Date: December 31, 2009

Work Order: 9121711

Project Location: Lovington, NM
Project Name: Deep 6
Project Number: 700376.017.01

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
217506	MW-1	water	2009-12-16	12:25	2009-12-17
217507	MW-3	water	2009-12-16	11:51	2009-12-17
217508	MW-4	water	2009-12-16	11:57	2009-12-17
217509	MW-5	water	2009-12-16	12:15	2009-12-17
217510	MW-6	water	2009-12-16	12:30	2009-12-17
217511	MW-7	water	2009-12-16	11:45	2009-12-17
217512	MW-8	water	2009-12-16	12:20	2009-12-17
217513	MW-9	water	2009-12-16	12:10	2009-12-17
217514	MW-10	water	2009-12-16	12:40	2009-12-17
217515	MW-11	water	2009-12-16	12:00	2009-12-17
217516	MW-12	water	2009-12-16	12:05	2009-12-17

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 15 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project Deep 6 were received by TraceAnalysis, Inc. on 2009-12-17 and assigned to work order 9121711. Samples for work order 9121711 were received intact without headspace and at a temperature of 3.2 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	56611	2009-12-22 at 11:00	66234	2009-12-23 at 00:37
BTEX	S 8021B	56635	2009-12-23 at 10:12	66264	2009-12-23 at 12:32
BTEX	S 8021B	56746	2009-12-30 at 11:58	66382	2009-12-30 at 11:58

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9121711 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 217506 - MW-1

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66234	Date Analyzed:	2009-12-23	Analyzed By:	AG
Prep Batch:	56611	Sample Preparation:	2009-12-22	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		**0.00100**	mg/L	1	0.00100
Xylene		**0.00330**	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.108	mg/L	1	0.100	108	70.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0955	mg/L	1	0.100	96	57.1 - 118.8

Sample: 217507 - MW-3

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66234	Date Analyzed:	2009-12-23	Analyzed By:	AG
Prep Batch:	56611	Sample Preparation:	2009-12-22	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**6.09**	mg/L	50	0.00100
Toluene		**0.568**	mg/L	50	0.00100
Ethylbenzene		**0.316**	mg/L	50	0.00100
Xylene		**0.129**	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.06	mg/L	50	5.00	101	70.9 - 129.8
4-Bromofluorobenzene (4-BFB)		4.26	mg/L	50	5.00	85	57.1 - 118.8

Sample: 217508 - MW-4

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66234	Date Analyzed:	2009-12-23	Analyzed By:	AG
Prep Batch:	56611	Sample Preparation:	2009-12-22	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.108	mg/L	1	0.100	108	70.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0905	mg/L	1	0.100	90	57.1 - 118.8

Sample: 217509 - MW-5

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66382	Date Analyzed:	2009-12-30	Analyzed By:	MT
Prep Batch:	56746	Sample Preparation:	2009-12-30	Prepared By:	MT

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0851	mg/L	1	0.100	85	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0910	mg/L	1	0.100	91	70 - 130

Sample: 217510 - MW-6

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66264	Date Analyzed:	2009-12-23	Analyzed By:	tn
Prep Batch:	56635	Sample Preparation:	2009-12-23	Prepared By:	tn

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0755	mg/L	1	0.100	76	70.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0591	mg/L	1	0.100	59	57.1 - 118.8

Sample: 217511 - MW-7

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66382	Date Analyzed:	2009-12-30	Analyzed By:	MT
Prep Batch:	56746	Sample Preparation:	2009-12-30	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0874	mg/L	1	0.100	87	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0812	mg/L	1	0.100	81	70 - 130

Sample: 217512 - MW-8

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66264	Date Analyzed:	2009-12-23	Analyzed By:	tn
Prep Batch:	56635	Sample Preparation:	2009-12-23	Prepared By:	tn

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0937	mg/L	1	0.100	94	70.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0731	mg/L	1	0.100	73	57.1 - 118.8

Sample: 217513 - MW-9

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66264	Date Analyzed:	2009-12-23	Analyzed By:	tn
Prep Batch:	56635	Sample Preparation:	2009-12-23	Prepared By:	tn

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0869	mg/L	1	0.100	87	70.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0687	mg/L	1	0.100	69	57.1 - 118.8

Sample: 217514 - MW-10

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66264	Date Analyzed:	2009-12-23	Analyzed By:	tn
Prep Batch:	56635	Sample Preparation:	2009-12-23	Prepared By:	tn

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		**15.9**		mg/L	50	0.00100
Toluene		<0.0500		mg/L	50	0.00100
Ethylbenzene		**0.0988**		mg/L	50	0.00100
Xylene		<0.0500		mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.98	mg/L	50	5.00	100	70.9 - 129.8
4-Bromofluorobenzene (4-BFB)		3.94	mg/L	50	5.00	79	57.1 - 118.8

Sample: 217515 - MW-11

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66264	Date Analyzed:	2009-12-23	Analyzed By:	tn
Prep Batch:	56635	Sample Preparation:	2009-12-23	Prepared By:	tn

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0928	mg/L	1	0.100	93	70.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0738	mg/L	1	0.100	74	57.1 - 118.8

Sample: 217516 - MW-12

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66264	Date Analyzed:	2009-12-23	Analyzed By:	tn
Prep Batch:	56635	Sample Preparation:	2009-12-23	Prepared By:	tn

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.692**	mg/L	10	0.00100
Toluene		<0.0100	mg/L	10	0.00100
Ethylbenzene		<0.0100	mg/L	10	0.00100
Xylene		<0.0100	mg/L	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.972	mg/L	10	1.00	97	70.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.767	mg/L	10	1.00	77	57.1 - 118.8

Method Blank (1) QC Batch: 66234

QC Batch:	66234	Date Analyzed:	2009-12-23	Analyzed By:	AG
Prep Batch:	56611	QC Preparation:	2009-12-22	Prepared By:	tn

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000300	mg/L	0.001
Toluene		<0.000200	mg/L	0.001
Ethylbenzene		<0.000200	mg/L	0.001
Xylene		<0.000900	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.110	mg/L	1	0.100	110	73.6 - 126.6
4-Bromofluorobenzene (4-BFB)		0.0869	mg/L	1	0.100	87	70.6 - 117.5

Method Blank (1) QC Batch: 66264

QC Batch: 66264 | Date Analyzed: 2009-12-23 | Analyzed By: tn
Prep Batch: 56635 | QC Preparation: 2009-12-23 | Prepared By: tn

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000300	mg/L	0.001
Toluene		<0.000200	mg/L	0.001
Ethylbenzene		<0.000200	mg/L	0.001
Xylene		<0.000900	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.113	mg/L	1	0.100	113	73.6 - 126.6
4-Bromofluorobenzene (4-BFB)		0.0848	mg/L	1	0.100	85	70.6 - 117.5

Method Blank (1) QC Batch: 66382

QC Batch: 66382 | Date Analyzed: 2009-12-30 | Analyzed By: MT
Prep Batch: 56746 | QC Preparation: 2009-12-30 | Prepared By: MT

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000133	mg/L	0.001
Toluene		<0.000281	mg/L	0.001
Ethylbenzene		<0.000535	mg/L	0.001
Xylene		<0.000960	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0934	mg/L	1	0.100	93	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0955	mg/L	1	0.100	96	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 66234 | Date Analyzed: 2009-12-23 | Analyzed By: AG
Prep Batch: 56611 | QC Preparation: 2009-12-22 | Prepared By: tn

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.103	mg/L	1	0.100	<0.000300	103	79.4 - 111.8
Toluene	0.102	mg/L	1	0.100	<0.000200	102	79.3 - 110
Ethylbenzene	0.0974	mg/L	1	0.100	<0.000200	97	73.8 - 113.1
Xylene	0.289	mg/L	1	0.300	<0.000900	96	73.9 - 113.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.100	mg/L	1	0.100	<0.000300	100	79.4 - 111.8	3	20
Toluene	0.0996	mg/L	1	0.100	<0.000200	100	79.3 - 110	2	20
Ethylbenzene	0.0958	mg/L	1	0.100	<0.000200	96	73.8 - 113.1	2	20
Xylene	0.285	mg/L	1	0.300	<0.000900	95	73.9 - 113.6	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.115	0.110	mg/L	1	0.100	115	110	76.2 - 129.6
4-Bromofluorobenzene (4-BFB)	0.0954	0.0921	mg/L	1	0.100	95	92	77.9 - 119.8

Laboratory Control Spike (LCS-1)

QC Batch: 66264 | Date Analyzed: 2009-12-23 | Analyzed By: tn
Prep Batch: 56635 | QC Preparation: 2009-12-23 | Prepared By: tn

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0914	mg/L	1	0.100	<0.000300	91	79.4 - 111.8
Toluene	0.0914	mg/L	1	0.100	<0.000200	91	79.3 - 110
Ethylbenzene	0.0888	mg/L	1	0.100	<0.000200	89	73.8 - 113.1
Xylene	0.264	mg/L	1	0.300	<0.000900	88	73.9 - 113.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.0938	mg/L	1	0.100	<0.000300	94	79.4 - 111.8	3	20
Toluene	0.0937	mg/L	1	0.100	<0.000200	94	79.3 - 110	2	20
Ethylbenzene	0.0908	mg/L	1	0.100	<0.000200	91	73.8 - 113.1	2	20
Xylene	0.271	mg/L	1	0.300	<0.000900	90	73.9 - 113.6	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.101	0.101	mg/L	1	0.100	101	101	76.2 - 129.6

continued ...

control spikes continued ...

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	0.0840	0.0846	mg/L	1	0.100	84	85	77.9 - 119.8

Laboratory Control Spike (LCS-1)

QC Batch: 66382 | Date Analyzed: 2009-12-30 | Analyzed By: MT
Prep Batch: 56746 | QC Preparation: 2009-12-30 | Prepared By: MT

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0972	mg/L	1	0.100	<0.000133	97	70 - 130
Toluene	0.0970	mg/L	1	0.100	<0.000281	97	70 - 130
Ethylbenzene	0.0992	mg/L	1	0.100	<0.000535	99	70 - 130
Xylene	0.308	mg/L	1	0.300	<0.000960	103	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.0985	mg/L	1	0.100	<0.000133	98	70 - 130	1	20
Toluene	0.0981	mg/L	1	0.100	<0.000281	98	70 - 130	1	20
Ethylbenzene	0.0986	mg/L	1	0.100	<0.000535	99	70 - 130	1	20
Xylene	0.307	mg/L	1	0.300	<0.000960	102	70 - 130	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0926	0.0907	mg/L	1	0.100	93	91	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0973	0.0975	mg/L	1	0.100	97	98	70 - 130

Matrix Spike (MS-1) Spiked Sample: 217507

QC Batch: 66234 | Date Analyzed: 2009-12-23 | Analyzed By: AG
Prep Batch: 56611 | QC Preparation: 2009-12-22 | Prepared By: tn

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	[1]	9.61	mg/L	50	5.00	6.0879	70	77.3 - 117.4
Toluene	[2]	4.13	mg/L	50	5.00	0.5675	71	75 - 111.8
Ethylbenzene	[3]	3.75	mg/L	50	5.00	0.3158	69	78.8 - 106.6

continued ...

[1]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[2]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[3]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

matrix spikes continued ...

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Xylene	10.4	mg/L	50	15.0	0.059	69	68.9 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		10.4	mg/L	50	5.00	6.0879	86	77.3 - 117.4	8	20
Toluene		5.01	mg/L	50	5.00	0.5675	89	75 - 111.8	19	20
Ethylbenzene	[4]	4.60	mg/L	50	5.00	0.3158	86	78.8 - 106.6	20	20
Xylene	[5]	12.9	mg/L	50	15.0	0.059	86	68.9 - 114	22	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	4.95	5.25	mg/L	50	5	99	105	76.3 - 129.8
4-Bromofluorobenzene (4-BFB)	4.28	4.46	mg/L	50	5	86	89	75.2 - 112.8

Matrix Spike (MS-1) Spiked Sample: 217514

QC Batch: 66264 | Date Analyzed: 2009-12-23 | Analyzed By: tn
Prep Batch: 56635 | QC Preparation: 2009-12-23 | Prepared By: tn

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	20.6	mg/L	50	5.00	15.8802	94	77.3 - 117.4
Toluene	4.49	mg/L	50	5.00	<0.0100	90	75 - 111.8
Ethylbenzene	4.52	mg/L	50	5.00	0.0988	88	78.8 - 106.6
Xylene	13.0	mg/L	50	15.0	<0.0450	87	68.9 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	20.5	mg/L	50	5.00	15.8802	92	77.3 - 117.4	0	20
Toluene	4.68	mg/L	50	5.00	<0.0100	94	75 - 111.8	4	20
Ethylbenzene	4.74	mg/L	50	5.00	0.0988	93	78.8 - 106.6	5	20
Xylene	13.6	mg/L	50	15.0	<0.0450	91	68.9 - 114	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	4.76	4.88	mg/L	50	5	95	98	76.3 - 129.8

continued ...

[4]MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.
[5]MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

matrix spikes continued ...

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	4.02	4.09	mg/L	50	5	80	82	75.2 - 112.8

Matrix Spike (MS-1) Spiked Sample: 218474

QC Batch: 66382 | Date Analyzed: 2009-12-30 | Analyzed By: MT
Prep Batch: 56746 | QC Preparation: 2009-12-30 | Prepared By: MT

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	5.11	mg/L	20	2.00	3.17	97	70 - 130
Toluene	8.92	mg/L	20	2.00	7.27	82	70 - 130
Ethylbenzene	2.82	mg/L	20	2.00	0.761	103	70 - 130
Xylene	11.8	mg/L	20	6.00	5.5	105	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		4.95	mg/L	20	2.00	3.17	89	70 - 130	3	20
Toluene	[6]	8.62	mg/L	20	2.00	7.27	68	70 - 130	3	20
Ethylbenzene		2.61	mg/L	20	2.00	0.761	92	70 - 130	8	20
Xylene		10.9	mg/L	20	6.00	5.5	90	70 - 130	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.34	2.23	mg/L	20	2	117	112	70 - 130
4-Bromofluorobenzene (4-BFB)	2.29	2.08	mg/L	20	2	114	104	70 - 130

Standard (CCV-1)

QC Batch: 66234 | Date Analyzed: 2009-12-23 | Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0999	100	80 - 120	2009-12-23
Toluene		mg/L	0.100	0.0996	100	80 - 120	2009-12-23
Ethylbenzene		mg/L	0.100	0.0955	96	80 - 120	2009-12-23
Xylene		mg/L	0.300	0.284	95	80 - 120	2009-12-23

[6]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Standard (CCV-2)

QC Batch: 66234 | Date Analyzed: 2009-12-23 | Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.101	101	80 - 120	2009-12-23
Toluene		mg/L	0.100	0.100	100	80 - 120	2009-12-23
Ethylbenzene		mg/L	0.100	0.0970	97	80 - 120	2009-12-23
Xylene		mg/L	0.300	0.289	96	80 - 120	2009-12-23

Standard (CCV-1)

QC Batch: 66264 | Date Analyzed: 2009-12-23 | Analyzed By: tn

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0870	87	80 - 120	2009-12-23
Toluene		mg/L	0.100	0.0884	88	80 - 120	2009-12-23
Ethylbenzene		mg/L	0.100	0.0857	86	80 - 120	2009-12-23
Xylene		mg/L	0.300	0.256	85	80 - 120	2009-12-23

Standard (CCV-2)

QC Batch: 66264 | Date Analyzed: 2009-12-23 | Analyzed By: tn

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0880	88	80 - 120	2009-12-23
Toluene		mg/L	0.100	0.0878	88	80 - 120	2009-12-23
Ethylbenzene		mg/L	0.100	0.0849	85	80 - 120	2009-12-23
Xylene		mg/L	0.300	0.254	85	80 - 120	2009-12-23

Standard (CCV-3)

QC Batch: 66264 | Date Analyzed: 2009-12-23 | Analyzed By: tn

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0920	92	80 - 120	2009-12-23
Toluene		mg/L	0.100	0.0927	93	80 - 120	2009-12-23
Ethylbenzene		mg/L	0.100	0.0916	92	80 - 120	2009-12-23

continued ...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Xylene		mg/L	0.300	0.272	91	80 - 120	2009-12-23

Standard (CCV-1)

QC Batch: 66382 Date Analyzed: 2009-12-30 Analyzed By: MT

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0977	98	80 - 120	2009-12-30
Toluene		mg/L	0.100	0.0977	98	80 - 120	2009-12-30
Ethylbenzene		mg/L	0.100	0.0999	100	80 - 120	2009-12-30
Xylene		mg/L	0.300	0.310	103	80 - 120	2009-12-30

Standard (CCV-2)

QC Batch: 66382 Date Analyzed: 2009-12-30 Analyzed By: MT

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0947	95	80 - 120	2009-12-30
Toluene		mg/L	0.100	0.0933	93	80 - 120	2009-12-30
Ethylbenzene		mg/L	0.100	0.0910	91	80 - 120	2009-12-30
Xylene		mg/L	0.300	0.280	93	80 - 120	2009-12-30

LAB Order # 9121711

Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9 — Lubbock, Texas 79424 — Tel (806) 794-1296 — Fax (806) 794-1298 — 1 (800) 378-1296

5002 Basin Street, Suite A1 — Midland, Texas 79703 — Tel (432) 689-6301 — Fax (432) 689-6313

200 East Sunset Rd., Suite E — El Paso, Texas 79922 — Tel (915) 585-3443 — Fax (915) 585-4944 — 1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180 — Ft. Worth, Texas 76116 — Tel (817) 201-5260 — Fax (817) 560-4336

Company Name: Talon/LPE

Phone #: 432-522-2133

Address: (Street, City, Zip) 2901 Rankin Hwy

Fax #:

Contact Person: Steve Killingsworth

E-mail: skillingsworth@talonlpe.com

Invoice to: (If different from above) PLAINS Jason Henry

SRS # 2002-10312

Project #: 700376.017.01

Project Name: Deep 6

Project Location (including state): Lovington, N.M.

Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
217506	MW-1	3	VOA	X				X				X		12/14/09	1225		X																	
507	MW-3	3													1151		X																	
508	MW-4	3													1157		X																	
509	MW-5	3													1215		X																	
510	MW-6	3													1230		X																	
511	MW-7	3													1145		X																	
512	MW-8	3													1220		X																	
513	MW-9	3													1210		X																	
514	MW-10	3													1240		X																	
515	MW-11	3													1200		X																	
516	MW-12	3													1205		X																	

Turn Around Time if different from standard

Hold

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
	Talon/LPE	12/14/09	0800		TRACE	12/17/08	08:00	INST ___ OBS 3.2 °C COR 3.2 °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST ___ OBS ___ °C COR ___ °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST IR OBS 4.6 °C COR 5.0 °C
				Carol Fox	Trace Lbk	12-30-09	9:45 AM	

LAB USE ONLY

Intact Y / N

Headspace Y / N / NA

Log-In-Review

REMARKS:

All tests Midland

217509 + 217511 - Lubbock

- Dry Weight Basis Required
- TRRP Report Required
- Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

CF 12-30-09

Carrier # comp in (LS 258168194)

ORIGINAL COPY

APPENDIX D

NMOCD C-141

PLAINS ALL AMERICAN

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised March 17, 1999

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action ☒ Initial Report ☐ Final Report

Name of Company: EOTT Energy Pipeline	**Contact:** Frank Hernandez
Address: P.O. Box 1660, Midland, TX 79703	**Telephone No.:** 915.638.3799
Facility Name: Lovington Deep 6"	**Facility Type:** Crude Oil Pipeline

Surface Owner: Darr Angell	**Mineral Owner:**	**Lease No.:**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	
H	6	17S	36E					**County:** Lea **Lat.:** 32°52'1.132"N **Lon:** 103°23'16.570"W

NATURE OF RELEASE

Type of Release: Crude Oil	**Volume of Release:** 25 bbls	**Volume Recovered:** 10 bbls
Source of Release: 6" steel pipeline	**Date and Hour of Occurrence:** 12-12-02 8:00 AM	**Date and Hour of Discovery:** 12-12-02 10:00 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	**If YES, To Whom?** Paul Sheeley and Sylvia Dickie, Hobbs NMOCD (left messages) Confirmed with Sylvia Dickie at 11:45 AM 12-12-02	
By Whom? Pat McCasland (Environmental Plus, Inc.)	**Date and Hour:** NMOCD notified on 12-12-02 10:30 AM	
Was a Watercourse Reached? ☐ Yes ☒ No	**If YES, Volume Impacting the Watercourse.** NA	

If a Watercourse was Impacted, Describe Fully.* NA

Describe Cause of Problem and Remedial Action Taken.* The cause of the leak was internal/external corrosion. The contaminated soil was stockpiled on a plastic barrier. Disposing at South Monument SWF

Describe Area Affected and Cleanup Action Taken.* Spill Area = ~6,000 ft^2 Near surface soil will be characterized in accordance with 40 CFR 261 and with NMOCD approval, disposed of in a NMOCD approved facility. The site will be delineated and remediated.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Frank Hernandez	**OIL CONSERVATION DIVISION**	
Printed Name: Frank Hernandez	**Approved by District Supervisor:**	
Title: District Environmental Supervisor	**Approval Date:**	**Expiration Date:**
Date: December 12, 2002 **Phone:** 915.638.3799	**Conditions of Approval:**	**Attached** ☐

* Attach Additional Sheets If Necessary

EOTT Energy Pipeline
Site Information and Metrics

Incident Date and NMOCD Notified?: Discovered 12-12-02	NMOCD verbally notified on 12-12-02
SITE: Lovington Deep 6"	**Assigned Site Reference #:** 2002-10312
Company: EOTT Energy Pipeline	
Street Address: 5805 East Highway 80	
Mailing Address: P.O. Box 1660	
City, State, Zip: Midland, Texas 79703	
Representative: Frank Hernandez, District Environmental Supervisor	
Representative Telephone: 915.638.3799	
Telephone:	
Fluid volume released (bbls): 25 bbls	**Recovered (bbls):** 10
>25 bbls : Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas)	
5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)	
Leak, Spill, or Pit (LSP) Name: Lovington Deep 6"	
Source of contamination: 6" Steel Crude Oil Pipeline	
Land Owner, i.e., BLM, ST, Fee, Other: Darr Angell	
LSP Dimensions: 140' X 75'	
LSP Area: Spill Area ~6,000 ft^2	
Location of Reference Point (RP):	
Location distance and direction from RP:	
Latitude: 32° 52' 1.132"N	
Longitude: 103° 23' 16.570"W	
Elevation above mean sea level: ~3,918 'amsl	
Feet from South Section Line:	
Feet from West Section Line:	
Location- Unit or ¼¼: UL-H SE ¼ of the NE ¼	
Location- Section: 6	
Location- Township: 17S	
Location- Range: 36E	
Surface water body within 1000 ' radius of site: None	
Domestic water wells within 1000' radius of site: None	
Agricultural water wells within 1000' radius of site: None	
Public water supply wells within 1000' radius of site: None	
Depth from land surface to ground water (DG): ~50.0 feet	
Depth of contamination (DC): ?	
Depth to ground water (DG – DC = DtGW): <50 feet	

1. Ground Water	2. Wellhead Protection Area	3. Distance to Surface Water Body
If Depth to GW <50 feet: *20 points*	If <1000' from water source, or;<200' from private domestic water source: *20 points*	<200 horizontal feet: *20 points*
If Depth to GW 50 to 99 feet: *10 points*		200-100 horizontal feet: *10 points*
If Depth to GW >100 feet: *0 points*	If >1000' from water source, or; >200' from private domestic water source: *0 points*	>1000 horizontal feet: *0 points*
Ground water Score = 20	***Wellhead Protection Area Score= 0***	***Surface Water Score= 0***

Site Rank (1+2+3) = 20

Total Site Ranking Score and Acceptable Concentrations

Parameter	>19 (Surface to 50.0'bgs)	10-19	0-9
Benzene[1]	**10 ppm**	10 ppm	10 ppm
BTEX[1]	**50 ppm**	50 ppm	50 ppm
TPH	**100 ppm**	1000 ppm	5000 ppm

[1]100 ppm field VOC headspace measurement may be substituted for lab analysis