

AP - 37

**ANNUAL
MONITORING REPORT**

**YEAR(S):
2016**



**2010 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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March 23, 2011

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

Re: Plains All American – 2010 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	AP-91 (1R-0380)	Section 16, T17S, R37E, Lea County
8-inch Moore to Jal #2	AP-92 (1R-0381)	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
Remediation Coordinator
Plains All American

CC: Geoff Leking, NMOCD, Hobbs, NM

Enclosures

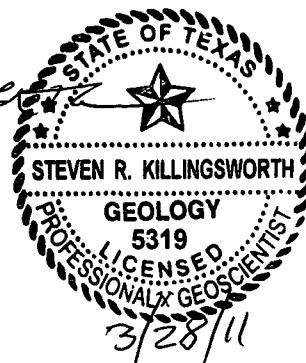
2010 ANNUAL GROUNDWATER MONITORING REPORT

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

TALON/LPE PROJECT NO. 700376.051.01

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February 2011

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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. A release of crude oil from the Deep 6" pipeline occurred on property which is primarily utilized as pasture/range with intermittent oil production facilities land and is owned by Chevron. The site is located within the West Lovington oil field and has no residence or surface water located within a 1,000-foot radius of the release point. 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 playa lakes 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 Deep 6" pipeline. Ten (10) bbls of oil 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.

Soil remediation activities were 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 groundwater remediation activities at the Lovington Deep 6" release site. Groundwater remediation activities at the site were previously conducted by Environmental Plus, Inc. (EPI).

1.2 Site Geology

The surficial 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 is 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, Ogallala sediments were deposited by fluvial mechanism as paleovalley fill, which is composed of gravelly to sandy braided stream deposits that trend 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.

Subsequent groundwater monitoring events indicated that benzene concentrations in the down-gradient sentinel monitor well, MW-12, consistently exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard. Therefore, monitor well MW-18 was installed further down-gradient in June of 2010.

PSH recovery operations have been performed at the site since March 2003, initially from hand bailing followed by a recovery system that utilizes skimmers with bladder pumps for PSH recovery. In April of 2010, a pneumatic total fluid pump was installed in monitor well MW-2. Since the total fluid pump increased groundwater production combined with an insignificant increase in PSH production, the total fluids pump was removed from MW-2 in September of 2010 and replaced with a skimmer and bladder pump. Currently, there are six (6) skimmers with bladder pumps operating in monitor wells MW-2, MW-13, MW-14, MW-15, MW-16, and MW-17. Approximately 13 bbls of crude oil was recovered during 2010 and approximately 60 bbls of crude oil has been recovered to date by the remediation system.

1.4 Regulatory Framework

Groundwater analytical data collected from the Deep 6" site is evaluated to the New Mexico Water Quality Control Commission (NMWQCC) groundwater standards outlined below..

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 subsequent sections of this report provide summaries of the groundwater monitoring activities that were conducted at the subject site during the year 2010 as well as analytical results from each groundwater sampling event. Cumulative analytical results for including the four (4) 2010 sampling events are summarized in Table 2, in Appendix B, and Figures 1, 2a through 2d, and 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 2010. 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 groundwater 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 2010 on February 25, June 15, September 14 and 15, and December 14. During all of the groundwater monitoring events, the depths to fluids were measured in all of the monitoring wells (MW-1 through MW-18) using an oil/water interface probe.

During the February and June 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.

A separate groundwater monitoring event was conducted on June 30, 2010 shortly after installation of new monitor well, MW-18. Monitor well, MW-18 was purged a minimum of three (3) casing volumes and a groundwater sample was collected.

During the September and December groundwater monitoring events, twelve (12) monitor wells, (MW-1, MW-3 through MW-12, and MW-18) were purged a minimum of three (3) 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.

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 567 gallons of purged groundwater and decontamination water was generated during the monitoring events of 2010.

Groundwater samples were collected from all monitor wells using dedicated disposable polyethylene bailers. 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.

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 / bladder pump recovery system was installed at the site. Currently, the system utilizes six (6) skimmer bladder pump combinations 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 2010 the quarterly PSH recovery totals are as followed:

- 1st Quarter – 2.83 bbls PSH, 21.16 bbls water
- 2nd Quarter – 3.21 bbls PSH, 246 bbls water
- 3rd Quarter – 1.10 bbls PSH, 354 bbls water
- 4th Quarter – 5.70 bbls PSH, 30 bbls water

Approximately 60 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 potentiometric 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-HCO₃, 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 2010. 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 0.36 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 2010 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 isopleths 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 2010, PSH was observed in monitor wells MW-2 and MW-13 through MW-17. PSH thickness ranged from 0.13 feet to 4.01 feet.
- In June 2010, PSH was observed in monitor wells MW-2 and MW-13 through MW-17. PSH thickness ranged from 0.13 feet to 4.59 feet.
- In September 2010, PSH was observed in monitor wells MW-2 and MW-13 through MW-17. PSH thickness ranged from 0.14 feet to 4.47 feet.
- In December 2010, PSH was observed in monitor wells MW-2 and MW-13 through MW-17. PSH thickness ranged from 0.21 feet to 3.45 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 2010 with overall increases and decreases. The largest increases in PSH thicknesses occurred in monitor well MW-2 of 0.59 ft., which is located near the center of the plume

PSH recovery operations have been performed at the site since March 2003. Currently, there are a total of six (6) skimmers with bladder pumps in operation in monitor wells MW-2, and MW-13, through MW-17. A summary of the historical groundwater and PSH gauging is provided in Table 1. Approximately 60 bbls of PSH have been recovered to date by the PSH recovery system.

3.1.4 Groundwater Sampling Results

During the first quarter February 25, 2010, 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-3, MW-10, and MW-12.
- Toluene concentrations ranged from <0.00100 mg/L to 1.50 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 0.507 mg/L. The ethylbenzene concentration did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any groundwater sample collected.
- Xylene concentrations ranged from <0.00100 mg/L to 0.636 mg/L. The xylene concentrations exceeded the NMWQCC groundwater standard of 0.620 mg/L in groundwater samples collected from monitor well MW-3.

During the second quarter June 15 and 30, 2010, sampling event, groundwater samples were collected from monitor wells MW-1, MW-3 through MW-12 and MW-18. 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 25.3 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, MW-12, and MW-18.
- Toluene concentrations ranged from <0.00100 mg/L to <0.200 mg/L. Toluene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any sampled monitor well.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.759 mg/L. Ethylbenzene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in groundwater samples collected from monitor well MW-10.
- 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 groundwater samples collected from monitor well MW-10.

During the third quarter, September 14-15, 2010 sampling event, groundwater samples were collected from MW-1, MW-3 through MW-12 and MW-18. 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 45.6 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 4.55 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 1.11 mg/L. The ethylbenzene concentration exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater samples collected from monitor wells MW-3 and MW-10.
- Xylene concentrations ranged from <0.00100 mg/L to 1.26 mg/L. The xylene

concentration exceeded the NMWQCC groundwater standard of 0.620 mg/L in the groundwater sample collected from monitor well MW-3.

During the fourth quarter, December 15, 2010, sampling event, groundwater samples were collected from monitor wells MW-1, MW-3 through MW-12 and MW-18. 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 24.8 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, MW-12, and MW-18.
- Toluene concentrations ranged from <0.00100 mg/L to 0.870 mg/L. Toluene concentration exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater sample collected from MW-3.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.387 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 1.69 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.

The dissolved-phase plume is delineated to NMWQCC groundwater standards in all directions except periodically down-gradient monitor well MW-18 exhibits benzene concentrations that have slightly exceeded NMWQCC standards. The laboratory analytical results 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 2010.
- Groundwater levels at the subject site have exhibited a steady decline averaging 0.291 feet for the year 2010 that appears to be associated with a regional trend of declining groundwater levels for the Ogallala Aquifer. Monitor wells impacted with PSH have exhibited increases in groundwater levels averaging 0.124 ft.
- On June 15, 2010, an additional monitor well, MW-18, was installed down-gradient to the east of MW-12 in order to delineate the dissolved-phase plume in the down-gradient direction. Of the two quarterly monitoring events and single monitor well sampling event conducted in 2010 after MW-18 was installed, the benzene concentration in MW-18 has slightly exceeded NMWQCC groundwater standards twice.
- PSH has consistently impacted monitor wells MW-2 and MW-13 through MW-17 during 2010 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, MW-14 and MW-16. Monitor wells MW-13, MW-15 and MW-17 exhibited declines in PSH thicknesses over the year.
- The PSH recovery system has removed approximately twelve (12) bbls of crude oil from the groundwater during 2010 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.

APPENDIX A

Figures

Figure 1 - Site Plan with Proposed Well

Figure 2a - Groundwater Gradient Map - 02/25/2010

Figure 2b - Groundwater Gradient Map - 06/15/2010

Figure 2c - Groundwater Gradient Map – 09/13/2010

Figure 2d - Groundwater Gradient Map - 12/14/2010

Figure 3a - PSH Thickness & Groundwater Concentration Map - 02/25/2010

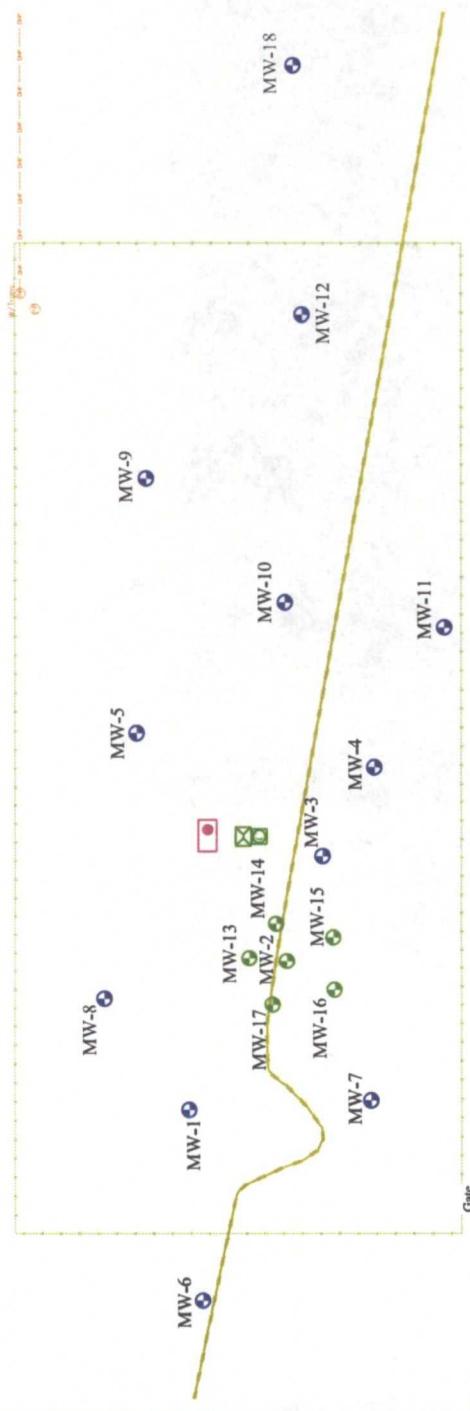
Figure 3b - PSH Thickness & Groundwater Concentration Map - 06/15/2010

Figure 3c - PSH Thickness & Groundwater Concentration Map – 09/13/2010

Figure 3d - PSH Thickness & Groundwater Concentration Map - 12/14/2010



Scale in Feet
0 50 100



Talon/LPE # : 700376.051.01

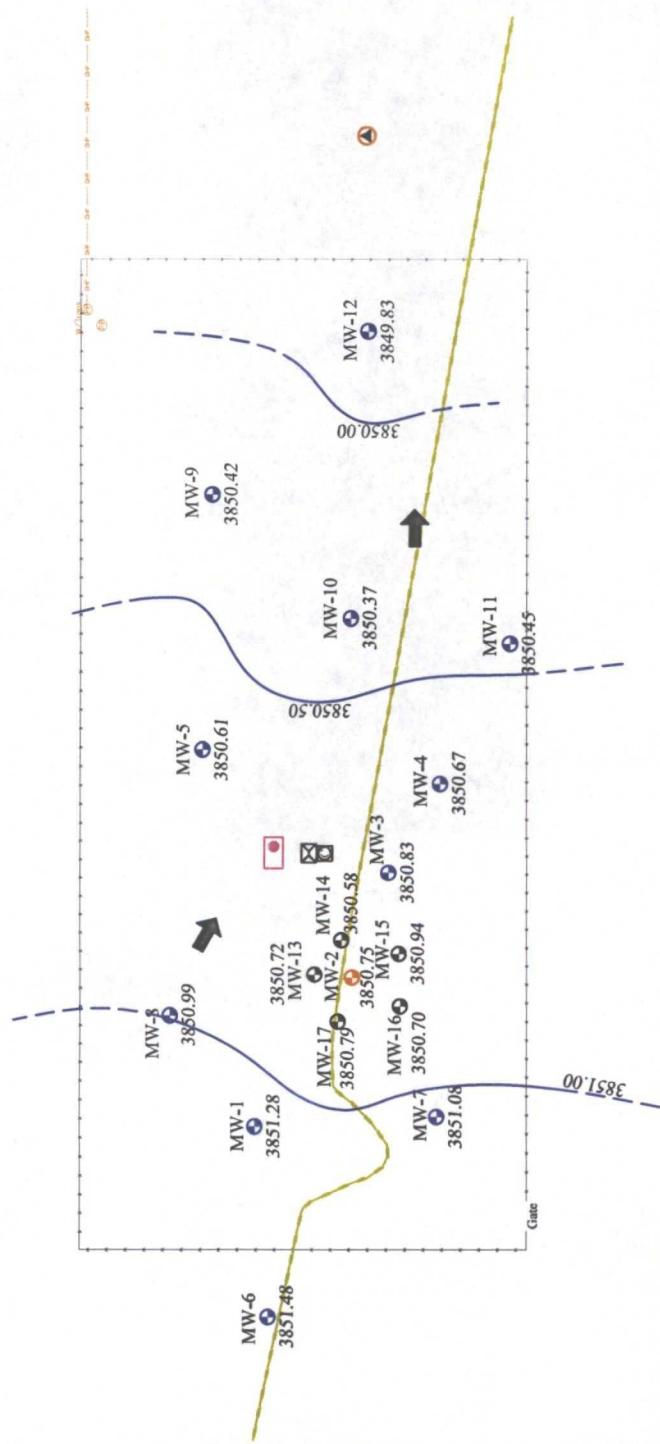
TALON
LPE

Date: 01/11/2011
Scale: 1" = 100'
Drawn By: TJS

Lovington Deep 6"
SRS # 2002-10312, NMOCID REF. # AP-037
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico
Figure 1 - Site Plan



Scale in Feet
0 50 100

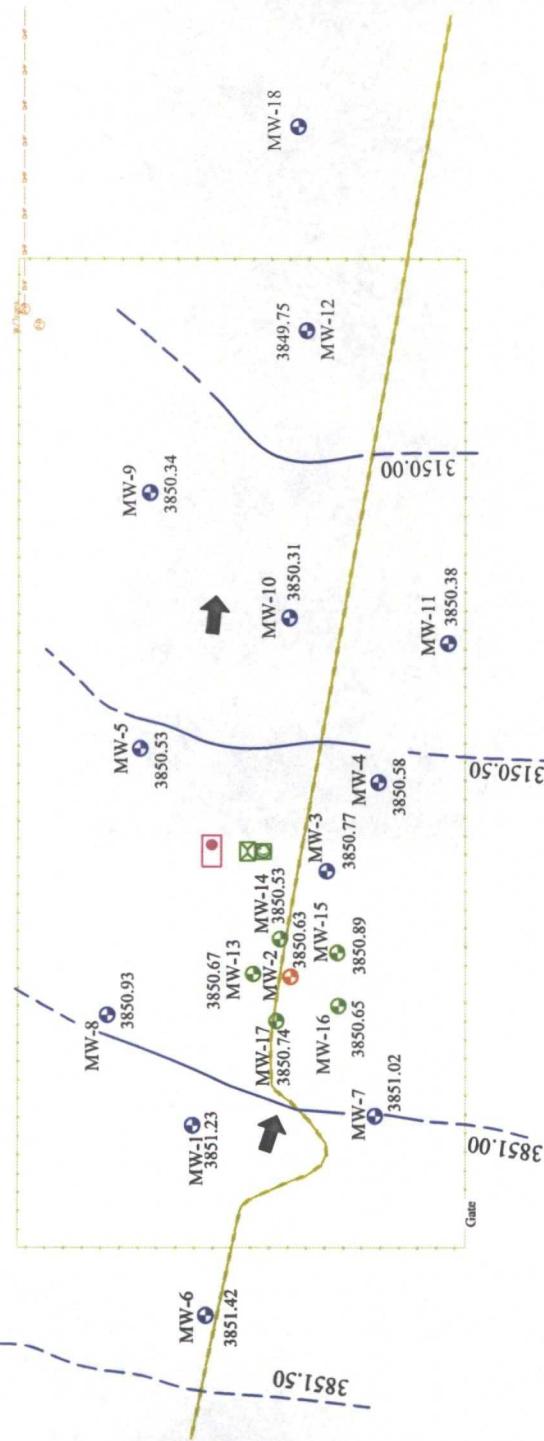
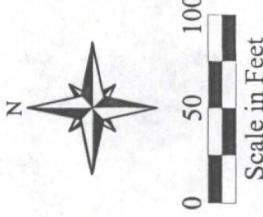


Talon/LPE # : 700376.051.01



Date: 04/02/2010
Scale: 1" = 100'
Drawn By: TJS

Lovington Deep 6"
SRS # 2002-10312, NMOCRD REF. # AP-037
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico
Figure 2a - Groundwater Gradient Map - 02/25/2010



Talon/LPE # : 700376.051.01

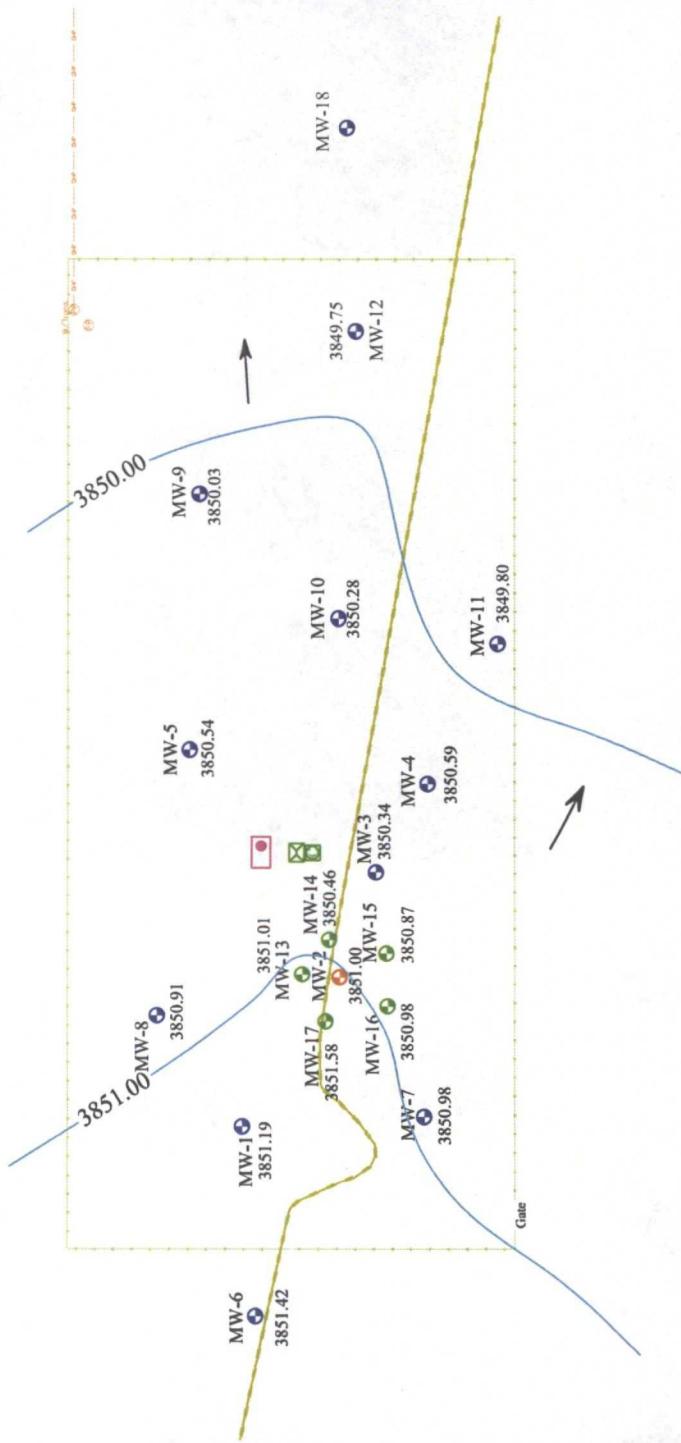


Date: 06/30/2010
Scale: 1" = 100'
Drawn By: TJS

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 2b - Groundwater Gradient Map - 06/15/2010



Scale in Feet
0 50 100



Talon/LPE #: 700376.051.01

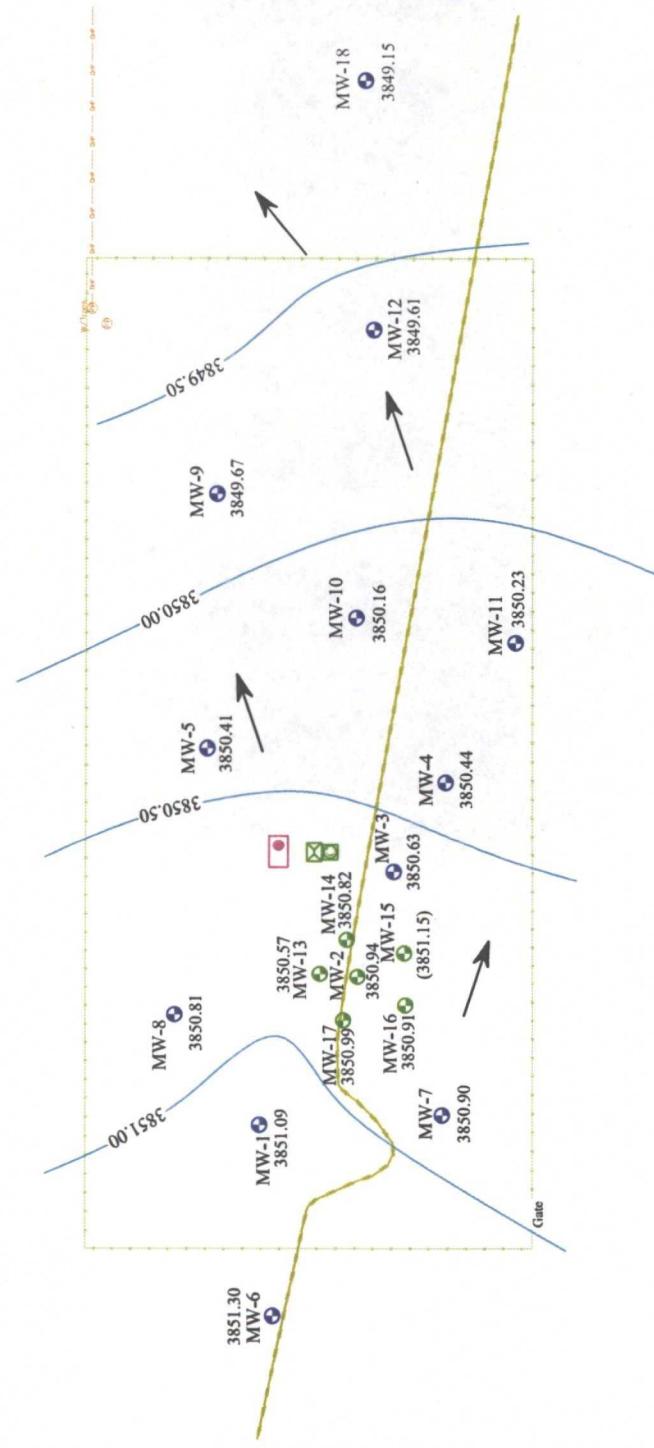
TALON
LPE

Date: 09/29/2010
Scale: 1" = 100'
Drawn By: TJS

Lovington Deep 6"
SRS # 2002-10312, NMOCID REF. # AP-037
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico
Figure 2c - Groundwater Gradient Map - 09/13/2010



Scale in Feet
0 50 100



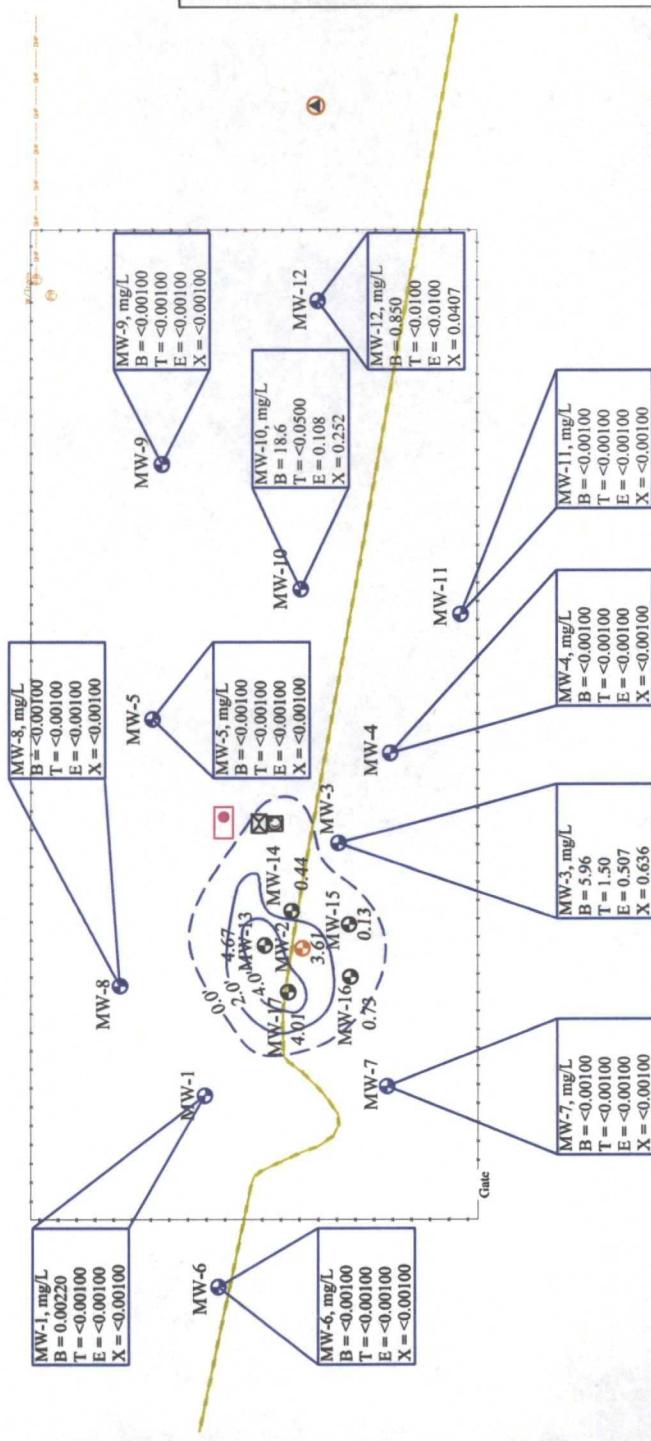
Gradient
0.0034 ft/ft
17.76 ft/mi

Talon/LPE #: 700376.051.01



Date: 12/29/2010
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 - 12/14/2010



Talon/LPE # : 700376.051.01



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

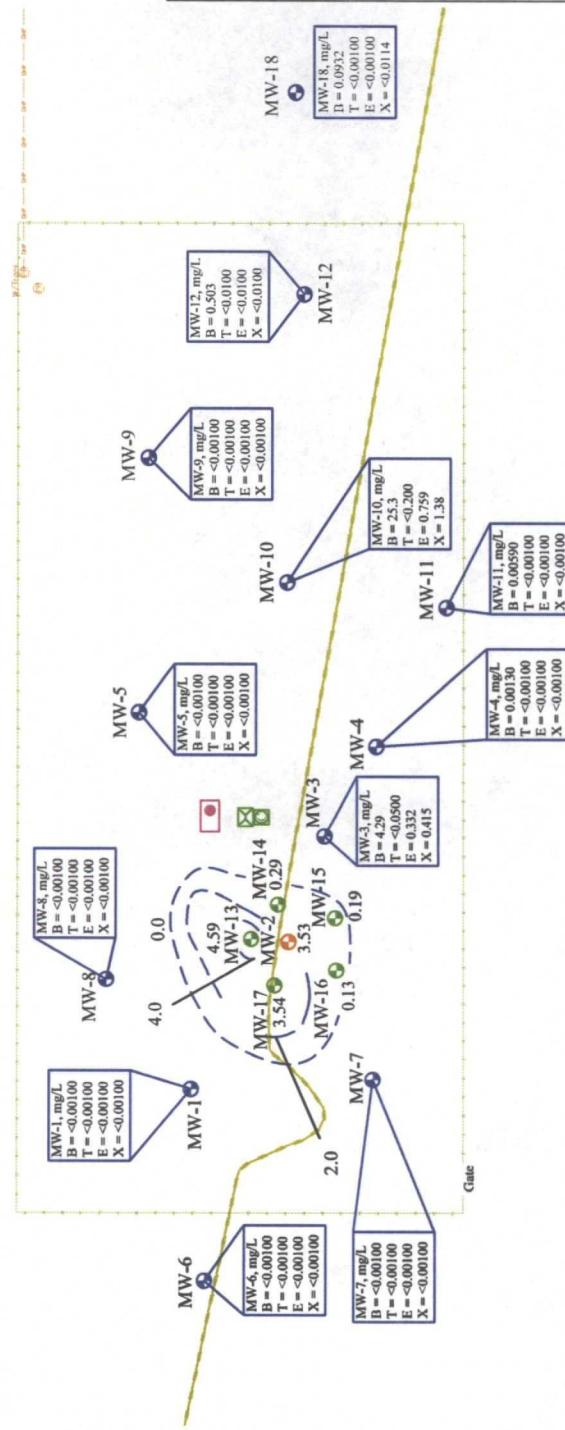
Lovington Deep 6"

SRS # 2002-10312, NMOCRD 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, (02/25/2010)



0 50 100
Scale in Feet

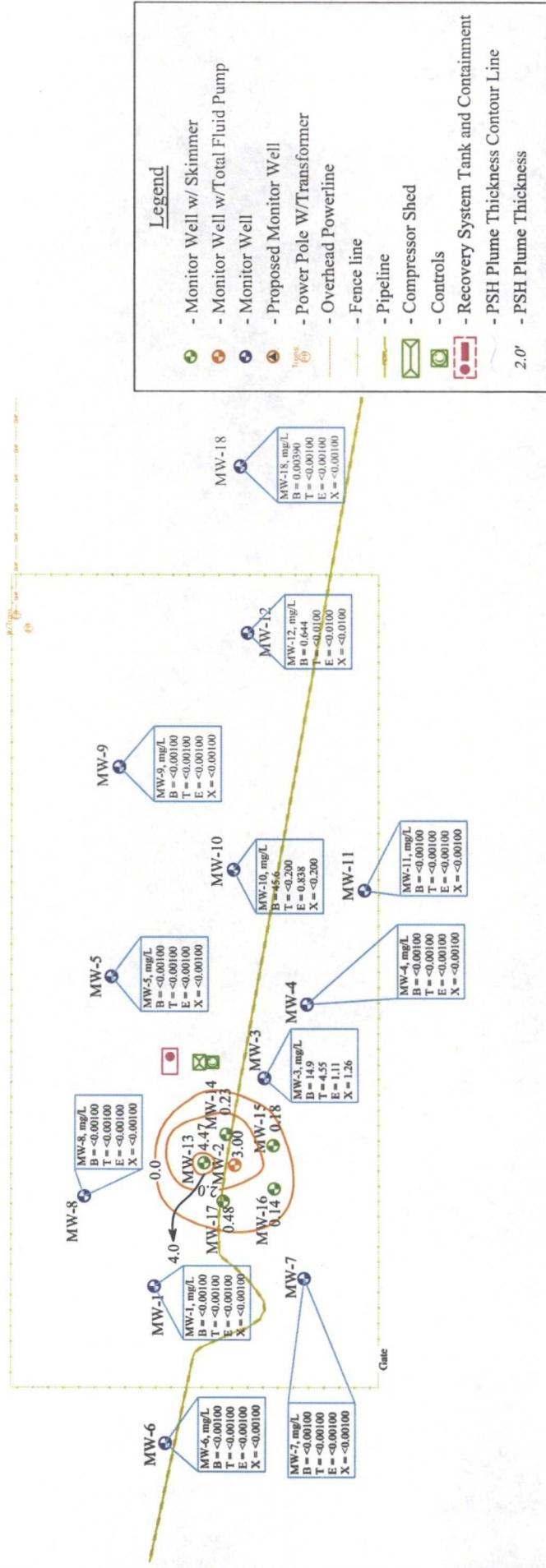


Talon/LPE # : 700376.051.01

Date: 06/30/2010
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, (06/15/2010)



Talon/LPE #: 700376.051.01

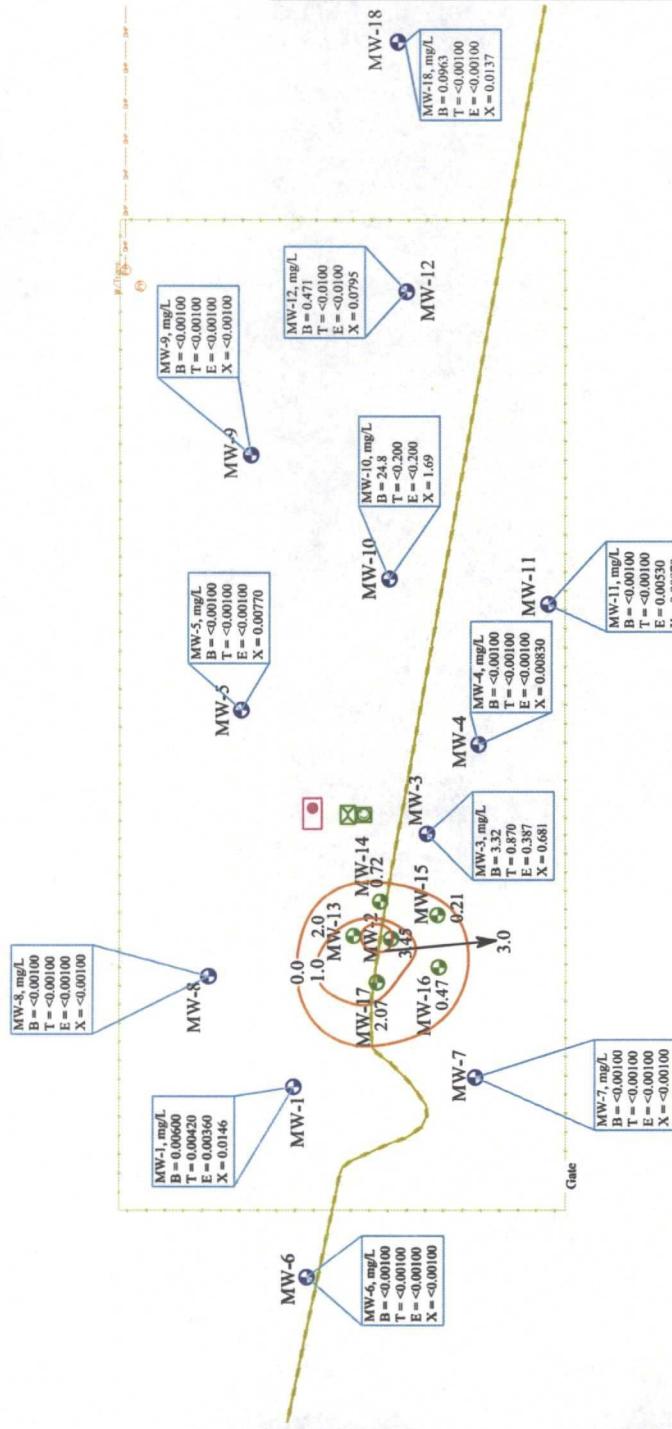
Date: 09/29/2010
Scale: 1" = 100'
Drawn By: TJS



Lovington Deep 6"
SRS # 2002-10312, NMOCRD 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, (09/13/2010)



Scale in Feet
0 50 100



Talon/LPE # : 700376.051.01



Date: 12/29/2010
Scale: 1" = 100'
Drawn By: TJS

Lovington Deep 6"

SRS # 2002-10312, NMOCRD 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, (12/14/2010)

APPENDIX B

Tables

Table 1 - Summary of Historical Fluid Level Measurements

Table 2 - Summary of Groundwater Analytical Results



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



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-1	02/25/10			64.23		3,851.28
MW-1	06/15/10			64.28		3,851.23
MW-1	09/13/10			64.32		3,851.19
MW-1	12/14/10			64.42		3,851.09
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



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	09/23/04		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
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

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	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
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



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	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
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-2	02/25/10		63.69	67.30	3.61	3,850.75
MW-2	06/15/10		63.84	67.27	3.43	3,850.63
MW-2	09/13/10		63.55	66.55	3.00	3,851.00
MW-2	12/14/10		63.53	66.98	3.45	3,850.94
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



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	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
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



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	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
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



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	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-3	02/25/10			64.41		3,850.83
MW-3	06/15/10			64.47		3,850.77
MW-3	09/13/10			64.90		3,850.34
MW-3	12/14/10			64.61		3,850.63
MW-4	03/04/03	3,915.30		64.25		3,851.05
MW-4	09/18/03			64.35		3,850.95
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



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	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
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



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	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
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-4	02/25/10			64.63		3,850.67
MW-4	06/15/10			64.72		3,850.58
MW-4	09/13/10			64.71		3,850.59
MW-4	12/14/10			64.86		3,850.44
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



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	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
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



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	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
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-5	02/25/10			64.65		3,850.61



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	06/15/10			64.73		3,850.53
MW-5	09/13/10			64.72		3,850.54
MW-5	12/14/10			64.85		3,850.41
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
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



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	12/27/06			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
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



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	02/25/10			63.97		3,851.48
MW-6	06/15/10			64.03		3,851.42
MW-6	09/13/10			64.03		3,851.42
MW-6	12/14/10			64.15		3,851.30
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
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



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	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
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



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	12/15/09			63.62		3,851.11
MW-7	02/25/10			63.65		3,851.08
MW-7	06/15/10			63.71		3,851.02
MW-7	09/13/10			63.75		3,850.98
MW-7	12/14/10			63.83		3,850.90
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
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



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	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
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



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	06/04/09			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-8	02/25/10			64.20		3,850.99
MW-8	06/15/10			64.26		3,850.93
MW-8	09/13/10			64.28		3,850.91
MW-8	12/14/10			64.38		3,850.81
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
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



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	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
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



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	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-9	02/25/10			63.50		3,850.42
MW-9	06/15/10			63.58		3,850.34
MW-9	09/13/10			63.89		3,850.03
MW-9	12/14/10			64.25		3,849.67
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



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



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-10	02/25/10		64.59			3,850.37
MW-10	06/15/10		64.65			3,850.31
MW-10	09/13/10		64.68			3,850.28
MW-10	12/14/10		64.80			3,850.16
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

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	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
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



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	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
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	12/1/15			63.91		3,850.49
MW-11	02/25/10			63.95		3,850.45
MW-11	06/15/10			64.02		3,850.38
MW-11	09/13/10			64.60		3,849.80
MW-11	12/14/10			64.17		3,850.23
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		



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	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
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-12	02/25/10			64.14		3,849.83
MW-12	06/15/10			64.22		3,849.75
MW-12	09/13/10			64.22		3,849.75
MW-12	12/14/10			64.36		3,849.61
MW-13	07/07/06		63.35	67.01	3.66	
MW-13	07/14/06		63.37	67.00	3.63	



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	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	
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



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	12/03/07		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
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-13	02/25/10		64.34	69.01	4.67	3,850.72
MW-13	06/15/10		64.40	68.99	4.59	3,850.67
MW-13	09/13/10		64.08	68.55	4.47	3,851.01
MW-13	12/14/10		64.93	66.93	2.00	3,850.57
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	



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	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	
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



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	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
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-14	02/25/10		65.07	65.51	0.44	3,850.58
MW-14	06/15/10		65.14	65.43	0.29	3,850.53
MW-14	09/13/10		65.22	65.45	0.23	3,850.46
MW-14	12/14/10		64.78	65.50	0.72	3,850.82
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		



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	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
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



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	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-15	02/25/10		64.88	65.01	0.13	3,850.94
MW-15	06/15/10		64.92	65.11	0.19	3,850.89
MW-15	09/13/10		64.94	65.12	0.18	3,850.87
MW-15	12/14/10		64.66	64.87	0.21	3,851.15
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	
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	



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	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
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



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	04/16/09		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-16	02/25/10		64.61	65.34	0.73	3,850.70
MW-16	06/15/10		64.76	64.89	0.13	3,850.65
MW-16	09/13/10		64.43	64.57	0.14	3,850.98
MW-16	12/14/10		64.44	64.91	0.47	3,850.91
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	
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	



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	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
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
MW-17	02/25/10		64.14	68.15	4.01	3,850.79
MW-17	06/15/10		64.27	67.81	3.54	3,850.74



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	09/13/10		63.93	64.41	0.48	3,851.58
MW-17	12/14/10		64.26	66.33	2.07	3,850.99
MW-18	06/15/10					
MW-18	09/28/10	3,912.90				
MW-18	09/13/10			63.64		3,849.26
MW-18	12/14/10			63.75		3,849.15

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



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	Total BTEX
MW-1	03/04/03	0.135	0.0638	0.0588	0.0166	0.2742
MW-1	09/18/03	0.00928	2.86	<0.00100	<0.00200	2.86928
MW-1	06/04/04	0.0559	0.0212	0.00262	0.00573	0.08545
MW-1	09/10/04	0.0247	0.00365	<0.00100	0.00321	0.03156
MW-1	12/13/04	0.00137	0.00267	<0.00100	0.00245	0.00649
MW-1	03/30/05	<0.00100	<0.00100	<0.00100	<0.00300	<0.00300
MW-1	05/20/05	<0.00100	<0.00100	<0.00100	<0.00300	<0.00300
MW-1	08/23/05	<0.00100	<0.00100	<0.00100	<0.00300	<0.00300
MW-1	11/22/05	<0.00100	<0.00100	<0.00100	<0.00300	<0.00300
MW-1	02/17/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-1	05/30/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-1	08/08/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-1	11/20/06	0.00105	<0.00100	<0.00100	<0.00200	<0.00200
MW-1	04/04/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200
MW-1	06/19/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200
MW-1	09/19/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200
MW-1	12/04/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200
MW-1	03/18/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200
MW-1	06/26/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200
MW-1	09/20/08	0.00610	0.00250	<0.00100	<0.00100	0.00860
MW-1	12/23/08	0.00140	<0.00100	<0.00100	<0.00100	0.00140
MW-1	02/26/09	0.150	0.0114	0.0131	0.0259	0.2004
MW-1	06/04/09	0.0174	<0.00100	0.00670	<0.00100	0.0241
MW-1	08/19/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-1	12/16/09	<0.00100	<0.00100	0.00100	0.00330	0.00430
MW-1	02/25/10	0.00220	<0.00100	0.00100	0.00330	0.00430
MW-1	06/15/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-1	09/14/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-1	12/14/10	0.00600	0.00420	0.00360	0.01460	0.02840
MW-2	03/04/03	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	09/18/03	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	06/04/04	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	09/10/04	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	12/13/04	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	03/30/05	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	05/20/05	Not Sampled Due to Presence of Phase Separated Hydrocarbons				



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	Total BTEX
MW-2	08/23/05	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	11/22/05	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	05/30/06	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	08/08/06	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	11/20/06	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	04/04/07	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	06/19/07	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	09/19/07	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	12/04/07	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	03/18/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	06/26/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	09/20/08	15.4	7.25	0.975	2.52	26.1
MW-2	12/23/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	02/26/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	06/04/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	08/19/09	22.6	16.6	2.56	7.54	52.3
MW-2	12/16/09	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	02/25/10	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	06/15/10	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	09/14/10	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	12/14/10	Not Sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	03/04/03	7.48	4.667	0.669	1.820	14.64
MW-3	09/18/03	9.4	114	0.782	0.558	124.7
MW-3	06/04/04	4.6	2.87	0.541	1.07	9.1
MW-3	09/10/04	7.21	0.0733	0.833	0.000396	8.12
MW-3	12/13/04	16.1	0.747	4.0	1.47	22.3
MW-3	03/30/05	4.41	0.376	0.403	0.284	5.47
MW-3	05/20/05	25.7	0.744	2.3	1.837	30.6
MW-3	08/23/05	6.15	0.0763	0.58	0.0267	6.76
MW-3	11/22/05	9.97	0.486	0.586	0.254	11.30
MW-3	02/17/06	1.33	76.9	0.091	<0.100	78.321
MW-3	05/30/06	23.0	8.33	1.25	2.163	34.743
MW-3	08/08/06	13.7	3.66	0.881	1.868	20.109
MW-3	04/04/07	18.9	0.907	1.97	5.98	27.757
MW-3	06/19/07	14.2	0.707	1.32	3.02	19.247



TABLE 2
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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	Total BTEX
MW-3	09/19/07	10.8	0.679	1.06	2.00	14.539
MW-3	12/04/07	12.2	0.762	1.16	1.78	15.902
MW-3	03/18/08	12.4	1.65	0.646	1.18	15.876
MW-3	06/26/08	11.2	1.410	0.655	0.775	14.040
MW-3	09/20/08	12.4	1.19	0.782	0.714	15.086
MW-3	12/23/08	7.97	0.437	0.412	0.294	9.113
MW-3	02/26/09	9.87	1.02	0.990	1.38	13.260
MW-3	06/04/09	6.39	0.515	0.380	<0.0500	7.285
MW-3	08/19/09	7.99	0.971	0.607	0.656	10.224
MW-3	12/16/09	6.09	0.568	0.316	0.129	7.103
MW-3	02/25/10	5.96	1.500	0.507	0.636	8.603
MW-3	06/15/10	4.29	<0.0500	0.332	0.415	5.037
MW-3	09/14/10	14.9	4.55	1.11	1.26	21.820
MW-3	12/14/10	3.32	0.870	0.387	0.081	4.658
MW-4	03/04/03	0.0385	0.0362	<0.00100	0.0015	0.0762
MW-4	09/18/03	0.00124	<0.00100	<0.00100	<0.00200	0.00124
MW-4	06/04/04	0.0262	0.00116	<0.00100	<0.00200	0.02736
MW-4	09/10/04	0.00101	<0.00100	<0.00100	<0.00200	0.00101
MW-4	12/13/04	0.00523	<0.00100	<0.00100	<0.00200	0.00523
MW-4	03/30/05	0.00389	<0.00100	<0.00100	<0.00200	0.00389
MW-4	05/20/05	0.00109	<0.00100	<0.00100	<0.00200	0.00109
MW-4	08/23/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-4	11/22/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-4	02/17/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-4	05/30/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-4	08/08/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-4	11/20/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-4	04/04/07	0.634	<0.100	0.152	<0.100	0.786
MW-4	06/19/07	0.414	0.0347	0.133	0.0151	0.597
MW-4	09/19/07	0.0179	<0.00500	<0.00500	<0.00500	0.0179
MW-4	12/04/07	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
MW-4	03/18/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-4	06/26/08	0.0353	0.00370	0.00230	0.00290	0.0442
MW-4	09/20/08	0.0757	0.00930	0.00620	0.00720	0.0984
MW-4	12/23/08	0.00610	<0.00100	<0.00100	<0.00100	0.00610



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	Total BTEX
MW-4	02/26/09	0.0168	<0.00100	<0.00100	<0.00100	0.0168
MW-4	06/04/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-4	08/19/09	0.00430	<0.00100	<0.00100	<0.00100	0.00430
MW-4	12/16/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-4	02/25/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-4	06/15/10	0.00130	<0.00100	<0.00100	<0.00100	0.0013
MW-4	09/14/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-4	12/14/10	<0.00100	<0.00100	<0.00100	0.00830	0.00830
MW-5	03/04/03	0.049	0.672	<0.00500	<0.010	0.721
MW-5	09/18/03	0.00312	<0.00100	<0.00100	<0.00200	0.00312
MW-5	06/04/04	0.0295	0.00184	<0.00100	<0.00200	0.03134
MW-5	09/10/04	0.00146	<0.00100	<0.00100	<0.00200	0.00146
MW-5	12/13/04	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-5	03/30/05	0.00217	<0.00100	<0.00100	<0.00200	0.00217
MW-5	05/20/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-5	08/23/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-5	11/22/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-5	02/17/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-5	05/30/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-5	08/08/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-5	11/20/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-5	04/04/07	<0.00100	<0.00100	0.00150	<0.00100	<0.00100
MW-5	06/19/07	0.00540	<0.00100	0.00770	<0.00100	0.01310
MW-5	09/19/07	0.0383	<0.00100	0.0724	<0.00100	0.1107
MW-5	12/04/07	0.0628	<0.00100	0.0894	<0.00100	0.1522
MW-5	03/18/08	0.0335	<0.00100	<0.00100	0.0492	0.0827
MW-5	06/26/08	0.0525	0.00350	0.00250	0.0267	0.0852
MW-5	09/20/08	0.0653	0.00580	0.00390	0.0469	0.1219
MW-5	12/23/08	0.00360	<0.00100	<0.00100	0.0117	0.01530
MW-5	02/26/09	0.0114	<0.00100	<0.00100	0.0271	0.0385
MW-5	06/04/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-5	08/19/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-5	12/16/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-5	02/25/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-5	06/15/10	<0.00100	<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	Total BTEX
MW-5	09/14/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-5	12/14/10	<0.00100	<0.00100	<0.00100	0.00770	0.00770
MW-6	12/13/04	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-6	03/30/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-6	05/20/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-6	08/23/05	<0.00100	0.00112	<0.00100	<0.00200	0.00112
MW-6	11/22/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-6	02/17/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-6	05/30/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-6	08/08/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-6	11/20/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-6	04/04/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	06/19/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	09/19/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	12/04/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	03/18/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	06/26/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	09/20/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	12/23/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	06/04/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	08/19/09	0.0145	0.00680	<0.00100	<0.00100	0.0213
MW-6	12/16/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	02/25/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	06/15/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	09/15/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	12/14/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	12/13/04	0.0434	0.0212	0.0022	0.00893	0.07573
MW-7	03/30/05	0.00532	0.00265	<0.00100	<0.00200	0.00797
MW-7	05/20/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-7	08/23/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-7	11/22/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-7	02/17/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-7	05/30/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-7	08/08/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200



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	Total BTEX
MW-7	11/20/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-7	04/04/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	06/19/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	09/19/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	12/04/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	03/18/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	06/26/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	09/20/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	12/23/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	02/26/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	06/04/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	08/19/09	0.0344	0.00870	0.0100	0.0197	0.0728
MW-7	12/16/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	02/25/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	06/15/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	09/15/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	12/14/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	12/13/04	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-8	03/30/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-8	05/20/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-8	08/23/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-8	11/22/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-8	02/17/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-8	05/30/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-8	08/08/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-8	11/20/06	0.00134	<0.00100	<0.00100	<0.00200	0.00134
MW-8	04/04/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	06/19/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	09/19/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	12/04/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	03/18/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	06/26/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	09/20/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	12/23/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	02/26/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100



TABLE 2
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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	Total BTEX
MW-8	06/04/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	08/19/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	12/16/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	02/25/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	06/15/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	09/15/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	12/14/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	12/13/04	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-9	03/30/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-9	05/20/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-9	08/23/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-9	11/22/05	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-9	02/17/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-9	05/30/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-9	08/08/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-9	11/20/06	0.00125	<0.00100	<0.00100	<0.00200	0.00125
MW-9	04/04/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	06/19/07	0.00410	0.00230	0.00360	<0.00100	0.01000
MW-9	09/19/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	12/04/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	03/18/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	06/26/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	09/20/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	12/23/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	02/26/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	06/04/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	08/19/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	12/16/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	02/25/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	06/15/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	09/15/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	12/14/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-10	12/13/04	14.2	10.5	0.628	1.42	26.748
MW-10	03/30/05	13.9	1.64	0.901	1.95	18.391



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	Total BTEX
MW-10	05/20/05	10.9	1.57	0.833	1.454	14.757
MW-10	08/23/05	12.2	1.39	0.858	1.188	15.636
MW-10	11/22/05	0.116	0.889	0.578	0.742	2.325
MW-10	02/17/06	17.2	3.85	0.981	1.139	23.170
MW-10	05/30/06	13.0	0.40	0.804	0.625	14.826
MW-10	08/08/06	11.2	0.02	0.710	1.030	12.957
MW-10	11/20/06	9.6	<50	0.705	<0.100	10.275
MW-10	04/04/07	10.4	0.458	<0.200	<0.200	10.858
MW-10	06/19/07	11.5	0.424	0.230	<0.100	12.154
MW-10	09/19/07	8.05	0.312	0.133	<0.100	8.495
MW-10	12/04/07	11.1	0.275	0.185	<0.0500	11.560
MW-10	03/18/08	9.80	<0.100	0.194	0.184	10.178
MW-10	06/26/08	8.7	<0.0500	0.159	0.0964	8.955
MW-10	09/20/08	7.7	<0.0500	<0.0500	<0.0500	7.700
MW-10	12/23/08	10.2	<0.0500	0.0955	0.0973	10.393
MW-10	02/26/09	14	<0.0500	<0.0500	1.21	15.210
MW-10	06/04/09	18.6	<0.0500	0.233	<0.0500	18.833
MW-10	08/19/09	16.9	<0.0500	0.446	0.981	18.327
MW-10	12/16/09	15.9	<0.0500	0.0988	<0.0500	15.999
MW-10	02/25/10	18.0	<0.0500	0.108	0.252	18.360
MW-10	06/15/10	25.3	<0.200	0.759	1.38	28.439
MW-10	09/15/10	45.6	<0.200	0.838	<0.200	46.438
MW-10	12/14/10	24.8	<0.200	<0.200	1.69	26.490
MW-11	12/13/04	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-11	03/30/05	0.00307	<0.00100	<0.00100	<0.00200	0.00307
MW-11	05/20/05	0.00178	<0.00100	<0.00100	<0.00200	0.00178
MW-11	08/23/05	0.00148	<0.00100	<0.00100	<0.00200	0.00148
MW-11	11/22/05	0.00113	<0.00100	<0.00100	<0.00200	0.00113
MW-11	02/17/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-11	05/30/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-11	11/20/06	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200
MW-11	04/04/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-11	06/19/07	0.00310	<0.00100	<0.00100	<0.00100	0.0031
MW-11	09/19/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-11	12/04/07	<0.00100	<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	Total BTEX
MW-11	03/18/08	<0.00100	<0.00100	<0.00100	0.00120	0.0012
MW-11	06/26/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-11	09/20/08	0.00110	<0.00100	<0.00100	<0.00100	0.0011
MW-11	12/23/08	0.106	<0.00100	0.00210	0.00160	0.110
MW-11	02/26/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-11	06/04/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-11	08/19/09	0.00760	<0.00100	<0.00100	<0.00100	0.0076
MW-11	12/16/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-11	02/25/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-11	06/15/10	0.00590	<0.00100	<0.00100	<0.00100	0.0059
MW-11	09/15/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-11	12/14/10	<0.00100	<0.00100	0.00530	0.00970	0.01500
MW-12		Well Installed July 2006				
MW-12	08/08/06	0.00104	<0.00100	<0.00100	<0.00200	0.00104
MW-12	11/20/06	0.00547	<0.00100	<0.00100	<0.00200	0.00547
MW-12	04/04/07	0.172	0.0328	0.0231	<0.00100	0.228
MW-12	06/19/07	0.298	0.0562	0.0381	<0.00100	0.392
MW-12	09/19/07	0.264	0.0447	0.0203	<0.00100	0.329
MW-12	12/04/07	0.420	0.0668	0.0400	<0.0100	0.527
MW-12	03/18/08	0.559	<0.0100	0.0726	0.0373	0.669
MW-12	06/26/08	0.701	<0.00500	0.0584	0.0503	0.810
MW-12	09/20/08	0.791	<0.0150	0.0478	0.0517	0.891
MW-12	12/23/08	0.840	<0.0100	0.0372	0.0452	0.922
MW-12	02/26/09	0.880	<0.0100	<0.0100	0.247	1.127
MW-12	06/04/09	0.781	<0.0100	<0.0100	0.0563	0.837
MW-12	08/19/09	0.732	0.0889	<0.0100	0.235	1.056
MW-12	12/16/09	0.692	<0.00100	<0.00100	<0.00100	0.692
MW-12	02/25/10	0.850	<0.00100	<0.00100	0.041	0.891
MW-12	06/15/10	0.503	<0.00100	<0.00100	<0.00100	0.503
MW-12	09/15/10	0.644	<0.0100	<0.0100	<0.0100	0.644
MW-12	12/14/10	0.471	<0.0100	<0.0100	0.795	1.266
MW-13		Well Installed July 2006				
MW-13	08/08/06	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	11/20/06	Not sampled Due to Presence of Phase Separated Hydrocarbons				



TABLE 2
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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	Total BTEX
MW-13	04/04/07					
MW-13	06/19/07					
MW-13	09/19/07					
MW-13	12/04/07					
MW-13	03/18/08					
MW-13	06/26/08					
MW-13	09/20/08	12.7	8.43	1.10	2.89	25.1
MW-13	12/23/08					
MW-13	02/26/09					
MW-13	06/04/09					
MW-13	08/19/09	16.0	12.4	2.09	5.88	36.37
MW-13	12/16/09					
MW-13	02/25/10					
MW-13	06/15/10					
MW-13	09/15/10					
MW-13	12/14/10					
MW-14		Well Installed July 2006				
MW-14	08/08/06					
MW-14	11/20/06					
MW-14	04/04/07					
MW-14	06/19/07					
MW-14	09/19/07					
MW-14	12/04/07					
MW-14	03/18/08					
MW-14	06/26/08					
MW-14	09/20/08	14.5	8.66	1.10	2.76	27.0
MW-14	12/23/08					
MW-14	02/26/09					
MW-14	06/04/09					
MW-14	08/19/09	11.0	5.70	1.04	2.95	20.69
MW-14	12/16/09					
MW-14	02/25/10					
MW-14	06/15/10					
MW-14	09/15/10					
MW-14	12/14/10					



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	Total BTEX
MW-15	05/30/06					
MW-15	08/08/06	13.0	8.21	0.41	2.54	24.16
MW-15	11/20/06	15.8	5.74	0.94	2.90	25.38
MW-15	04/04/07					
MW-15	06/19/07					
MW-15	09/19/07					
MW-15	12/04/07					
MW-15	03/18/08					
MW-15	06/26/08					
MW-15	09/20/08	4.87	2.17	0.480	1.43	8.950
MW-15	12/23/08					
MW-15	02/26/09					
MW-15	06/04/09					
MW-15	08/19/09	4.42	1.66	0.786	2.25	9.12
MW-15	12/16/09					
MW-15	02/25/10					
MW-15	06/15/10					
MW-15	09/15/10					
MW-15	12/14/10					
MW-16						
MW-16	08/08/06					
MW-16	11/20/06					
MW-16	04/04/07					
MW-16	06/19/07					
MW-16	09/19/07					
MW-16	12/04/07					
MW-16	03/18/08					
MW-16	06/26/08					
MW-16	09/20/08	3.45	2.63	0.476	1.21	7.77
MW-16	12/23/08					
MW-16	02/26/09					
MW-16	06/04/09					
MW-16	08/19/09	3.20	2.72	0.603	1.78	8.303
MW-16	12/16/09					



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	Total BTEX
MW-16	02/25/10					
MW-16	06/15/10					
MW-16	09/15/10					
MW-16	12/14/10					
MW-17		Well Installed July 2006				
MW-17	08/08/06					
MW-17	11/20/06					
MW-17	04/04/07					
MW-17	06/19/07					
MW-17	09/19/07					
MW-17	12/04/07					
MW-17	03/18/08					
MW-17	06/26/08					
MW-17	09/20/08	14.5	9.60	1.04	2.63	27.8
MW-17	12/23/08					
MW-17	02/26/09					
MW-17	06/04/09					
MW-17	08/19/09	13.5	10.5	1.38	3.92	29.3
MW-17	12/16/09					
MW-17	02/25/10					
MW-17	06/15/10					
MW-17	09/15/10					
MW-17	12/14/10					
MW-18	06/15/10	Well Installed June 2010				
MW-18	06/30/10	0.0932	<0.00100	<0.00100	0.0114	0.1046
MW-18	09/14/10	0.0039	<0.00100	<0.00100	<0.00100	0.0039
MW-18	12/14/10	0.0963	<0.00100	<0.00100	0.0137	0.110
NMWQCC Remedial Limit		0.010	0.750	0.750	0.620	NA

¹ Bolded values are in excess of the NMWQCC Remediation Thresholds

BTEX analyzed by EPA Method 8021B

APPENDIX C

Laboratory Analytical Data Reports and Chains of Custody Documentation

Summary Report

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

Report Date: March 3, 2010

Work Order: 10030104



Project Location: Lovington, NM
 Project Name: Deep 6 in.
 Project Number: 700376.051.01

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
223852	MW-1	water	2010-02-25	16:54	2010-02-26
223853	MW-3	water	2010-02-25	17:28	2010-02-26
223854	MW-4	water	2010-02-25	17:24	2010-02-26
223855	MW-5	water	2010-02-25	17:00	2010-02-26
223856	MW-6	water	2010-02-25	16:32	2010-02-26
223857	MW-7	water	2010-02-25	16:51	2010-02-26
223858	MW-8	water	2010-02-25	16:39	2010-02-26
223859	MW-9	water	2010-02-25	17:05	2010-02-26
223860	MW-10	water	2010-02-25	17:16	2010-02-26
223861	MW-11	water	2010-02-25	17:20	2010-02-26
223862	MW-12	water	2010-02-25	17:11	2010-02-26

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
223852 - MW-1	0.00220	<0.00100	<0.00100	<0.00100
223853 - MW-3	5.96	1.50	0.507	0.636
223854 - MW-4	<0.00100	<0.00100	<0.00100	<0.00100
223855 - MW-5	<0.00100	<0.00100	<0.00100	<0.00100
223856 - MW-6	<0.00100	<0.00100	<0.00100	<0.00100
223857 - MW-7	<0.00100	<0.00100	<0.00100	<0.00100
223858 - MW-8	<0.00100	<0.00100	<0.00100	<0.00100
223859 - MW-9	<0.00100	<0.00100	<0.00100	<0.00100
223860 - MW-10	18.6	<0.0500	0.108	0.252
223861 - MW-11	<0.00100	<0.00100	<0.00100	<0.00100
223862 - MW-12	0.850	<0.0100	<0.0100	0.0407

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
NCTRCA WFWB38444Y0909

DBE: VN 20657

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: March 3, 2010

Work Order: 10030104



Project Location: Lovington, NM
Project Name: Deep 6 in.
Project Number: 700376.051.01

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
223852	MW-1	water	2010-02-25	16:54	2010-02-26
223853	MW-3	water	2010-02-25	17:28	2010-02-26
223854	MW-4	water	2010-02-25	17:24	2010-02-26
223855	MW-5	water	2010-02-25	17:00	2010-02-26
223856	MW-6	water	2010-02-25	16:32	2010-02-26
223857	MW-7	water	2010-02-25	16:51	2010-02-26
223858	MW-8	water	2010-02-25	16:39	2010-02-26
223859	MW-9	water	2010-02-25	17:05	2010-02-26
223860	MW-10	water	2010-02-25	17:16	2010-02-26
223861	MW-11	water	2010-02-25	17:20	2010-02-26
223862	MW-12	water	2010-02-25	17:11	2010-02-26

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 13 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 in. were received by TraceAnalysis, Inc. on 2010-02-26 and assigned to work order 10030104. Samples for work order 10030104 were received intact without headspace and at a temperature of 3.8 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	58101	2010-03-01 at 15:45	67911	2010-03-01 at 17:11
BTEX	S 8021B	58117	2010-03-02 at 10:00	67927	2010-03-02 at 08:03

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 10030104 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.

Report Date: March 3, 2010
700376.051.01

Work Order: 10030104
Deep 6 in.

Page Number: 4 of 13
Lovington, NM

Analytical Report

Sample: 223852 - MW-1

Laboratory: Midland
Analysis: BTEX
QC Batch: 67911
Prep Batch: 58101

Analytical Method: S 8021B
Date Analyzed: 2010-03-01
Sample Preparation: 2010-03-01

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.00220	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)		0.0902	mg/L	1	0.100	90	65.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0802	mg/L	1	0.100	80	51.1 - 118.8

Sample: 223853 - MW-3

Laboratory: Midland
Analysis: BTEX
QC Batch: 67911
Prep Batch: 58101

Analytical Method: S 8021B
Date Analyzed: 2010-03-01
Sample Preparation: 2010-03-01

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	Result	Units	Dilution	RL
Benzene		5.96	mg/L	50	0.00100
Toluene		1.50	mg/L	50	0.00100
Ethylbenzene		0.507	mg/L	50	0.00100
Xylene		0.636	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.39	mg/L	50	5.00	88	65.9 - 129.8
4-Bromofluorobenzene (4-BFB)		4.28	mg/L	50	5.00	86	51.1 - 118.8

Sample: 223854 - MW-4

Laboratory: Midland
Analysis: BTEX
QC Batch: 67911
Prep Batch: 58101

Analytical Method: S 8021B
Date Analyzed: 2010-03-01
Sample Preparation: 2010-03-01

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

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Parameter	Flag	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)		0.102	mg/L	1	0.100	102	65.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0945	mg/L	1	0.100	94	51.1 - 118.8

Sample: 223855 - MW-5

Laboratory: Midland
Analysis: BTEX
QC Batch: 67911
Prep Batch: 58101

Analytical Method: S 8021B
Date Analyzed: 2010-03-01
Sample Preparation: 2010-03-01

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	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)		0.0922	mg/L	1	0.100	92	65.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0848	mg/L	1	0.100	85	51.1 - 118.8

Sample: 223856 - MW-6

Laboratory: Midland
Analysis: BTEX
QC Batch: 67911
Prep Batch: 58101

Analytical Method: S 8021B
Date Analyzed: 2010-03-01
Sample Preparation: 2010-03-01

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	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

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0906	mg/L	1	0.100	91	65.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0815	mg/L	1	0.100	82	51.1 - 118.8

Sample: 223857 - MW-7

Laboratory: Midland
Analysis: BTEX
QC Batch: 67911
Prep Batch: 58101

Analytical Method: S 8021B
Date Analyzed: 2010-03-01
Sample Preparation: 2010-03-01

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	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	65.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0902	mg/L	1	0.100	90	51.1 - 118.8

Sample: 223858 - MW-8

Laboratory: Midland
Analysis: BTEX
QC Batch: 67927
Prep Batch: 58117

Analytical Method: S 8021B
Date Analyzed: 2010-03-02
Sample Preparation: 2010-03-02

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	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)		0.0888	mg/L	1	0.100	89	65.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0810	mg/L	1	0.100	81	51.1 - 118.8

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Sample: 223859 - MW-9

Laboratory: Midland	Analytical Method: S 8021B	Prep Method: S 5030B
Analysis: BTEX	Date Analyzed: 2010-03-02	Analyzed By: AG
QC Batch: 67927	Sample Preparation: 2010-03-02	Prepared By: AG
Prep Batch: 58117		

Parameter	Flag	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)		0.0910	mg/L	1	0.100	91	65.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0788	mg/L	1	0.100	79	51.1 - 118.8

Sample: 223860 - MW-10

Laboratory: Midland	Analytical Method: S 8021B	Prep Method: S 5030B
Analysis: BTEX	Date Analyzed: 2010-03-02	Analyzed By: AG
QC Batch: 67927	Sample Preparation: 2010-03-02	Prepared By: AG
Prep Batch: 58117		

Parameter	Flag	Result	Units	Dilution	RL
Benzene		18.6	mg/L	50	0.00100
Toluene		<0.0500	mg/L	50	0.00100
Ethylbenzene		0.108	mg/L	50	0.00100
Xylene		0.252	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.87	mg/L	50	5.00	97	65.9 - 129.8
4-Bromofluorobenzene (4-BFB)		4.64	mg/L	50	5.00	93	51.1 - 118.8

Sample: 223861 - MW-11

Laboratory: Midland	Analytical Method: S 8021B	Prep Method: S 5030B
Analysis: BTEX	Date Analyzed: 2010-03-02	Analyzed By: AG
QC Batch: 67927	Sample Preparation: 2010-03-02	Prepared By: AG
Prep Batch: 58117		

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Parameter	Flag	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)		0.103	mg/L	1	0.100	103	65.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0899	mg/L	1	0.100	90	51.1 - 118.8

Sample: 223862 - MW-12

Laboratory: Midland

Analysis: BTEX

Analytical Method: S 8021B

Prep Method: S 5030B

QC Batch: 67927

Date Analyzed: 2010-03-02

Analyzed By: AG

Prep Batch: 58117

Sample Preparation: 2010-03-02

Prepared By: AG

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.850	mg/L	10	0.00100
Toluene		<0.0100	mg/L	10	0.00100
Ethylbenzene		<0.0100	mg/L	10	0.00100
Xylene		0.0407	mg/L	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.970	mg/L	10	1.00	97	65.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.906	mg/L	10	1.00	91	51.1 - 118.8

Method Blank (1) QC Batch: 67911

QC Batch: 67911

Date Analyzed: 2010-03-01

Analyzed By: AG

Prep Batch: 58101

QC Preparation: 2010-03-01

Prepared By: AG

Parameter	Flag	Result	MDL	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

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0991	mg/L	1	0.100	99	73.6 - 126.6
4-Bromofluorobenzene (4-BFB)		0.102	mg/L	1	0.100	102	62.6 - 117.5

Method Blank (1) QC Batch: 67927

QC Batch: 67927 Date Analyzed: 2010-03-02 Analyzed By: AG
Prep Batch: 58117 QC Preparation: 2010-03-02 Prepared By: AG

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)		0.0912	mg/L	1	0.100	91	73.6 - 126.6
4-Bromofluorobenzene (4-BFB)		0.0775	mg/L	1	0.100	78	62.6 - 117.5

Laboratory Control Spike (LCS-1)

QC Batch: 67911 Date Analyzed: 2010-03-01 Analyzed By: AG
Prep Batch: 58101 QC Preparation: 2010-03-01 Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0949	mg/L	1	0.100	<0.000300	95	79.4 - 112.4
Toluene	0.0942	mg/L	1	0.100	<0.000200	94	79.3 - 110
Ethylbenzene	0.0935	mg/L	1	0.100	<0.000200	94	73.8 - 113.1
Xylene	0.282	mg/L	1	0.300	<0.000900	94	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	0.0957	mg/L	1	0.100	<0.000300	96	79.4 - 112.4	1	20
Toluene	0.0954	mg/L	1	0.100	<0.000200	95	79.3 - 110	1	20
Ethylbenzene	0.0952	mg/L	1	0.100	<0.000200	95	73.8 - 113.1	2	20
Xylene	0.287	mg/L	1	0.300	<0.000900	96	73.9 - 113.6	2	20

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

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Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0954	0.0943	mg/L	1	0.100	95	94	76.2 - 129.6
4-Bromofluorobenzene (4-BFB)	0.112	0.111	mg/L	1	0.100	112	111	77.9 - 119.8

Laboratory Control Spike (LCS-1)

QC Batch: 67927 Date Analyzed: 2010-03-02 Analyzed By: AG
Prep Batch: 58117 QC Preparation: 2010-03-02 Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0906	mg/L	1	0.100	<0.000300	91	79.4 - 112.4
Toluene	0.0895	mg/L	1	0.100	<0.000200	90	79.3 - 110
Ethylbenzene	0.0886	mg/L	1	0.100	<0.000200	89	73.8 - 113.1
Xylene	0.267	mg/L	1	0.300	<0.000900	89	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	0.0911	mg/L	1	0.100	<0.000300	91	79.4 - 112.4	1	20
Toluene	0.0911	mg/L	1	0.100	<0.000200	91	79.3 - 110	2	20
Ethylbenzene	0.0911	mg/L	1	0.100	<0.000200	91	73.8 - 113.1	3	20
Xylene	0.274	mg/L	1	0.300	<0.000900	91	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.	Rec. Limit
Trifluorotoluene (TFT)	0.0832	0.0830	mg/L	1	0.100	83	83	76.2 - 129.6	
4-Bromofluorobenzene (4-BFB)	0.0985	0.0995	mg/L	1	0.100	98	100	77.9 - 119.8	

Matrix Spike (MS-1) Spiked Sample: 223853

QC Batch: 67911 Date Analyzed: 2010-03-01 Analyzed By: AG
Prep Batch: 58101 QC Preparation: 2010-03-01 Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	10.9	mg/L	50	5.00	5.9567	99	77.3 - 117.4
Toluene	6.30	mg/L	50	5.00	1.5038	96	75 - 111.8
Ethylbenzene	5.23	mg/L	50	5.00	0.5072	94	78.8 - 106.6
Xylene	14.6	mg/L	50	15.0	0.6358	93	68.9 - 114

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

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Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	10.6	mg/L	50	5.00	5.9567	93	77.3 - 117.4	3	20
Toluene	5.98	mg/L	50	5.00	1.5038	90	75 - 111.8	5	20
Ethylbenzene	4.79	mg/L	50	5.00	0.5072	86	78.8 - 106.6	9	20
Xylene	13.5	mg/L	50	15.0	0.6358	86	68.9 - 114	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)	4.41	4.27	mg/L	50	5	88	85	76.3 - 129.8
4-Bromofluorobenzene (4-BFB)	5.17	4.98	mg/L	50	5	103	100	75.2 - 112.8

Matrix Spike (MS-1) Spiked Sample: 223878

QC Batch: 67927 Date Analyzed: 2010-03-02 Analyzed By: AG
Prep Batch: 58117 QC Preparation: 2010-03-02 Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.512	mg/L	5	0.500	0.0498	92	77.3 - 117.4
Toluene	0.456	mg/L	5	0.500	<0.00100	91	75 - 111.8
Ethylbenzene	0.460	mg/L	5	0.500	<0.00100	92	78.8 - 106.6
Xylene	1.38	mg/L	5	1.50	<0.00450	92	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.	RPD	RPD Limit	
Benzene	0.511	mg/L	5	0.500	0.0498	92	77.3 - 117.4	0	20
Toluene	0.460	mg/L	5	0.500	<0.00100	92	75 - 111.8	1	20
Ethylbenzene	0.461	mg/L	5	0.500	<0.00100	92	78.8 - 106.6	0	20
Xylene	1.38	mg/L	5	1.50	<0.00450	92	68.9 - 114	0	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)	0.465	0.466	mg/L	5	0.5	93	93	76.3 - 129.8
4-Bromofluorobenzene (4-BFB)	0.543	0.549	mg/L	5	0.5	109	110	75.2 - 112.8

Standard (CCV-1)

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0875	88	80 - 120	2010-03-01
Toluene		mg/L	0.100	0.0857	86	80 - 120	2010-03-01
Ethylbenzene		mg/L	0.100	0.0823	82	80 - 120	2010-03-01
Xylene		mg/L	0.300	0.249	83	80 - 120	2010-03-01

Standard (CCV-2)

QC Batch: 67911 Date Analyzed: 2010-03-01 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	0.0945	94	80 - 120	2010-03-01
Toluene		mg/L	0.100	0.0943	94	80 - 120	2010-03-01
Ethylbenzene		mg/L	0.100	0.0941	94	80 - 120	2010-03-01
Xylene		mg/L	0.300	0.283	94	80 - 120	2010-03-01

Standard (CCV-3)

QC Batch: 67911 Date Analyzed: 2010-03-01 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	0.0957	96	80 - 120	2010-03-01
Toluene		mg/L	0.100	0.0944	94	80 - 120	2010-03-01
Ethylbenzene		mg/L	0.100	0.0932	93	80 - 120	2010-03-01
Xylene		mg/L	0.300	0.281	94	80 - 120	2010-03-01

Standard (CCV-1)

QC Batch: 67927 Date Analyzed: 2010-03-02 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	0.0938	94	80 - 120	2010-03-02
Toluene		mg/L	0.100	0.0930	93	80 - 120	2010-03-02
Ethylbenzene		mg/L	0.100	0.0921	92	80 - 120	2010-03-02
Xylene		mg/L	0.300	0.280	93	80 - 120	2010-03-02

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Standard (CCV-2)

QC Batch: 67927

Date Analyzed: 2010-03-02

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	0.0932	93	80 - 120	2010-03-02
Toluene		mg/L	0.100	0.0926	93	80 - 120	2010-03-02
Ethylbenzene		mg/L	0.100	0.0927	93	80 - 120	2010-03-02
Xylene		mg/L	0.300	0.279	93	80 - 120	2010-03-02

Standard (CCV-3)

QC Batch: 67927

Date Analyzed: 2010-03-02

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	0.0934	93	80 - 120	2010-03-02
Toluene		mg/L	0.100	0.0932	93	80 - 120	2010-03-02
Ethylbenzene		mg/L	0.100	0.0923	92	80 - 120	2010-03-02
Xylene		mg/L	0.300	0.278	93	80 - 120	2010-03-02

Summary Report

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

Report Date: June 25, 2010

Work Order: 10061709



Project Location: Lovington, NM
 Project Name: Deep 6 in.
 Project Number: 700376.051.01

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
234774	MW-1	water	2010-06-15	13:14	2010-06-17
234775	MW-3	water	2010-06-15	14:04	2010-06-17
234776	MW-4	water	2010-06-15	13:58	2010-06-17
234777	MW-5	water	2010-06-15	13:26	2010-06-17
234778	MW-6	water	2010-06-15	13:04	2010-06-17
234779	MW-7	water	2010-06-15	14:12	2010-06-17
234780	MW-8	water	2010-06-15	13:18	2010-06-17
234781	MW-9	water	2010-06-15	13:32	2010-06-17
234782	MW-10	water	2010-06-15	13:45	2010-06-17
234783	MW-11	water	2010-06-15	13:50	2010-06-17
234784	MW-12	water	2010-06-15	13:36	2010-06-17

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
234774 - MW-1	<0.00100	<0.00100	<0.00100	<0.00100
234775 - MW-3	4.29	<0.0500	0.332	0.415
234776 - MW-4	0.00130	<0.00100	<0.00100	<0.00100
234777 - MW-5	<0.00100	<0.00100	<0.00100	<0.00100
234778 - MW-6	<0.00100	<0.00100	<0.00100	<0.00100
234779 - MW-7	<0.00100	<0.00100	<0.00100	<0.00100
234780 - MW-8	<0.00100	<0.00100	<0.00100	<0.00100
234781 - MW-9	<0.00100	<0.00100	<0.00100	<0.00100
234782 - MW-10	25.3	<0.200	0.759	1.38
234783 - MW-11	0.00590	<0.00100	<0.00100	<0.00100
234784 - MW-12	0.503	<0.0100	<0.0100	<0.0100

TRACEANALYSIS, INC.

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Certifications

WBENC: 237019

HUB: 1752439743100-86536
NCTRCA WFWB38444Y0909

DBE: VN 20657

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: June 25, 2010

Work Order: 10061709



Project Location: Lovington, NM
Project Name: Deep 6 in.
Project Number: 700376.051.01

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
234774	MW-1	water	2010-06-15	13:14	2010-06-17
234775	MW-3	water	2010-06-15	14:04	2010-06-17
234776	MW-4	water	2010-06-15	13:58	2010-06-17
234777	MW-5	water	2010-06-15	13:26	2010-06-17
234778	MW-6	water	2010-06-15	13:04	2010-06-17
234779	MW-7	water	2010-06-15	14:12	2010-06-17
234780	MW-8	water	2010-06-15	13:18	2010-06-17
234781	MW-9	water	2010-06-15	13:32	2010-06-17
234782	MW-10	water	2010-06-15	13:45	2010-06-17
234783	MW-11	water	2010-06-15	13:50	2010-06-17
234784	MW-12	water	2010-06-15	13:36	2010-06-17

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 13 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 in. were received by TraceAnalysis, Inc. on 2010-06-17 and assigned to work order 10061709. Samples for work order 10061709 were received intact without headspace and at a temperature of 4.0 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	60823	2010-06-18 at 09:30	71002	2010-06-18 at 11:00
BTEX	S 8021B	60823	2010-06-18 at 09:30	71004	2010-06-18 at 15:49

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 10061709 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.

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Analytical Report

Sample: 234774 - MW-1

Laboratory: Midland
Analysis: BTEX
QC Batch: 71002
Prep Batch: 60823

Analytical Method: S 8021B
Date Analyzed: 2010-06-18
Sample Preparation: 2010-06-18

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	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)		0.108	mg/L	1	0.100	108	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0980	mg/L	1	0.100	98	51.1 - 128

Sample: 234775 - MW-3

Laboratory: Midland
Analysis: BTEX
QC Batch: 71002
Prep Batch: 60823

Analytical Method: S 8021B
Date Analyzed: 2010-06-18
Sample Preparation: 2010-06-18

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	Result	Units	Dilution	RL
Benzene		4.29	mg/L	50	0.00100
Toluene		<0.0500	mg/L	50	0.00100
Ethylbenzene		0.332	mg/L	50	0.00100
Xylene		0.415	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.36	mg/L	50	5.00	107	67.8 - 126
4-Bromofluorobenzene (4-BFB)		4.92	mg/L	50	5.00	98	51.1 - 128

Sample: 234776 - MW-4

Laboratory: Midland
Analysis: BTEX
QC Batch: 71002
Prep Batch: 60823

Analytical Method: S 8021B
Date Analyzed: 2010-06-18
Sample Preparation: 2010-06-18

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

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Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.00130	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)		0.116	mg/L	1	0.100	116	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.108	mg/L	1	0.100	108	51.1 - 128

Sample: 234777 - MW-5

Laboratory: Midland
Analysis: BTEX
QC Batch: 71002
Prep Batch: 60823

Analytical Method: S 8021B
Date Analyzed: 2010-06-18
Sample Preparation: 2010-06-18

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	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)		0.110	mg/L	1	0.100	110	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.101	mg/L	1	0.100	101	51.1 - 128

Sample: 234778 - MW-6

Laboratory: Midland
Analysis: BTEX
QC Batch: 71002
Prep Batch: 60823

Analytical Method: S 8021B
Date Analyzed: 2010-06-18
Sample Preparation: 2010-06-18

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	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

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.117	mg/L	1	0.100	117	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.108	mg/L	1	0.100	108	51.1 - 128

Sample: 234779 - MW-7

Laboratory: Midland
Analysis: BTEX
QC Batch: 71002
Prep Batch: 60823

Analytical Method: S 8021B
Date Analyzed: 2010-06-18
Sample Preparation: 2010-06-18

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	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)		0.117	mg/L	1	0.100	117	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.108	mg/L	1	0.100	108	51.1 - 128

Sample: 234780 - MW-8

Laboratory: Midland
Analysis: BTEX
QC Batch: 71002
Prep Batch: 60823

Analytical Method: S 8021B
Date Analyzed: 2010-06-18
Sample Preparation: 2010-06-18

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	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)		0.113	mg/L	1	0.100	113	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.105	mg/L	1	0.100	105	51.1 - 128

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Sample: 234781 - MW-9

Laboratory: Midland
Analysis: BTEX
QC Batch: 71002
Prep Batch: 60823

Analytical Method: S 8021B
Date Analyzed: 2010-06-18
Sample Preparation: 2010-06-18

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL		Dilution	RL
		Result	Units		
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	Percent	Recovery
					Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.0964	mg/L	1	0.100	96	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0878	mg/L	1	0.100	88	51.1 - 128

Sample: 234782 - MW-10

Laboratory: Midland
Analysis: BTEX
QC Batch: 71002
Prep Batch: 60823

Analytical Method: S 8021B
Date Analyzed: 2010-06-18
Sample Preparation: 2010-06-18

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL		Dilution	RL
		Result	Units		
Benzene		25.3	mg/L	200	0.00100
Toluene		<0.200	mg/L	200	0.00100
Ethylbenzene		0.759	mg/L	200	0.00100
Xylene		1.38	mg/L	200	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike	Percent	Recovery
					Amount	Recovery	Limits
Trifluorotoluene (TFT)		21.5	mg/L	200	20.0	108	67.8 - 126
4-Bromofluorobenzene (4-BFB)		17.8	mg/L	200	20.0	89	51.1 - 128

Sample: 234783 - MW-11

Laboratory: Midland
Analysis: BTEX
QC Batch: 71002
Prep Batch: 60823

Analytical Method: S 8021B
Date Analyzed: 2010-06-18
Sample Preparation: 2010-06-18

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

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Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.00590	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)		0.116	mg/L	1	0.100	116	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.104	mg/L	1	0.100	104	51.1 - 128

Sample: 234784 - MW-12

Laboratory: Midland
Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B
QC Batch: 71004 Date Analyzed: 2010-06-18 Analyzed By: AG
Prep Batch: 60823 Sample Preparation: 2010-06-18 Prepared By: AG

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.503	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)		0.939	mg/L	10	1.00	94	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.859	mg/L	10	1.00	86	51.1 - 128

Method Blank (1) QC Batch: 71002

QC Batch: 71002 Date Analyzed: 2010-06-18 Analyzed By: AG
Prep Batch: 60823 QC Preparation: 2010-06-18 Prepared By: AG

Parameter	Flag	MDL	Units	RL
Benzene		<0.000600	mg/L	0.001
Toluene		<0.000600	mg/L	0.001
Ethylbenzene		<0.000800	mg/L	0.001
Xylene		<0.000767	mg/L	0.001

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.103	mg/L	1	0.100	103	70.2 - 118
4-Bromofluorobenzene (4-BFB)		0.0992	mg/L	1	0.100	99	47.3 - 116

Method Blank (1) QC Batch: 71004

QC Batch: 71004 Date Analyzed: 2010-06-18 Analyzed By: AG
Prep Batch: 60823 QC Preparation: 2010-06-18 Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000600	mg/L	0.001
Toluene		<0.000600	mg/L	0.001
Ethylbenzene		<0.000800	mg/L	0.001
Xylene		<0.000767	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0881	mg/L	1	0.100	88	70.2 - 118
4-Bromofluorobenzene (4-BFB)		0.0809	mg/L	1	0.100	81	47.3 - 116

Laboratory Control Spike (LCS-1)

QC Batch: 71002 Date Analyzed: 2010-06-18 Analyzed By: AG
Prep Batch: 60823 QC Preparation: 2010-06-18 Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.102	mg/L	1	0.100	<0.000600	102	82.9 - 108
Toluene	0.100	mg/L	1	0.100	<0.000600	100	82.7 - 107
Ethylbenzene	0.0945	mg/L	1	0.100	<0.000800	94	78.8 - 106
Xylene	0.285	mg/L	1	0.300	<0.000767	95	79.3 - 106

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.	RPD	RPD Limit	
Benzene	0.0944	mg/L	1	0.100	<0.000600	94	82.9 - 108	8	20
Toluene	0.0943	mg/L	1	0.100	<0.000600	94	82.7 - 107	6	20
Ethylbenzene	0.0910	mg/L	1	0.100	<0.000800	91	78.8 - 106	4	20
Xylene	0.274	mg/L	1	0.300	<0.000767	91	79.3 - 106	4	20

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

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Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0969	0.106	mg/L	1	0.100	97	106	67.3 - 113
4-Bromofluorobenzene (4-BFB)	0.0953	0.103	mg/L	1	0.100	95	103	68.2 - 124

Laboratory Control Spike (LCS-1)

QC Batch: 71004 Date Analyzed: 2010-06-18 Analyzed By: AG
Prep Batch: 60823 QC Preparation: 2010-06-18 Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0899	mg/L	1	0.100	<0.000600	90	82.9 - 108
Toluene	0.0944	mg/L	1	0.100	<0.000600	94	82.7 - 107
Ethylbenzene	0.0930	mg/L	1	0.100	<0.000800	93	78.8 - 106
Xylene	0.280	mg/L	1	0.300	<0.000767	93	79.3 - 106

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	0.0885	mg/L	1	0.100	<0.000600	88	82.9 - 108	2	20
Toluene	0.0945	mg/L	1	0.100	<0.000600	94	82.7 - 107	0	20
Ethylbenzene	0.0943	mg/L	1	0.100	<0.000800	94	78.8 - 106	1	20
Xylene	0.283	mg/L	1	0.300	<0.000767	94	79.3 - 106	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)	0.0889	0.102	mg/L	1	0.100	89	102	67.3 - 113
4-Bromofluorobenzene (4-BFB)	0.0884	0.102	mg/L	1	0.100	88	102	68.2 - 124

Matrix Spike (MS-1) Spiked Sample: 234755

QC Batch: 71002 Date Analyzed: 2010-06-18 Analyzed By: AG
Prep Batch: 60823 QC Preparation: 2010-06-18 Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	38.4	mg/L	200	20.0	16.8695	108	77.9 - 114
Toluene	19.9	mg/L	200	20.0	<0.120	100	78.3 - 111
Ethylbenzene	19.6	mg/L	200	20.0	0.6203	95	75.3 - 110
Xylene	56.8	mg/L	200	60.0	<0.153	95	75.7 - 109

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

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Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	RPD	RPD Limit
Benzene	36.6	mg/L	200	20.0	16.8695	99	77.9 - 114	5 20
Toluene	19.4	mg/L	200	20.0	<0.120	97	78.3 - 111	2 20
Ethylbenzene	19.3	mg/L	200	20.0	0.6203	93	75.3 - 110	2 20
Xylene	56.4	mg/L	200	60.0	<0.153	94	75.7 - 109	1 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)	¹ 20.9	21.5	mg/L	200	20	104	108	68.3 - 107
4-Bromofluorobenzene (4-BFB)	20.5	21.0	mg/L	200	20	102	105	60.1 - 135

Matrix Spike (MS-1) Spiked Sample: 234784

QC Batch: 71004 Date Analyzed: 2010-06-18 Analyzed By: AG
Prep Batch: 60823 QC Preparation: 2010-06-18 Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.51	mg/L	10	1.00	0.503	101	77.9 - 114
Toluene	0.962	mg/L	10	1.00	<0.00600	96	78.3 - 111
Ethylbenzene	0.923	mg/L	10	1.00	<0.00800	92	75.3 - 110
Xylene	2.77	mg/L	10	3.00	<0.00767	92	75.7 - 109

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. Limit	RPD	RPD Limit
Benzene	1.51	mg/L	10	1.00	0.503	101	77.9 - 114	0 20
Toluene	0.963	mg/L	10	1.00	<0.00600	96	78.3 - 111	0 20
Ethylbenzene	0.930	mg/L	10	1.00	<0.00800	93	75.3 - 110	1 20
Xylene	2.80	mg/L	10	3.00	<0.00767	93	75.7 - 109	1 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)	1.03	1.06	mg/L	10	1	103	106	68.3 - 107
4-Bromofluorobenzene (4-BFB)	0.997	1.02	mg/L	10	1	100	102	60.1 - 135

Standard (CCV-1)

QC Batch: 71002 Date Analyzed: 2010-06-18 Analyzed By: AG

¹ High surrogate recovery due to peak interference.

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Param	Flag	Units	CCVs	CCVs	CCVs	Percent	Date Analyzed
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	
Benzene		mg/L	0.100	0.0999	100	80 - 120	2010-06-18
Toluene		mg/L	0.100	0.0981	98	80 - 120	2010-06-18
Ethylbenzene		mg/L	0.100	0.0894	89	80 - 120	2010-06-18
Xylene		mg/L	0.300	0.277	92	80 - 120	2010-06-18

Standard (CCV-2)

QC Batch: 71002

Date Analyzed: 2010-06-18

Analyzed By: AG

Param	Flag	Units	CCVs	CCVs	CCVs	Percent	Date Analyzed
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	
Benzene		mg/L	0.100	0.0966	97	80 - 120	2010-06-18
Toluene		mg/L	0.100	0.0964	96	80 - 120	2010-06-18
Ethylbenzene		mg/L	0.100	0.0939	94	80 - 120	2010-06-18
Xylene		mg/L	0.300	0.283	94	80 - 120	2010-06-18

Standard (CCV-3)

C Batch: 71002

Date Analyzed: 2010-06-18

Analyzed By: AG

Param	Flag	Units	CCVs	CCVs	CCVs	Percent	Date
			True	Found	Percent	Recovery	Analyzed
			Conc.	Conc.	Recovery	Limits	
Benzene		mg/L	0.100	0.0988	99	80 - 120	2010-06-18
Toluene		mg/L	0.100	0.0983	98	80 - 120	2010-06-18
Ethylbenzene		mg/L	0.100	0.0955	96	80 - 120	2010-06-18
Xylene		mg/L	0.300	0.287	96	80 - 120	2010-06-18

Standard (CCV-1)

QC Batch: 71004

Date Analyzed: 2010-06-18

Analyzed By: AG

Param	Flag	Units	CCVs	CCVs	CCVs	Percent	Date Analyzed
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	
Benzene		mg/L	0.100	0.0923	92	80 - 120	2010-06-18
Toluene		mg/L	0.100	0.0956	96	80 - 120	2010-06-18
Ethylbenzene		mg/L	0.100	0.0952	95	80 - 120	2010-06-18
Xylene		mg/L	0.300	0.286	95	80 - 120	2010-06-18

Report Date: June 25, 2010
00376.051.01

Work Order: 10061709
Deep 6 in.

Page Number: 13 of 13
Lovington, NM

Standard (CCV-2)

QC Batch: 71004

Date Analyzed: 2010-06-18

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	0.0866	87	80 - 120	2010-06-18
Toluene		mg/L	0.100	0.0939	94	80 - 120	2010-06-18
Ethylbenzene		mg/L	0.100	0.0931	93	80 - 120	2010-06-18
Xylene		mg/L	0.300	0.280	93	80 - 120	2010-06-18

TraceAnalysis, Inc.

email: lab@traceanalysis.com

Company Name:

Address: (Street, City, Zip)

2001 Rankin Hwy.

Contact Person:

Steve Killingsworth

Invoice to:

PLAINS

Jason Henry

(If different from above)

Project #: 700522.051.01

Project Location (including state):

Laguna N.M.

Phone #:

(432) 522-2133

Fax #:

6260 / 624

E-mail:

Skillingsworth@talonpc.com

Project Name:

Deed

Sampler Signature:

FIELD CODE	MATRIX	PRESERVATIVE	SAMPLING		TIME
			METHOD	DATE	
7474	WATER	VOLUME	X	X	6/15/00 13:44
7475	AIR		X		14:44
7476	SOLID	HCl			13:58
7477	SLUDGE	HNO ₃			13:26
7478	AIR	H ₂ SO ₄			13:04
7479	WATER	NaOH			14:12
7480	AIR	None			13:18
7481	SOLID	HCl			13:32
7482	SLUDGE	HNO ₃			13:45
7483	WATER	H ₂ SO ₄			13:50
7484	AIR	None			13:36

Relinquished by: Company: Date: Time: Received by:

Jason Henry Jason Henry

Date: Time: Received by:

Trace Trace

Date: Time: Received by:

Taylor Taylor

Date: Time: Received by:

Mark Mark

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

6701 Aberdeen Avenue, Suite 9

Lubbock, Texas 79324

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1 (800) 378-1296

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Tel (915) 585-4944

Fax (915) 588-5843

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

ANALYSIS REQUEST

(Circle or Specify Method No.)

PCBs 8082 / 608	GC/MS Vol. 8260 / 624	RCI	TCLP Pesticides
PAH 8270 / 625	TPH 8015 GRO / DRO / TVHC	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Solubles
BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ex(C35)	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Semi Volatiles
MTEB 8021 / 602 / 8260 / 624	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	PCBs 8081 / 608
BTEx 8021 / 602 / 8260 / 624	GC/MS Sem. Vol. 8270 / 625	RCI	Moisture Content
GC/MS Vol. 8260 / 624	PCBs 8082 / 608	CI, F1, SO4, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC
RCI	PCBs 8081 / 608	DOD, TSS, PH	Turn Around Time if different from standard
TCLP Pesticides	GC/MS Sem. Vol. 8270 / 625	BOD, TSS, PH	Hold

LAB USE
ONLYREMARKS:
X All

Relinquished by: Company: Date: Time: Received by:

Trace Trace

Date: Time: Received by:

Taylor Taylor

Date: Time: Received by:

Mark Mark

Date: Time: Received by:

Jay JayDry Weight Basis Required
TRRP Report Required
Check If Special Reporting
Limits Are Needed

Summary Report

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

Report Date: September 21, 2010

Work Order: 10091617



Project Location: Lovington, NM
 Project Name: Deep 6 in.
 Project Number: 700376.051.01

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
244773	MW 9	water	2010-09-15	10:55	2010-09-15
244774	MW 8	water	2010-09-15	10:34	2010-09-15
244775	MW 4	water	2010-09-14	13:10	2010-09-15
244776	MW 3	water	2010-09-14	13:00	2010-09-15
244777	MW 10	water	2010-09-15	10:48	2010-09-15
244778	MW 7	water	2010-09-15	10:22	2010-09-15
244779	MW 11	water	2010-09-15	10:41	2010-09-15
244780	MW 6	water	2010-09-15	10:30	2010-09-15
244781	MW 1	water	2010-09-14	13:32	2010-09-15
244782	MW 12	water	2010-09-15	11:00	2010-09-15
244783	MW 5	water	2010-09-14	13:20	2010-09-15
244784	MW 18	water	2010-09-14	14:19	2010-09-15

Sample - Field Code	B'TEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
244773 - MW 9	<0.00100	<0.00100	<0.00100	<0.00100
244774 - MW 8	<0.00100	<0.00100	<0.00100	<0.00100
244775 - MW 4	<0.00100	<0.00100	<0.00100	<0.00100
244776 - MW 3	14.9	4.55	1.11	1.26
244777 - MW 10	45.6	<0.200	0.838	<0.200
244778 - MW 7	<0.00100	<0.00100	<0.00100	<0.00100
244779 - MW 11	<0.00100	<0.00100	<0.00100	<0.00100
244780 - MW 6	<0.00100	<0.00100	<0.00100	<0.00100
244781 - MW 1	<0.00100	<0.00100	<0.00100	<0.00100
244782 - MW 12	0.644	<0.0100	<0.0100	<0.0100
244783 - MW 5	<0.00100	<0.00100	<0.00100	<0.00100
244784 - MW 18	0.00390	<0.00100	<0.00100	<0.00100

TRACEANALYSIS, INC.

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6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260

E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019

HUB: 1752439743100-86536
NCTRCA WFWB38444Y0909

DBE: VN 20657

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: September 21, 2010

Work Order: 10091617



Project Location: Lovington, NM
Project Name: Deep 6 in.
Project Number: 700376.051.01

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
244773	MW 9	water	2010-09-15	10:55	2010-09-15
244774	MW 8	water	2010-09-15	10:34	2010-09-15
244775	MW 4	water	2010-09-14	13:10	2010-09-15
244776	MW 3	water	2010-09-14	13:00	2010-09-15
244777	MW 10	water	2010-09-15	10:48	2010-09-15
244778	MW 7	water	2010-09-15	10:22	2010-09-15
244779	MW 11	water	2010-09-15	10:41	2010-09-15
244780	MW 6	water	2010-09-15	10:30	2010-09-15
244781	MW 1	water	2010-09-14	13:32	2010-09-15
244782	MW 12	water	2010-09-15	11:00	2010-09-15

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
244783	MW 5	water	2010-09-14	13:20	2010-09-15
244784	MW 18	water	2010-09-14	14:19	2010-09-15

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 11 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 in. were received by TraceAnalysis, Inc. on 2010-09-15 and assigned to work order 10091617. Samples for work order 10091617 were received intact without headspace and at a temperature of 2.9 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	63178	2010-09-17 at 16:00	73645	2010-09-17 at 19:16

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 10091617 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.

Report Date: September 21, 2010
700376.051.01

Work Order: 10091617
Deep 6 in.

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Lovington, NM

Analytical Report

Sample: 244773 - MW 9

Laboratory: Midland

Analysis: BTEX

QC Batch: 73645

Prep Batch: 63178

Analytical Method: S 8021B

Date Analyzed: 2010-09-17

Sample Preparation: 2010-09-17

Prep Method: S 5030B

Analyzed By: AG

Prepared By: AG

Parameter	Flag	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)		0.102	mg/L	1	0.100	102	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0812	mg/L	1	0.100	81	51.1 - 128

Sample: 244774 - MW 8

Laboratory: Midland

Analysis: BTEX

QC Batch: 73645

Prep Batch: 63178

Analytical Method: S 8021B

Date Analyzed: 2010-09-17

Sample Preparation: 2010-09-17

Prep Method: S 5030B

Analyzed By: AG

Prepared By: AG

Parameter	Flag	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)		0.0992	mg/L	1	0.100	99	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0717	mg/L	1	0.100	72	51.1 - 128

Sample: 244775 - MW 4

Laboratory: Midland

Analysis: BTEX

QC Batch: 73645

Prep Batch: 63178

Analytical Method: S 8021B

Date Analyzed: 2010-09-17

Sample Preparation: 2010-09-17

Prep Method: S 5030B

Analyzed By: AG

Prepared By: AG

Report Date: September 21, 2010
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Work Order: 10091617
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Parameter	Flag	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	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0589	mg/L	1	0.100	59	51.1 - 128

Sample: 244776 - MW 3

Laboratory: Midland
Analysis: BTEX
QC Batch: 73645
Prep Batch: 63178

Analytical Method: S 8021B
Date Analyzed: 2010-09-17
Sample Preparation: 2010-09-17

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	Result	Units	Dilution	RL
Benzene		14.9	mg/L	50	0.00100
Toluene		4.55	mg/L	50	0.00100
Ethylbenzene		1.11	mg/L	50	0.00100
Xylene		1.26	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.79	mg/L	50	5.00	96	67.8 - 126
4-Bromofluorobenzene (4-BFB)		3.14	mg/L	50	5.00	63	51.1 - 128

Sample: 244777 - MW 10

Laboratory: Midland
Analysis: BTEX
QC Batch: 73645
Prep Batch: 63178

Analytical Method: S 8021B
Date Analyzed: 2010-09-17
Sample Preparation: 2010-09-17

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	Result	Units	Dilution	RL
Benzene		45.6	mg/L	200	0.00100
Toluene		<0.200	mg/L	200	0.00100
Ethylbenzene		0.838	mg/L	200	0.00100
Xylene		<0.200	mg/L	200	0.00100

Report Date: September 21, 2010
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Work Order: 10091617
Deep 6 in.

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		18.1	mg/L	200	20.0	90	67.8 - 126
4-Bromofluorobenzene (4-BFB)	1	9.79	mg/L	200	20.0	49	51.1 - 128

Sample: 244778 - MW 7

Laboratory: Midland
Analysis: BTEX
QC Batch: 73645
Prep Batch: 63178

Analytical Method: S 8021B
Date Analyzed: 2010-09-17
Sample Preparation: 2010-09-17

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	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	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0744	mg/L	1	0.100	74	51.1 - 128

Sample: 244779 - MW 11

Laboratory: Midland
Analysis: BTEX
QC Batch: 73645
Prep Batch: 63178

Analytical Method: S 8021B
Date Analyzed: 2010-09-17
Sample Preparation: 2010-09-17

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	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)		0.0976	mg/L	1	0.100	98	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0580	mg/L	1	0.100	58	51.1 - 128

¹SPECIAL- 4-BFB is out of control limits due to an unknown anomaly. However, TFT shows the method to be in control. •

Report Date: September 21, 2010
700376.051.01

Work Order: 10091617
Deep 6 in.

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Lovington, NM

Sample: 244780 - MW 6

Laboratory: Midland
Analysis: BTEX
QC Batch: 73645
Prep Batch: 63178

Analytical Method: S 8021B
Date Analyzed: 2010-09-17
Sample Preparation: 2010-09-17

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	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	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0613	mg/L	1	0.100	61	51.1 - 128

Sample: 244781 - MW 1

Laboratory: Midland
Analysis: BTEX
QC Batch: 73645
Prep Batch: 63178

Analytical Method: S 8021B
Date Analyzed: 2010-09-17
Sample Preparation: 2010-09-17

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Parameter	Flag	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)		0.103	mg/L	1	0.100	103	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0839	mg/L	1	0.100	84	51.1 - 128

Sample: 244782 - MW 12

Laboratory: Midland
Analysis: BTEX
QC Batch: 73645
Prep Batch: 63178

Analytical Method: S 8021B
Date Analyzed: 2010-09-17
Sample Preparation: 2010-09-17

Prep Method: S 5030B
Analyzed By: AG
Prepared By: AG

Report Date: September 21, 2010
700376.051.01

Work Order: 10091617
Deep 6 in.

Page Number: 8 of 11
Lovington, NM

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.644	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)		0.918	mg/L	10	1.00	92	67.8 - 126
4-Bromofluorobenzene (4-BFB)	²	0.490	mg/L	10	1.00	49	51.1 - 128

Sample: 244783 - MW 5

Laboratory: Midland
Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B
QC Batch: 73645 Date Analyzed: 2010-09-17 Analyzed By: AG
Prep Batch: 63178 Sample Preparation: 2010-09-17 Prepared By: AG

Parameter	Flag	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)		0.0982	mg/L	1	0.100	98	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0569	mg/L	1	0.100	57	51.1 - 128

Sample: 244784 - MW 18

Laboratory: Midland
Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B
QC Batch: 73645 Date Analyzed: 2010-09-17 Analyzed By: AG
Prep Batch: 63178 Sample Preparation: 2010-09-17 Prepared By: AG

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.00390	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

²SPECIAL- 4-BFB is out of control limits due to an unknown anomaly. However, TFT shows the method to be in control. •

Report Date: September 21, 2010
700376.051.01

Work Order: 10091617
Deep 6 in.

Page Number: 9 of 11
Lovington, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0914	mg/L	1	0.100	91	67.8 - 126
4-Bromofluorobenzene (4-BFB)	³	0.0378	mg/L	1	0.100	38	51.1 - 128

Method Blank (1) QC Batch: 73645

QC Batch: 7364
Prep Batch: 6312

Date Analyzed: 2010-09-17
QC Preparation: 2010-09-17

Analyzed By: AG
Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000600	mg/L	0.001
Toluene		<0.000600	mg/L	0.001
Ethylbenzene		<0.000800	mg/L	0.001
Xylene		<0.000767	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	70.2 - 118
4-Bromofluorobenzene (4-BFB)		0.101	mg/L	1	0.100	101	47.3 - 116

Laboratory Control Spike (LCS-1)

QC Batch: 73645
Prep Batch: 63178

Date Analyzed: 2010-09-17
QC Preparation: 2010-09-17

Analyzed By: AG
Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit
Benzene	0.109	mg/L	1	0.100	<0.000600	109	82.9 - 118
Toluene	0.108	mg/L	1	0.100	<0.000600	108	82.7 - 117
Ethylbenzene	0.109	mg/L	1	0.100	<0.000800	109	78.8 - 116
Xylene	0.324	mg/L	1	0.300	<0.000767	108	79.3 - 116

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

Param	LCSD			Spike	Matrix		Rec.		RPD
	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	0.110	mg/L	1	0.100	<0.000600	110	82.9 - 118	1	20
Toluene	0.109	mg/L	1	0.100	<0.000600	109	82.7 - 117	1	20
Ethylbenzene	0.111	mg/L	1	0.100	<0.000800	111	78.8 - 116	2	20
Xylene	0.330	mg/L	1	0.300	<0.000767	110	79.3 - 116	2	20

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

³SPECIAL- 4-BFB is out of control limits due to an unknown anomaly. However, TFT shows the method to be in control. •

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Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.110	0.111	mg/L	1	0.100	110	111	67.3 - 113
4-Bromofluorobenzene (4-BFB)	0.120	0.122	mg/L	1	0.100	120	122	68.2 - 134

Matrix Spike (MS-1) Spiked Sample: 244782

QC Batch: 73645
Prep Batch: 63178

Date Analyzed: 2010-09-17
QC Preparation: 2010-09-17

Analyzed By: AG
Prepared By: AG

Param	MS		Spike		Matrix		Rec.	
	Result	Units	Dil.	Amount	Result	Rec.	Limit	
Benzene	1.61	mg/L	10	1.00	0.6444	96	77.9 - 114	
Toluene	0.880	mg/L	10	1.00	<0.00600	88	78.3 - 111	
Ethylbenzene	0.784	mg/L	10	1.00	<0.00800	78	75.3 - 110	
Xylene	4 2.20	mg/L	10	3.00	<0.00767	73	75.7 - 109	

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

Param	MSD		Spike Amount	Matrix Result	Rec.		RPD Limit		
	Result	Units			Dil.	Limit			
Benzene	1.64	mg/L	10	1.00	0.6444	100	77.9 - 114	2	20
Toluene	0.894	mg/L	10	1.00	<0.00600	89	78.3 - 111	2	20
Ethylbenzene	0.822	mg/L	10	1.00	<0.00800	82	75.3 - 110	5	20
Xylene	2.32	mg/L	10	3.00	<0.00767	77	75.7 - 109	5	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)	0.931	0.919	mg/L	10	1	93	92	68.3 - 107
4-Bromofluorobenzene (4-BFB)	0.952	1.04	mg/L	10	1	95	104	60.1 - 135

Standard (CCV-1)

QC Batch: 73645

Date Analyzed: 2010-09-17

Analyzed By: AG

Param	Flag	Units	CCVs	CCVs	CCVs	Percent	Date
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	
Benzene		mg/L	0.100	0.106	106	80 - 120	2010-09-17
Toluene		mg/L	0.100	0.104	104	80 - 120	2010-09-17
Ethylbenzene		mg/L	0.100	0.102	102	80 - 120	2010-09-17
Xylene		mg/L	0.300	0.308	103	80 - 120	2010-09-17

⁴Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

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Standard (CCV-2)

QC Batch: 73645

Date Analyzed: 2010-09-17

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	0.104	104	80 - 120	2010-09-17
Toluene		mg/L	0.100	0.0980	98	80 - 120	2010-09-17
Ethylbenzene		mg/L	0.100	0.0888	89	80 - 120	2010-09-17
Xylene		mg/L	0.300	0.250	83	80 - 120	2010-09-17

Standard (CCV-3)

QC Batch: 73645

Date Analyzed: 2010-09-17

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	0.104	104	80 - 120	2010-09-17
Toluene		mg/L	0.100	0.0980	98	80 - 120	2010-09-17
Ethylbenzene		mg/L	0.100	0.0888	89	80 - 120	2010-09-17
Xylene		mg/L	0.300	0.250	83	80 - 120	2010-09-17

TraceAnalysis, Inc.

email: lab@traceanalysis.com

Company Name: Talon

Address: (Street, City, Zip)

Phone #:

Fax #:

E-mail:

Date:

Contact Person: Steve Hillingsworth

Date:

Time:

Invoice to:
(If different from above)

Date:

Time:

Project #: 700376.051.01

Date:

Time:

Project Name: Loving ~~Shallow~~ Deep

Date:

Time:

Sampler Signature: John D. Lovin

Date:

Time:

Project Location (including state): H0205, NM

Date:

Time:

FIELD CODE

Date:

Time:

CONTAINERS

Date:

Time:

MATRIX

Date:

Time:

PRESERVATIVE

Date:

Time:

METHOD

Date:

Time:

TIME

Date:

Time:

DATE

Date:

Time:

NONE

Date:

Time:

ICE

Date:

Time:

NaOH

Date:

Time:

H₂SO₄

Date:

Time:

HNO₃

Date:

Time:

HCl

Date:

Time:

SLUDGE

Date:

Time:

AIR

Date:

Time:

SOIL

Date:

Time:

WATER

Date:

Time:

X

Summary Report

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

Report Date: December 22, 2010

Work Order: 10121607



Project Location: Lovington, NM
 Project Name: Deep 6 in.
 Project Number: 700376.051.01
 SRS #: 2002-10312

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
253485	MW1	water	2010-12-15	13:16	2010-12-16
253486	MW3	water	2010-12-15	13:00	2010-12-16
253487	MW4	water	2010-12-15	12:56	2010-12-16
253488	MW5	water	2010-12-15	12:30	2010-12-16
253489	MW6	water	2010-12-15	13:30	2010-12-16
253490	MW7	water	2010-12-15	13:12	2010-12-16
253491	MW8	water	2010-12-15	13:20	2010-12-16
253492	MW9	water	2010-12-15	12:40	2010-12-16
253493	MW10	water	2010-12-15	13:05	2010-12-16
253494	MW11	water	2010-12-15	12:52	2010-12-16
253495	MW12	water	2010-12-15	12:46	2010-12-16
253496	MW18	water	2010-12-15	12:15	2010-12-16

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
253485 - MW1	0.00600	0.00420	0.00360	0.0146
253486 - MW3	3.32	0.870	0.387	0.681
253487 - MW4	<0.00100	<0.00100	<0.00100	0.00830
253488 - MW5	<0.00100	<0.00100	<0.00100	0.00770
253489 - MW6	<0.00100	<0.00100	<0.00100	<0.00100
253490 - MW7	<0.00100	<0.00100	<0.00100	<0.00100
253491 - MW8	<0.00100	<0.00100	<0.00100	<0.00100
253492 - MW9	<0.00100	<0.00100	<0.00100	<0.00100
253493 - MW10	24.8	<0.200	<0.200	1.69
253494 - MW11	<0.00100	<0.00100	0.00530	0.00870
253495 - MW12	0.471	<0.0100	<0.0100	0.0795
253496 - MW18	0.0963	<0.00100	<0.00100	0.0137

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

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

Report Date: December 22, 2010

Work Order: 10121607



Project Location: Lovington, NM
Project Name: Deep 6 in.
Project Number: 700376.051.01
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
253485	MW1	water	2010-12-15	13:16	2010-12-16
253486	MW3	water	2010-12-15	13:00	2010-12-16
253487	MW4	water	2010-12-15	12:56	2010-12-16
253488	MW5	water	2010-12-15	12:30	2010-12-16
253489	MW6	water	2010-12-15	13:30	2010-12-16
253490	MW7	water	2010-12-15	13:12	2010-12-16
253491	MW8	water	2010-12-15	13:20	2010-12-16
253492	MW9	water	2010-12-15	12:40	2010-12-16
253493	MW10	water	2010-12-15	13:05	2010-12-16

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
253494	MW11	water	2010-12-15	12:52	2010-12-16
253495	MW12	water	2010-12-15	12:46	2010-12-16
253496	MW18	water	2010-12-15	12:15	2010-12-16

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 13 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 in. were received by TraceAnalysis, Inc. on 2010-12-16 and assigned to work order 10121607. Samples for work order 10121607 were received intact without headspace and at a temperature of 4.0 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	65454	2010-12-17 at 10:08	76320	2010-12-18 at 02:52
BTEX	S 8021B	65458	2010-12-20 at 09:03	76325	2010-12-20 at 09:03

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 10121607 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.

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Analytical Report

Sample: 253485 - MW1

Laboratory: Midland
Analysis: BTEX
QC Batch: 76325
Prep Batch: 65458

Analytical Method: S 8021B
Date Analyzed: 2010-12-20
Sample Preparation: 2010-12-20

Prep Method: S 5030B
Analyzed By: ME
Prepared By: ME

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.00600	mg/L	1	0.00100
Toluene		0.00420	mg/L	1	0.00100
Ethylbenzene		0.00360	mg/L	1	0.00100
Xylene		0.0146	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0786	mg/L	1	0.100	79	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0840	mg/L	1	0.100	84	51.1 - 128

Sample: 253486 - MW3

Laboratory: Midland
Analysis: BTEX
QC Batch: 76320
Prep Batch: 65454

Analytical Method: S 8021B
Date Analyzed: 2010-12-18
Sample Preparation: 2010-12-17

Prep Method: S 5030B
Analyzed By: ME
Prepared By: ME

Parameter	Flag	Result	Units	Dilution	RL
Benzene		3.32	mg/L	50	0.00100
Toluene		0.870	mg/L	50	0.00100
Ethylbenzene		0.387	mg/L	50	0.00100
Xylene		0.681	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.28	mg/L	50	5.00	86	67.8 - 126
4-Bromofluorobenzene (4-BFB)		4.63	mg/L	50	5.00	93	51.1 - 128

Sample: 253487 - MW4

Laboratory: Midland
Analysis: BTEX
QC Batch: 76325
Prep Batch: 65458

Analytical Method: S 8021B
Date Analyzed: 2010-12-20
Sample Preparation: 2010-12-20

Prep Method: S 5030B
Analyzed By: ME
Prepared By: ME

Report Date: December 22, 2010
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Parameter	Flag	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		0.00830	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0990	mg/L	1	0.100	99	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.104	mg/L	1	0.100	104	51.1 - 128

Sample: 253488 - MW5

Laboratory: Midland
Analysis: BTEX
QC Batch: 76325
Prep Batch: 65458

Analytical Method: S 8021B
Date Analyzed: 2010-12-20
Sample Preparation: 2010-12-20

Prep Method: S 5030B
Analyzed By: ME
Prepared By: ME

Parameter	Flag	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		0.00770	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0949	mg/L	1	0.100	95	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0957	mg/L	1	0.100	96	51.1 - 128

Sample: 253489 - MW6

Laboratory: Midland
Analysis: BTEX
QC Batch: 76325
Prep Batch: 65458

Analytical Method: S 8021B
Date Analyzed: 2010-12-20
Sample Preparation: 2010-12-20

Prep Method: S 5030B
Analyzed By: ME
Prepared By: ME

Parameter	Flag	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

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0965	mg/L	1	0.100	96	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.100	mg/L	1	0.100	100	51.1 - 128

Sample: 253490 - MW7

Laboratory: Midland
Analysis: BTEX
QC Batch: 76325
Prep Batch: 65458

Analytical Method: S 8021B
Date Analyzed: 2010-12-20
Sample Preparation: 2010-12-20

Prep Method: S 5030B
Analyzed By: ME
Prepared By: ME

Parameter	Flag	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)		0.0941	mg/L	1	0.100	94	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0975	mg/L	1	0.100	98	51.1 - 128

Sample: 253491 - MW8

Laboratory: Midland
Analysis: BTEX
QC Batch: 76325
Prep Batch: 65458

Analytical Method: S 8021B
Date Analyzed: 2010-12-20
Sample Preparation: 2010-12-20

Prep Method: S 5030B
Analyzed By: ME
Prepared By: ME

Parameter	Flag	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)		0.0941	mg/L	1	0.100	94	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0976	mg/L	1	0.100	98	51.1 - 128

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Sample: 253492 - MW9

Laboratory: Midland
Analysis: BTEX
QC Batch: 76325
Prep Batch: 65458

Analytical Method: S 8021B
Date Analyzed: 2010-12-20
Sample Preparation: 2010-12-20

Prep Method: S 5030B
Analyzed By: ME
Prepared By: ME

Parameter	Flag	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)		0.0856	mg/L	1	0.100	86	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0890	mg/L	1	0.100	89	51.1 - 128

Sample: 253493 - MW10

Laboratory: Midland
Analysis: BTEX
QC Batch: 76320
Prep Batch: 65454

Analytical Method: S 8021B
Date Analyzed: 2010-12-18
Sample Preparation: 2010-12-17

Prep Method: S 5030B
Analyzed By: ME
Prepared By: ME

Parameter	Flag	Result	Units	Dilution	RL
Benzene		24.8	mg/L	200	0.00100
Toluene		<0.200	mg/L	200	0.00100
Ethylbenzene		<0.200	mg/L	200	0.00100
Xylene		1.69	mg/L	200	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		16.3	mg/L	200	20.0	82	67.8 - 126
4-Bromofluorobenzene (4-BFB)		17.9	mg/L	200	20.0	90	51.1 - 128

Sample: 253494 - MW11

Laboratory: Midland
Analysis: BTEX
QC Batch: 76320
Prep Batch: 65454

Analytical Method: S 8021B
Date Analyzed: 2010-12-18
Sample Preparation: 2010-12-17

Prep Method: S 5030B
Analyzed By: ME
Prepared By: ME

Report Date: December 22, 2010
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Parameter	Flag	Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		0.00530	mg/L	1	0.00100
Xylene		0.00870	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0888	mg/L	1	0.100	89	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0889	mg/L	1	0.100	89	51.1 - 128

Sample: 253495 - MW12

Laboratory: Midland
Analysis: BTEX
QC Batch: 76320
Prep Batch: 65454

Analytical Method: S 8021B
Date Analyzed: 2010-12-18
Sample Preparation: 2010-12-17

Prep Method: S 5030B
Analyzed By: ME
Prepared By: ME

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.471	mg/L	10	0.00100
Toluene		<0.0100	mg/L	10	0.00100
Ethylbenzene		<0.0100	mg/L	10	0.00100
Xylene		0.0795	mg/L	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.862	mg/L	10	1.00	86	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.916	mg/L	10	1.00	92	51.1 - 128

Sample: 253496 - MW18

Laboratory: Midland
Analysis: BTEX
QC Batch: 76320
Prep Batch: 65454

Analytical Method: S 8021B
Date Analyzed: 2010-12-18
Sample Preparation: 2010-12-17

Prep Method: S 5030B
Analyzed By: ME
Prepared By: ME

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.0963	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		0.0137	mg/L	1	0.00100

Report Date: December 22, 2010
700376.051.01

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0774	mg/L	1	0.100	77	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0846	mg/L	1	0.100	85	51.1 - 128

Method Blank (1) QC Batch: 76320

QC Batch: 76320 Date Analyzed: 2010-12-18 Analyzed By: ME
Prep Batch: 65454 QC Preparation: 2010-12-17 Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000600	mg/L	0.001
Toluene		<0.000600	mg/L	0.001
Ethylbenzene		<0.000800	mg/L	0.001
Xylene		<0.000767	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0879	mg/L	1	0.100	88	70.2 - 118
4-Bromofluorobenzene (4-BFB)		0.0927	mg/L	1	0.100	93	47.3 - 116

Method Blank (1) QC Batch: 76325

QC Batch: 76325 Date Analyzed: 2010-12-20 Analyzed By: ME
Prep Batch: 65458 QC Preparation: 2010-12-20 Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000600	mg/L	0.001
Toluene		<0.000600	mg/L	0.001
Ethylbenzene		<0.000800	mg/L	0.001
Xylene		<0.000767	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0815	mg/L	1	0.100	82	70.2 - 118
4-Bromofluorobenzene (4-BFB)		0.0857	mg/L	1	0.100	86	47.3 - 116

Laboratory Control Spike (LCS-1)

QC Batch: 76320 Date Analyzed: 2010-12-18 Analyzed By: ME
Prep Batch: 65454 QC Preparation: 2010-12-17 Prepared By: ME

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Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0936	mg/L	1	0.100	<0.000600	94	82.9 - 118
Toluene	0.0924	mg/L	1	0.100	<0.000600	92	82.7 - 117
Ethylbenzene	0.0904	mg/L	1	0.100	<0.000800	90	78.8 - 116
Xylene	0.273	mg/L	1	0.300	<0.000767	91	79.3 - 116

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 Limit
Benzene	0.0962	mg/L	1	0.100	<0.000600	96	82.9 - 118	3
Toluene	0.0948	mg/L	1	0.100	<0.000600	95	82.7 - 117	3
Ethylbenzene	0.0921	mg/L	1	0.100	<0.000800	92	78.8 - 116	2
Xylene	0.279	mg/L	1	0.300	<0.000767	93	79.3 - 116	2

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)	0.0837	0.0863	mg/L	1	0.100	84	86	67.3 - 113
4-Bromofluorobenzene (4-BFB)	0.0919	0.0923	mg/L	1	0.100	92	92	68.2 - 134

Laboratory Control Spike (LCS-1)

QC Batch: 76325
Prep Batch: 65458

Date Analyzed: 2010-12-20
QC Preparation: 2010-12-20

Analyzed By: ME
Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0905	mg/L	1	0.100	<0.000600	90	82.9 - 118
Toluene	0.0901	mg/L	1	0.100	<0.000600	90	82.7 - 117
Ethylbenzene	0.0889	mg/L	1	0.100	<0.000800	89	78.8 - 116
Xylene	0.270	mg/L	1	0.300	<0.000767	90	79.3 - 116

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 Limit
Benzene	0.0940	mg/L	1	0.100	<0.000600	94	82.9 - 118	4
Toluene	0.0932	mg/L	1	0.100	<0.000600	93	82.7 - 117	3
Ethylbenzene	0.0926	mg/L	1	0.100	<0.000800	93	78.8 - 116	4
Xylene	0.279	mg/L	1	0.300	<0.000767	93	79.3 - 116	3

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)	0.0848	0.0881	mg/L	1	0.100	85	88	67.3 - 113

continued ...

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control spikes continued ...

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	0.0921	0.0958	mg/L	1	0.100	92	96	68.2 - 134

Matrix Spike (MS-1) Spiked Sample: 253495

QC Batch: 76320 Date Analyzed: 2010-12-18 Analyzed By: ME
Prep Batch: 65454 QC Preparation: 2010-12-17 Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.42	mg/L	10	1.00	0.4708	95	77.9 - 114
Toluene	0.934	mg/L	10	1.00	<0.00600	93	78.3 - 111
Ethylbenzene	0.928	mg/L	10	1.00	<0.00800	93	75.3 - 110
Xylene	2.82	mg/L	10	3.00	0.0795	91	75.7 - 109

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	1.41	mg/L	10	1.00	0.4708	94	77.9 - 114	1	20
Toluene	0.929	mg/L	10	1.00	<0.00600	93	78.3 - 111	0	20
Ethylbenzene	0.918	mg/L	10	1.00	<0.00800	92	75.3 - 110	1	20
Xylene	2.78	mg/L	10	3.00	0.0795	90	75.7 - 109	1	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.	Rec. Limit
Trifluorotoluene (TFT)	0.785	0.812	mg/L	10	1	78	81	68.3 - 107	
4-Bromofluorobenzene (4-BFB)	0.870	0.888	mg/L	10	1	87	89	60.1 - 135	

Matrix Spike (MS-1) Spiked Sample: 253703

QC Batch: 76325 Date Analyzed: 2010-12-20 Analyzed By: ME
Prep Batch: 65458 QC Preparation: 2010-12-20 Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.545	mg/L	5	0.500	0.0814	93	77.9 - 114
Toluene	0.463	mg/L	5	0.500	<0.00300	93	78.3 - 111
Ethylbenzene	0.458	mg/L	5	0.500	<0.00400	92	75.3 - 110
Xylene	1.39	mg/L	5	1.50	<0.00384	93	75.7 - 109

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

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Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.545	mg/L	5	0.500	0.0814	93	77.9 - 114	0	20
Toluene	0.463	mg/L	5	0.500	<0.00300	93	78.3 - 111	0	20
Ethylbenzene	0.459	mg/L	5	0.500	<0.00400	92	75.3 - 110	0	20
Xylene	1.39	mg/L	5	1.50	<0.00384	93	75.7 - 109	0	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)	0.391	0.392	mg/L	5	0.5	78	78	68.3 - 107
4-Bromofluorobenzene (4-BFB)	0.435	0.437	mg/L	5	0.5	87	87	60.1 - 135

Standard (CCV-1)

QC Batch: 76320

Date Analyzed: 2010-12-18

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	0.0967	97	80 - 120	2010-12-18
Toluene		mg/L	0.100	0.0950	95	80 - 120	2010-12-18
Ethylbenzene		mg/L	0.100	0.0928	93	80 - 120	2010-12-18
Xylene		mg/L	0.300	0.281	94	80 - 120	2010-12-18

Standard (CCV-2)

QC Batch: 76320

Date Analyzed: 2010-12-18

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	0.0994	99	80 - 120	2010-12-18
Toluene		mg/L	0.100	0.0974	97	80 - 120	2010-12-18
Ethylbenzene		mg/L	0.100	0.0957	96	80 - 120	2010-12-18
Xylene		mg/L	0.300	0.288	96	80 - 120	2010-12-18

Standard (CCV-3)

QC Batch: 76320

Date Analyzed: 2010-12-18

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	0.0994	99	80 - 120	2010-12-18

continued ...

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standard continued . . .

Param	Flag	Units	CCVs	CCVs	CCVs	Percent	Date
			True	Found	Percent	Recovery	
Conc.	Conc.	Recovery	Limits	Analyzed			
Toluene		mg/L	0.100	0.0976	98	80 - 120	2010-12-18
Ethylbenzene		mg/L	0.100	0.0958	96	80 - 120	2010-12-18
Xylene		mg/L	0.300	0.290	97	80 - 120	2010-12-18

Standard (CCV-1)

QC Batch: 76325

Date Analyzed: 2010-12-20

Analyzed By: ME

Param	Flag	Units	CCVs	CCVs	CCVs	Percent	Date
			True	Found	Percent	Recovery	
Conc.	Conc.	Recovery	Limits	Analyzed			
Benzene		mg/L	0.100	0.0949	95	80 - 120	2010-12-20
Toluene		mg/L	0.100	0.0914	91	80 - 120	2010-12-20
Ethylbenzene		mg/L	0.100	0.0870	87	80 - 120	2010-12-20
Xylene		mg/L	0.300	0.264	88	80 - 120	2010-12-20

Standard (CCV-2)

QC Batch: 76325

Date Analyzed: 2010-12-20

Analyzed By: ME

Param	Flag	Units	CCVs	CCVs	CCVs	Percent	Date
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	
Benzene		mg/L	0.100	0.0989	99	80 - 120	2010-12-20
Toluene		mg/L	0.100	0.0981	98	80 - 120	2010-12-20
Ethylbenzene		mg/L	0.100	0.0960	96	80 - 120	2010-12-20
Xylene		mg/L	0.300	0.291	97	80 - 120	2010-12-20

TraceAnalysis, Inc.

Logo

email: lab@traceanalysis.com

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

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Tel (432) 699-6301
Fax (432) 699-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79925
Tel (915) 585-3443
Fax (915) 585-3444
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrizo Springs, Texas 78006
Tel (972) 242-7750

ANALYSIS REQUEST
(Circle or Specify Method No.)

Company Name:	Phone #:	Fax #:	Address: (Street, City, Zip)	Contact Person:	E-mail:	Invoice to: (If different from above)	Project #:	Project Name: <i>Deep E</i>	Sampler Signature: <i>Eric</i>	Hold
Turn Around Time if different from standard										
# CONTAINERS	FIELD CODE	MATRIX	PRESERVATIVE METHOD	SAMPLING	DATE	TIME	TIME	TIME	TIME	
3	MW16	X	X	X	12/15	1215	X			
Volume / Amount										
LAB # (LAB USE ONLY)		WATER	SOL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	
233496		X	X	X	X	X	X	X	X	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/2007										
TCLP Volatiles										
TCLP Semivolatileles										
TCP/P Pesticides										
RCI										
GC/MS VDL 8260 / 624										
GC/MS Sam. VDL 8270 / 625										
PCBs 8062 / 608										
BOD, TSS, PH										
Pesticides 8061 / 608										
Moisture Content										
Cl, F, SO ₄ , NO ₃ , NO ₂ , Alkalinity										
Na, Ca, Mg, K, TDS, EC										
Turn Around Time if different from standard										
Relinquished by:	Company:	Date:	Time:	Company:	Date:	Time:	INST	OBS	REMARKS:	
<i>By Lab</i>	Taylor/LP	12/15	1730	<i>Trace Analysis</i>	<i>12/15</i>	<i>1730</i>	<i>c</i>	<i>c</i>	ONLY	
Relinquished by:	Company:	Date:	Time:	Company:	Date:	Time:	INST	OBS		
<i>By Lab</i>	<i>12/16</i>	<i>9:30</i>	<i>12/16</i>	<i>Trace Analysis</i>	<i>12/16</i>	<i>9:30</i>	<i>c</i>	<i>c</i>		
Relinquished by:	Company:	Date:	Time:	Company:	Date:	Time:	INST	OBS	Dry Weight Basis Required	
<i>By Lab</i>	<i>12/16</i>	<i>9:30</i>	<i>12/16</i>	<i>Trace Analysis</i>	<i>12/16</i>	<i>9:30</i>	<i>c</i>	<i>c</i>	TRRP Report Required	
Carrier #	<i>Carry</i>									
Check If Special Reporting Limits Are Needed										

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

C.R.G.M.A. C.U.P.A.Y.

APPENDIX D

NMOCD C-141

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	County
H	6	17S	36E					Lea Lat.: 32°52'1.132"N Lon: 103°23'16.570"W

NATURE OF RELEASE

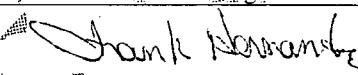
Type of Release: Crude Oil	Volume of Release: 25 bbls	Volume Recovered: 10 bbls
Source of Release: 6" steel pipeline	Date and Hour of Occurrence: 12-12-02 8:00 AM	Date and Hour of Discovery: 12-12-02 10:00 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 ft² 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: 	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 <input type="checkbox"/>

* 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 ¼: 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

¹100 ppm field VOC headspace measurement may be substituted for lab analysis