

**AP - 37**

**ANNUAL  
MONITORING REPORT**

**YEAR(S):  
2008**



PLAINS  
ALL AMERICAN

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March 27, 2009

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

Re: Plains All American – 2008 Annual Monitoring Reports  
6 Sites in Lea County, New Mexico

Dear Mr. Hansen:

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

8-inch Moore to Jal #1	1R-0380	Section 16, T17S, R37E, Lea County
8-inch Moore to Jal #2	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: Larry Johnson, NMOCD, Hobbs, NM

Enclosures

2530 State Hwy. 214 • Denver City, TX 79323 • (575)441-1099



**2008 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 27, 2009**

ENVIRONMENTAL CONSULTING  
ENGINEERING  
DRILLING  
CONSTRUCTION  
EMERGENCY RESPONSE

# **2008 ANNUAL GROUNDWATER MONITORING REPORT**

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

**TALON/LPE PROJECT NO. PLAINS046SPL**

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**March 2009**

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NMOCD - New Mexico Oil Conservation Division

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## **1.0 INTRODUCTION AND OBJECTIVES**

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### **1.1 Objectives and Site Background**

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

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

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

### **1.2 Previous Environmental Investigations**

In an initial effort 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 advancement of soil boring BH-1, groundwater was encountered and was found to be impacted by phase separated hydrocarbons (PSH). Subsequently, soil boring BH-1 was completed as a groundwater monitor well, MW-2. Soil borings BH-2, BH-4 through BH-6 were advanced to delineate the impacted area and were completed as groundwater monitor wells MW-1, MW-3, MW-4, and MW-5.

During November and December 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. In July 2006, an additional six (6) groundwater monitor wells (MW-12 through MW-17) were installed.

PSH recovery operations have been performed at the site since March 2003. Approximately 1,567 gallons (37 bbls) of PSH have been recovered to date from the site.

### **1.3 Regulatory Framework**

Groundwater analytical data from this site was compared to the New Mexico Water Quality Control Commission (NMWQCC) groundwater standards. Following sections provide summaries of the groundwater monitoring activities conducted at the site as well as analytical results from each groundwater sampling event of 2008. Analytical results for the four sampling events are summarized in Table 2, Table 3, and Table 4 in Appendix B, and Figures 3a through 4 in Appendix A. Laboratory analytical data reports and chain of custody documentation are included in Appendix C.

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

## **2.0 SITE ACTIVITIES**

---

The following section presents a summary of the product recovery and groundwater monitoring activities conducted at the site. The focus of the groundwater monitoring activities included collecting groundwater measurements and groundwater samples from monitor wells for laboratory analysis.

### **2.1 Groundwater Monitoring Activities**

A total of four (4) groundwater monitoring events were conducted by Talon: March 2008; June 2008; September 2008; and December 2008.

During the March 2008 groundwater monitoring event, all monitor wells were gauged. Eleven (11) monitor wells, MW-1 and MW-3 through MW-12, were purged and sampled. Six (6) monitor wells, MW-2 and MW-13 through MW-17, were not sampled due to the presence of PSH. Details of the gauging, purging, and sampling activities are presented in Section 2.2.

During the June 2008 groundwater monitoring event, all monitor wells were gauged. Eleven (11) monitor wells, MW-1 and MW-3 through MW-12, were purged and sampled. Six (6) monitor wells, MW-2 and MW-13 through MW-17, were not sampled due to the presence of PSH. Details of the gauging, purging, and sampling activities are presented in Section 2.2.

During the September 2008 groundwater monitoring event, all monitor wells were gauged. Seventeen (17) monitor wells, MW-1 through MW-17, were purged and sampled. Six (6) monitor wells, MW-2 and MW-13 through MW-17, exhibited PSH thicknesses ranging from 0.11' to 2.82'; however, groundwater samples were collected from these wells per NMOCD's request. Details of the gauging, purging, and sampling activities are presented in Section 2.2.

During the December 2008 groundwater monitoring event, all monitor wells were gauged. Eleven (11) monitor wells, MW-1 and MW-3 through MW-12 were purged and sampled. Six (6) monitor wells, MW-2, MW-13 through MW-17, were not sampled due to the presence of PSH. Details of the gauging, purging, and sampling activities are presented in Section 2.2.

### **2.2 Groundwater Gauging, Purging, and Sampling Procedures**

During each groundwater monitoring event, all monitor wells were measured to determine static water levels and monitor the presence and/or absence of PSH accumulations. Measured groundwater depths and elevations collected during the sampling events, along with historical measurements, are presented in Table 1 – Summary of Historical Fluid Level Measurements.

All wells not containing PSH were purged a minimum of three (3) well volumes prior to sampling. During the September 2008 groundwater sampling event, the monitor wells containing PSH (monitor wells MW-2 and MW-13 through MW-17) were purged utilizing a pump and vinyl tubing. Purge volumes for the monitor wells exhibiting PSH varied from one well to the next and each monitor well was purged to the maximum extent practical that still allowed for the collection of a groundwater sample. All monitor wells were purged utilizing pumps and vinyl tubing. The pumps and tubing used to purge the wells were decontaminated with Alconox® detergent and rinsed with distilled water prior to initial use. Recovered purged

groundwater and recovered decon water was immediately transferred to the on-site poly tank which stores recovered PSH. This tank is monitored for accumulations and all recovered water and PSH is properly disposed of as needed. Approximately four hundred and sixty three (463) gallons of groundwater was purged during the monitoring events of 2008.

Groundwater samples were collected from all monitor wells utilizing dedicated disposable Teflon® bailers, except for the monitor wells exhibiting PSH during the September 2008 groundwater sampling event. These groundwater samples were collected through the pump and vinyl tubing. The groundwater samples were transferred from the disposable bailer or vinyl tubing into laboratory supplied sample containers appropriate for the analysis requested. The groundwater samples were maintained on ice in the custody of Talon, until delivery to TraceAnalysis, Inc. in Midland, Texas for analysis. The collected groundwater samples were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method SW-846 8021B and poly-aromatic hydrocarbons (PAH) using EPA Methods SW-846 and 8270C.

### **2.3 Phase Separated Hydrocarbon Recovery**

PSH recovery methods have been conducted at the site since 2003 via portable total fluid pump. In February 2008, an automated skimmer recovery system was installed at the site. A total of five (5) skimmer pumps were installed in monitor wells MW-2, MW-13, MW-14, MW-16, and MW-17. Talon conducts weekly operation and maintenance to the skimmer system.

Recovered PSH is pumped to an on-site poly tank, which is monitor for the accumulation of PSH on a weekly basis. PSH is removed from the on-site poly tank via a vacuum truck and re-introduced to the Plains' pipeline system via the Scharb Station and/or 34 Junction South pipeline.

During 2008 the quarterly PSH recovery totals are as followed:

- 1<sup>st</sup> Quarter - 0 gallons (0 bbls)
- 2<sup>nd</sup> Quarter – 0 gallons (0 bbls)
- 3<sup>rd</sup> Quarter – 0 gallons (0 bbls)
- 4<sup>th</sup> Quarter – 840 gallons (20 bbls)

Approximately 1,567 gallons (37 bbls) of PSH have been recovered to date from the site.

## **3.0 GROUNDWATER MONITORING RESULTS**

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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.

### **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 first water-bearing zone underlying the site is an unconfined aquifer that appears to be part of the Ogallala Aquifer. The first water-bearing zone is likely to exhibit temporal fluctuations in saturated thickness based upon the season and the frequency and intensity of local and regional rainfall. The depth of groundwater has historically been approximately 63 to 70 feet bgs and the gradient direction is to the east.

#### **3.1.2 Groundwater Gradient and Flow Direction**

Water level measurements were collected on March 18, 2008, June 26, 2008, September 20, 2008 and December 23, 2008. The monitor well fluid level measurement data arising from the four (4) monitoring events is summarized in Table 1 - Summary of Historical Fluid Level Measurements in Appendix B.

Potentiometric surface maps were constructed from four (4) of the water level measurement data sets:

- March 18, 2008
- June 26, 2008
- September 20, 2008
- December 23, 2008

These maps are Figure 2a through Figure 2d presented in Appendix A.

The potentiometric surface map for March 2008 was constructed from water level elevations collected from all monitor wells. The water level elevations exhibit a general groundwater direction of flow to the east with an approximate gradient of 0.003 feet/foot.

The potentiometric surface map for June 2008 was constructed from water level elevations from all monitor wells. The water level elevations exhibit a general groundwater direction of flow to the east with an approximate gradient of 0.003 feet/foot.

The potentiometric surface map for September 2008 was constructed from water level elevations from all monitor wells. The water level elevations exhibit a general groundwater direction of flow to the east with an approximate gradient of 0.003 feet/foot.

The potentiometric surface map for December 2008 was constructed from water level elevations from all monitor wells. The water level elevations exhibit a general groundwater direction of flow to the east with an approximate gradient of 0.003 feet/foot.

Based on fluid elevations measured at this site, the groundwater within the first water-bearing zone underlying the site is consistently towards the east.

### 3.1.3 Phase Separated Hydrocarbon (PSH)

The collection of water level measurement data was conducted using an oil/water interface probe, which was also used to determine the presence of PSH.

- In March 2008, PSH was observed in monitor wells MW-2 and MW-13 through MW-17. PSH thickness ranged from 0.17 feet to 5.91 feet.
- In June 2008, PSH was observed in monitor wells MW-2 and MW-13 through MW-17. PSH thickness ranged from 0.14 feet to 1.27 feet.
- In September 2008, PSH was observed in monitor wells MW-2 and MW-13 through MW-17. PSH thickness ranged from 0.11 feet to 2.82 feet.
- In December 2008, PSH was observed in monitor wells MW-2 and MW-13 through MW-17. PSH thickness ranged from 0.18 feet to 1.43 feet.

PSH plume maps are presented on Figure 3a through 3d. Based on these measurements, the PSH plume is delineated by the current system and appears to be stable in thickness.

PSH recovery operations have been performed at the site since March 2003. Currently there are a total of five (5) skimmer pumps in operation in monitor wells MW-2, MW-13, MW-14, MW-16 and MW-17. A summary of the historical groundwater and PSH gauging is provided in Table 1. Approximately 1,567 gallons (37 bbls) of PSH have been recovered to date.

### 3.1.4 Groundwater Sampling Results

During the March 2008 sampling event, monitor wells MW-1 and MW-3 through MW-12 were sampled. Groundwater samples collected from these wells exhibited the following analytical results:

- Benzene concentrations ranged from <0.00100 mg/L to 12.4 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-3, MW-5, MW-10, and MW-12.
- Toluene concentrations ranged from <0.00100 mg/L to 1.65 mg/L. Toluene concentrations 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 0.646 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 1.18 mg/L. Xylene concentrations exceeded the NMWQCC groundwater standard of 0.620 mg/L in the groundwater sample collected from monitor well MW-3.
- Monitor wells MW-2 and MW-13 through MW-17 were not sampled due to the presence of PSH.

During the June 2008 sampling event, monitor wells MW-1 and MW-3 through MW-12 were sampled. Groundwater samples collected from these wells exhibited the following:

- Benzene concentrations ranged from <0.00100 mg/L to 11.2 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-3, MW-4, MW-5, MW-10, and MW-12.
- Toluene concentrations ranged from <0.00100 mg/L to 1.41 mg/L. Toluene concentrations 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 0.655 mg/L. All ethylbenzene concentrations were below the NMWQCC groundwater standard of 0.750 mg/L.
- Xylene concentrations ranged from <0.00100 mg/L to 0.775 mg/L. Xylene concentrations exceeded the NMWQCC groundwater standard of 0.620 mg/L in the groundwater samples collected from monitor well MW-3.
- Monitor wells MW-2 and MW-13 through MW-17 were not sampled due to the presence of PSH.

During the September 2008 sampling event, monitor wells MW-1 through MW-17, were sampled. Groundwater samples collected from these wells exhibited the following:

- Benzene concentrations ranged from <0.00100 mg/L to 15.4 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor well MW-2, MW-3, MW-4, MW-5, MW-10, and MW-12 through MW-17.
- Toluene concentrations ranged from <0.00100 mg/L to 9.60 mg/L. Toluene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in groundwater samples collected from monitor wells MW-2, MW-3, and MW-13 through MW-17.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 1.10 mg/L. Ethylbenzene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in groundwater samples collected from monitor wells MW-2, MW-3, and MW-13 through MW-17.
- Xylene concentrations ranged from <0.00100 mg/L to 2.89 mg/L. Xylene concentrations exceeded the NMWQCC groundwater standard of 0.620 mg/L in groundwater samples collected from monitor wells MW-2, MW-3 and MW-13, MW-14, and MW-17.
- PAH concentrations are summarized in Tables 3 and 4 in Appendix B.

During the December 2008 sampling event, monitor wells MW-1, and MW-3 through MW-12 were sampled. Groundwater samples collected from these wells exhibited the following:

- Benzene concentrations ranged from <0.00100 mg/L to 10.2 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-3, and MW-10 through MW-12.
- Toluene concentrations ranged from <0.00100 mg/L to 0.437 mg/L. All toluene concentrations were below the NMWQCC groundwater standard of 0.750 mg/L.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.412 mg/L. All

ethylbenzene concentrations were below the NMWQCC groundwater standard of 0.750 mg/L.

- Xylene concentrations ranged from <0.00100 mg/L to 0.294 mg/L. All xylene concentrations were below the NMWQCC groundwater standard of 0.620 mg/L.
- Monitor wells MW-3, and MW-13 through MW-17 were not sampled due to the presence of PSH.

The groundwater plume impacted at concentrations above the NMWQCC groundwater standards has been delineated in all directions except to the east of monitor well MW-12. The results of the laboratory analyses are summarized in Table 2 – Summary of Groundwater Analytical Results in Appendix B. Laboratory analytical data reports and chain of custody documentation are provided in Appendix C.

## **4.0 CONCLUSIONS AND RECOMMENDATIONS**

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

### **4.1 Summary of Findings**

The groundwater flow direction in the first water-bearing zone is to the east based upon the water level measurement data collected to date. The number and locations of the existing monitor well array are not adequate to detect movement of the dissolved-phase plume that might emanate east of monitor well MW-12. Down-gradient monitor well MW-12 exhibited benzene concentrations above NMWQCC groundwater standards through the four quarterly groundwater monitoring events. Additionally, monitor well MW-11 exhibited a benzene concentration above NMWQCC groundwater standards during the December 2008 groundwater sampling event.

PSH has been encountered in monitor wells MW-2, and MW-13 through MW-17. Monitor wells, MW-2, MW-13, MW-14, MW-16 and MW-17 have skimmer pumps installed in them. The PSH plume underlying this site has been delineated by the current monitoring system. Based upon the fluid level measurements to date, the PSH plume appears to be stable. The skimmer pump network has recovered approximately 2,029 gallons (48 bbls) of PSH to date.

Monitor wells MW-2, MW-3, and MW-13 through MW-17 exhibited BTEX concentrations above the NMWQCC groundwater standards during the September 2008 groundwater monitoring sampling event. The dissolved-phase plume appears to be moving and/or increasing in size east of monitor well MW-12.

### **4.2 Recommendations**

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

- Gauge the monitor wells weekly to record water and PSH levels.
- Operate and maintain the existing skimmer recovery system to achieve maximum PSH recovery.
- Monitor wells MW-1, and MW-3 through MW-12 will be sampled and analyzed for BTEX quarterly and PAH annually.
- Monitor wells MW-2, and MW-13 through MW-17 will be added to the quarterly sampling/analysis schedule when PSH is no longer present in each well. Pursuant to the request of the NMOCD, Plains will collect a discrete sample below the PSH in the water table from these monitor wells on an annual basis to evaluate BTEX, TPH, and PAH concentrations in the groundwater.
- Install one (1) additional monitor well east of monitor well MW-12 for the delineation of the dissolved-phase plume (see Figure 1).

## **APPENDIX A**

### **Drawings**

Figure 1 - Site Plan with Proposed Well

Figure 2a - Groundwater Gradient Map - 03/18/2008

Figure 2b - Groundwater Gradient Map - 06/26/2008

Figure 2c - Groundwater Gradient Map - 09/20/2008

Figure 2d - Groundwater Gradient Map - 12/23/2008

Figure 3a - PSH Thickness & Groundwater Concentration Map - 03/18/2008

Figure 3b - PSH Thickness & Groundwater Concentration Map - 06/26/2008

Figure 3c - PSH Thickness & Groundwater Concentration Map - 09/20/2008

Figure 3d - PSH Thickness & Groundwater Concentration Map - 12/23/2008

Figure 4 - Groundwater Concentration in Wells with PSH Map - 09/20/2008



Scale in Feet  
0 50 100



Legend  
- Monitor Well  
- Pipeline  
- Proposed Monitor Well

Talon/LPE #: PLAINS046SPL

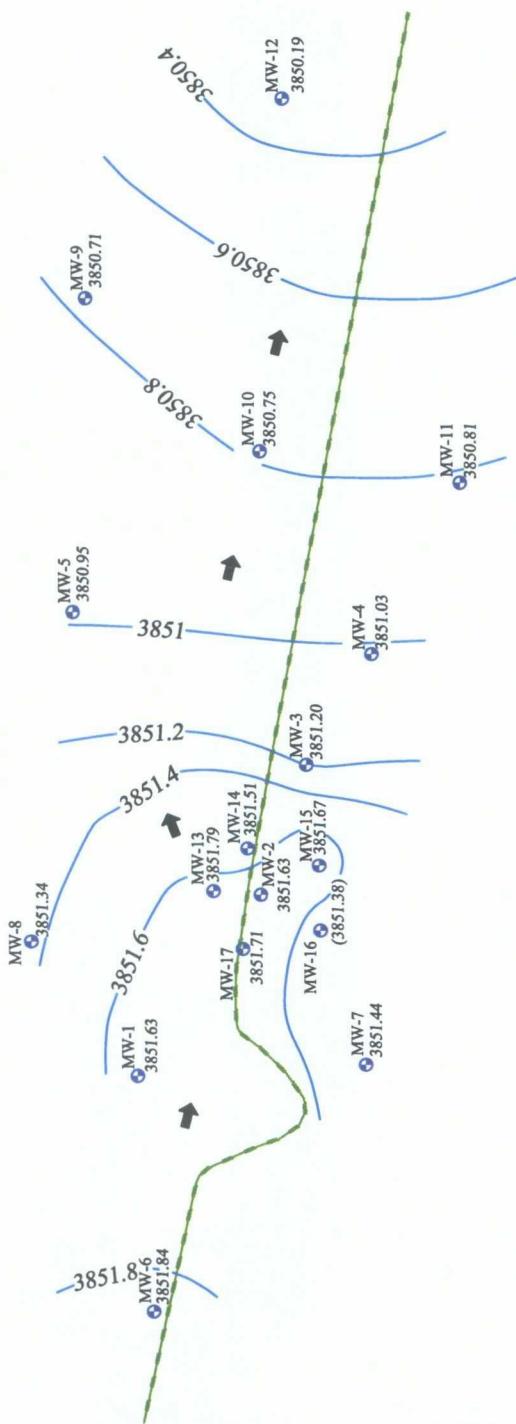
**TALON**  
**LPE**

Date: 03/23/2009
Scale: 1" = 100'
Drawn By: SJA

**Lovington Deep 6"**  
SRS # 2002-10312, NMOCD REF # AP-0029  
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
Figure 1 - Site Plan with Proposed Well



0 40 80  
Scale in Feet



Legend

- Monitor Well
- Pipeline
- Groundwater Gradient Contour Line
- 3850.0 - Groundwater Gradient Contour Elevation (3851.56) - Data Not Used For Contouring
- - Groundwater Flow Direction

Talon/LPE #: PLAINS046SPL

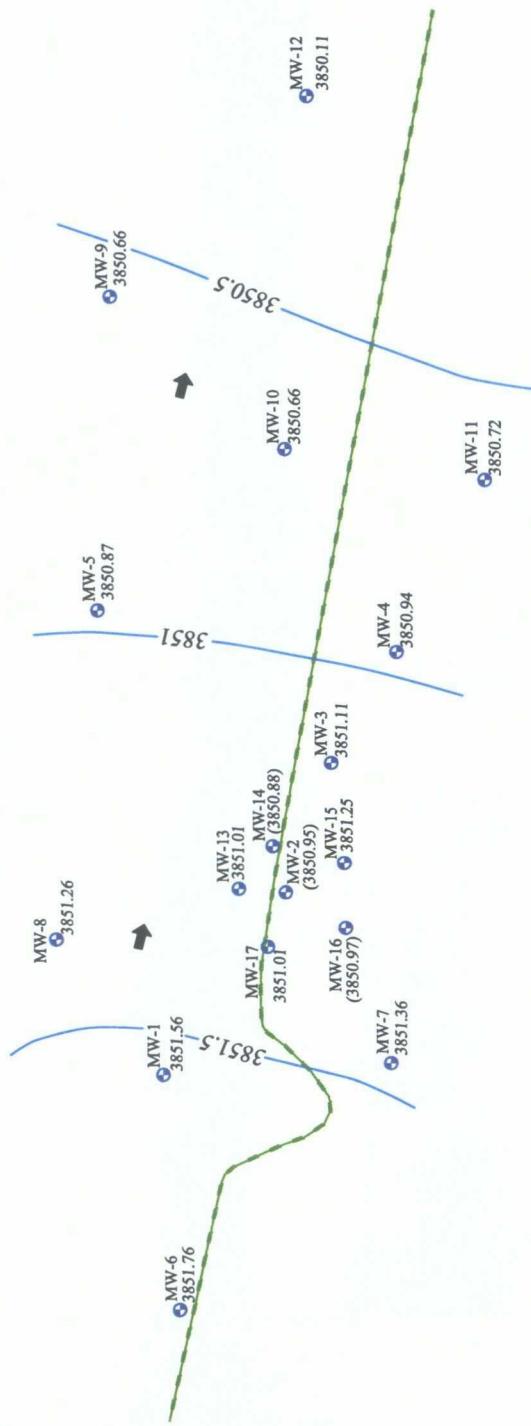
Date: 03/17/2009  
Scale: 1" = 80'  
Drawn By: SJA

**TA  
LON  
LPE**

Lovington Deep 6"  
SRS # 2002-10312, NMOCID REF. # AP-0029  
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
Figure 2a- Groundwater Gradient Map, - 03/18/2008



0 40 80  
Scale in Feet



Legend

- Monitor Well
- Pipeline
- Groundwater Gradient Contour Line
- 3850.0 - Groundwater Gradient Contour Elevation (3851.56) - Data Not Used For Contouring
- ↑ - Groundwater Flow Direction

Talon/LPE # : PLAINS046SPL

Date: 03/17/2009  
Scale: 1" = 80'  
Drawn By: SJA



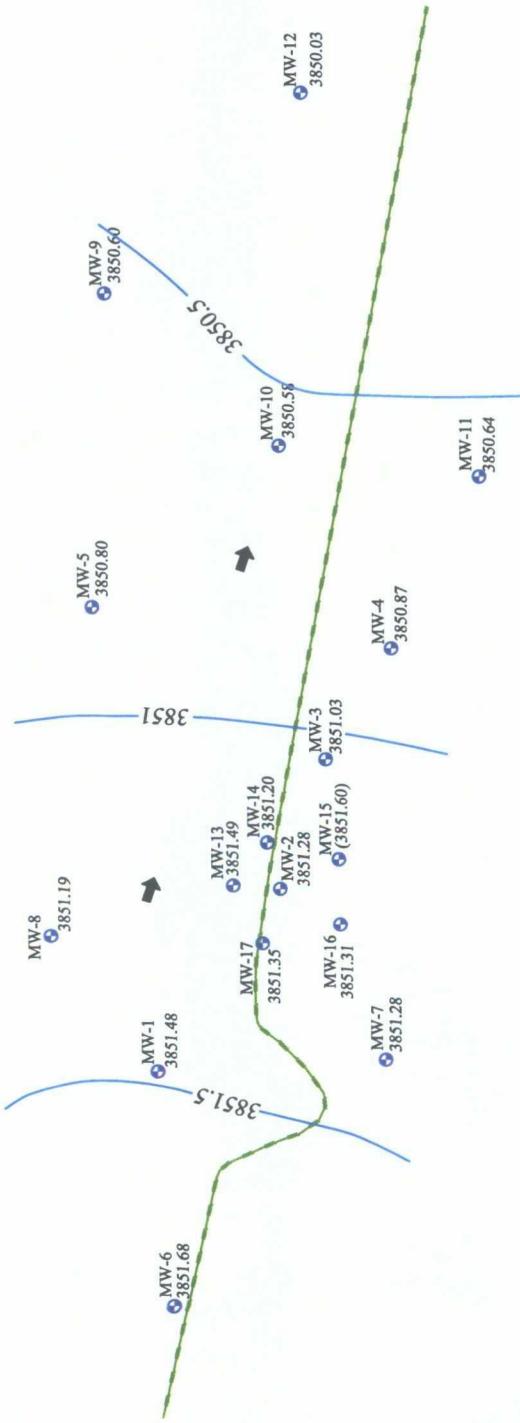
Lovington Deep 6"

SRS # 2002-10312, NMOCDD REF. # AP-0029

SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
Figure 2b- Groundwater Gradient Map, - 06/26/2008



0 40 80  
Scale in Feet



Talon/LPE # : PLAINS046SPL



Date: 03/17/2009  
Scale: 1" = 80'  
Drawn By: SJA

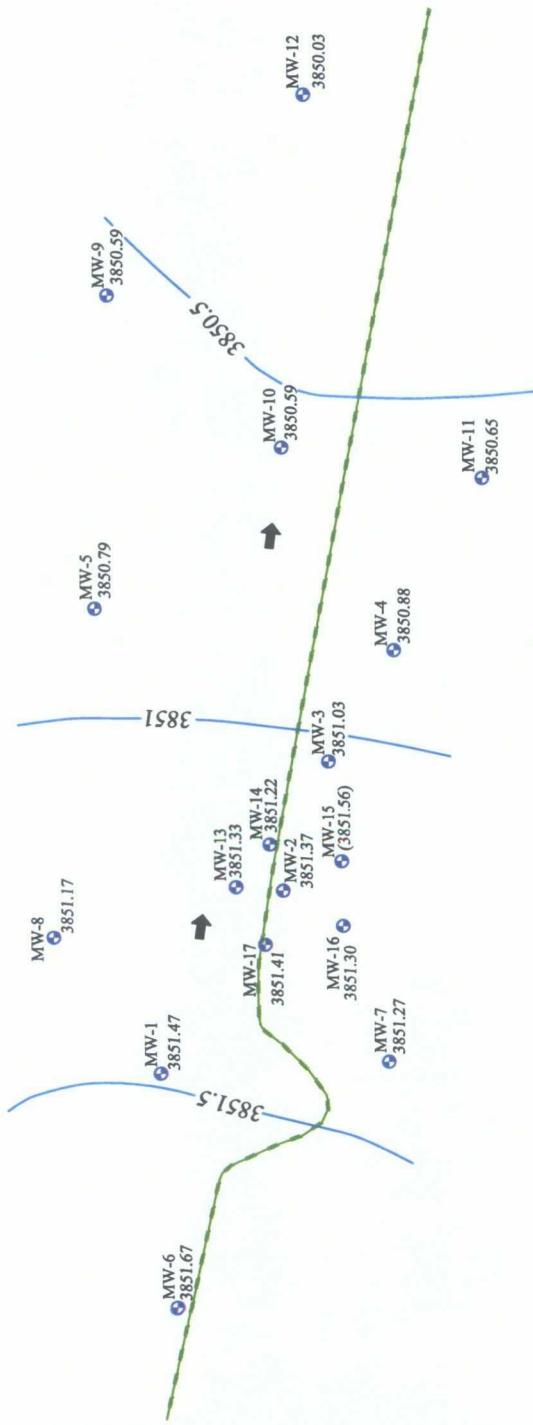
Lovington Deep 6"  
SRS # 2002-10312, NMOCDF REF. # AP-0029  
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
Figure 2c- Groundwater Gradient Map, - 09/20/2008

Legend

- Monitor Well
- Pipeline
- Groundwater Gradient Contour Line
- 3850.0 - Groundwater Gradient Contour Elevation (3851.56) - Data Not Used For Contouring
- - Groundwater Flow Direction



0 40 80  
Scale in Feet



Legend

- Monitor Well
- Pipeline
- Groundwater Gradient Contour Line
- 3850.0 - Groundwater Gradient Contour Elevation (3851.56) - Data Not Used For Contouring
- ↑ - Groundwater Flow Direction

Talon/LPE #: PLAINS046SPL

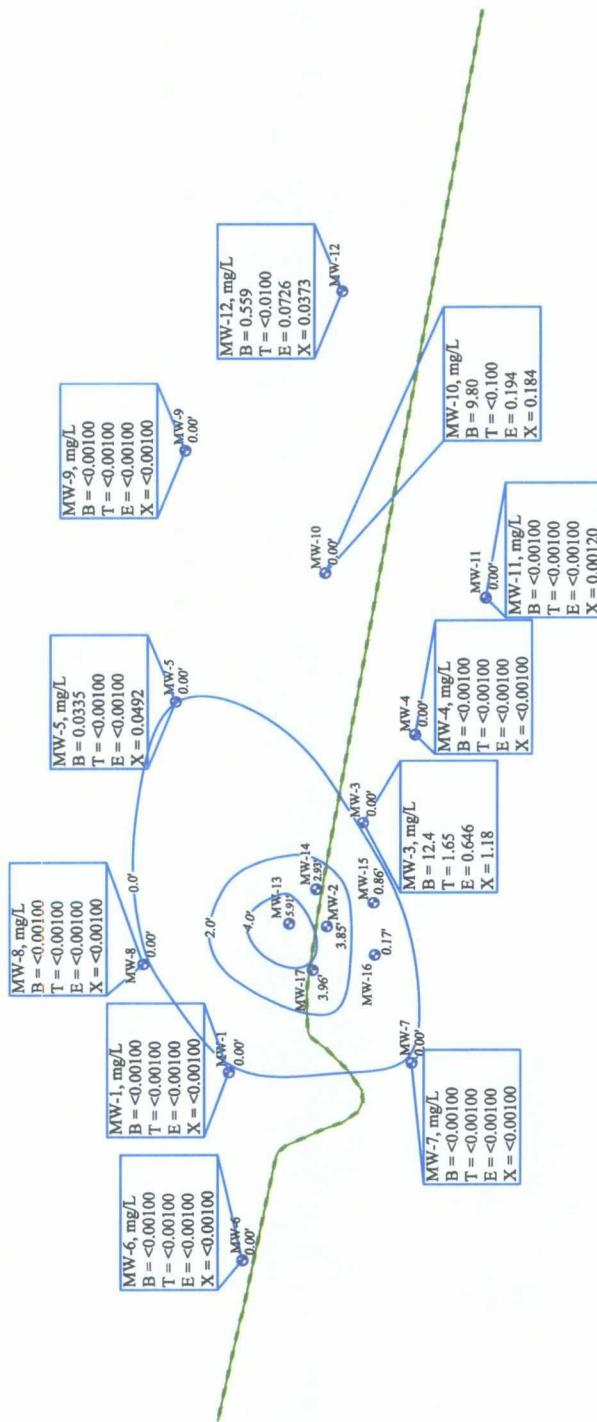
Date: 03/17/2009  
Scale: 1" = 80'  
Drawn By: SJA

**TALON**  
**LPE**

**Lovington Deep 6"**  
SRS # 2002-10312, NMOCID REF. # AP-0029  
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
Figure 2d- Groundwater Gradient Map, - 12/23/2008



Scale in Feet  
0 50 100



Talon/LPE #: PLAINS046SPL

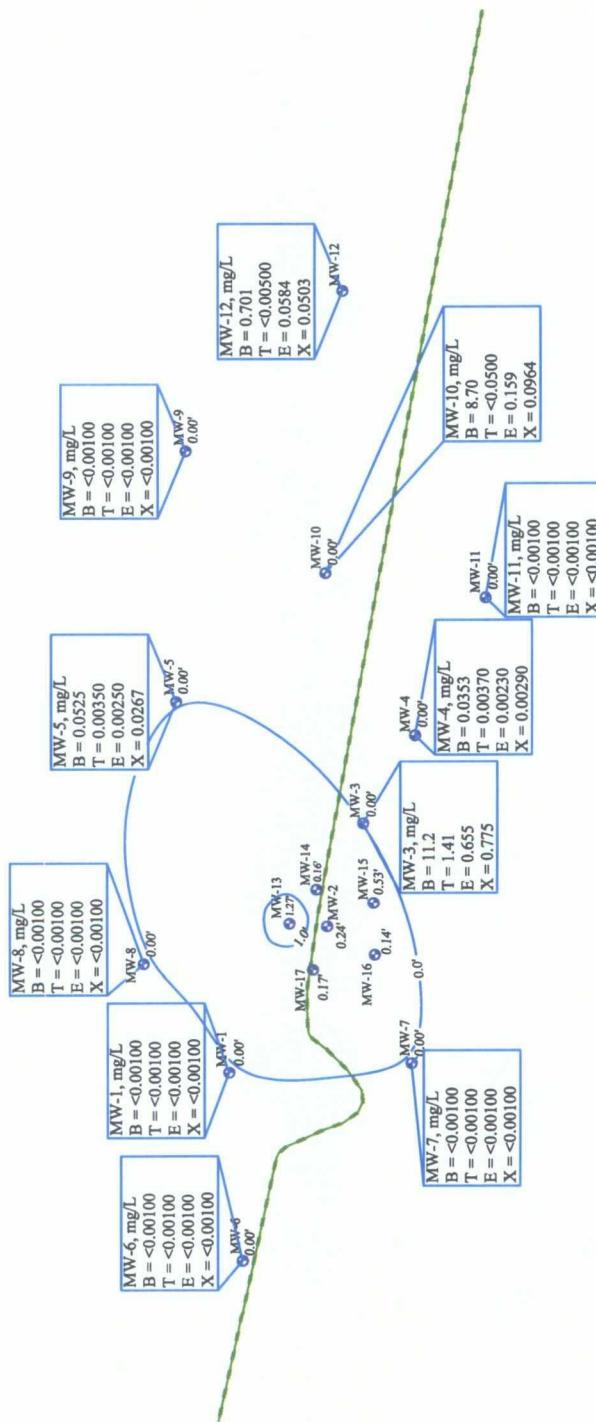
Date: 03/25/2009
Scale: 1" = 100'
Drawn By: SJA

**TAION**  
**LPE**

Lovington Deep 6"  
SRS # 2002-10312, NMOCID REF. # AP-0029  
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
Figure 3a- PSH Thickness & Groundwater Concentration Map - 03/18/2008



Scale in Feet  
0 50 100



Talon/LPE # : PLAINS046SPL

Date: 03/25/2009  
Scale: 1" = 100'  
Drawn By: SJA

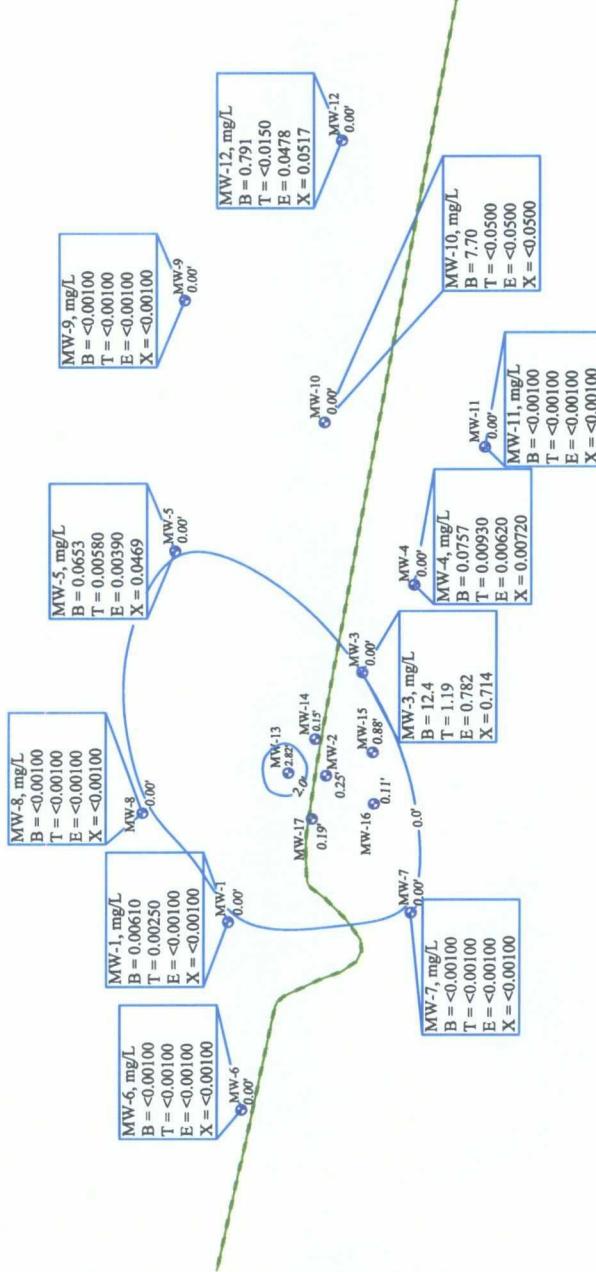
Lovington Deep 6"

SRS # 2002-10312, NMOCRD REF. # AP-0029  
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
Figure 3b- PSH Thickness & Groundwater Concentration Map - 06/26/2008





Scale in Feet  
0 50 100



Talon/LPE # : PLAINS046SPL



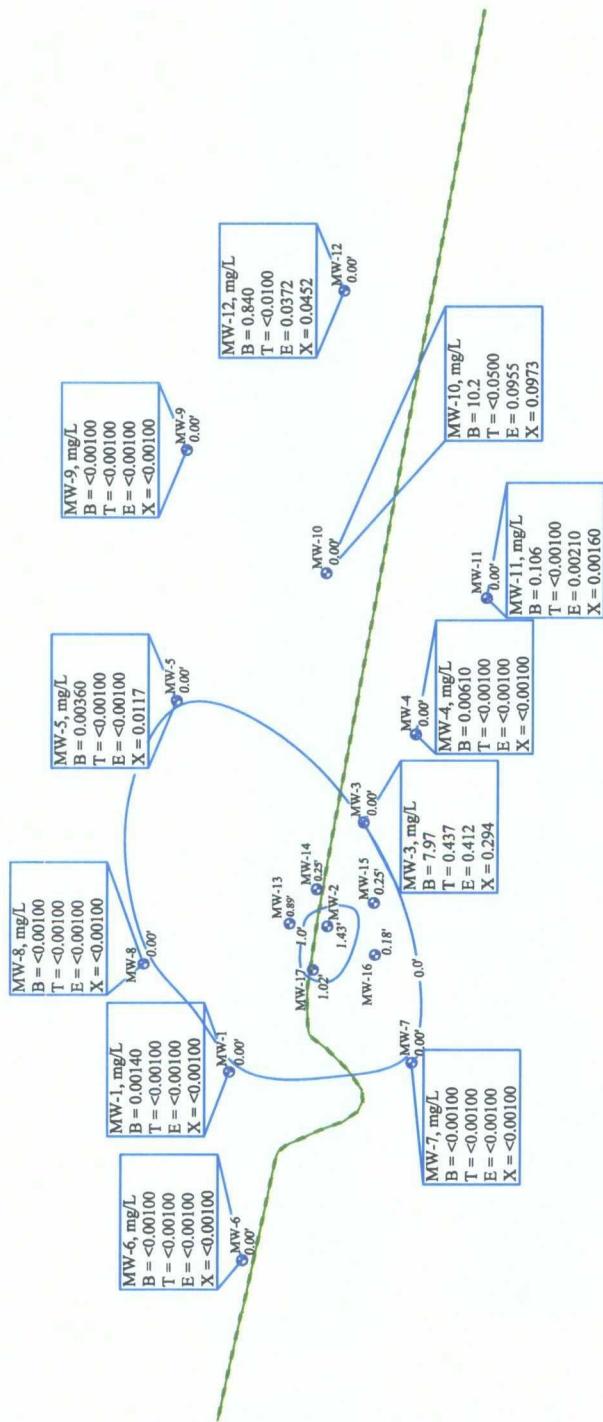
Date: 03/25/2009
Scale: 1" = 100'
Drawn By: SJA

### Lovington Deep 6"

SRS # 2002-10312, NMOCDD REF. # AP-0029  
SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
Figure 3c - PSH Thickness & Groundwater Concentration Map - 09/20/2008



Scale in Feet

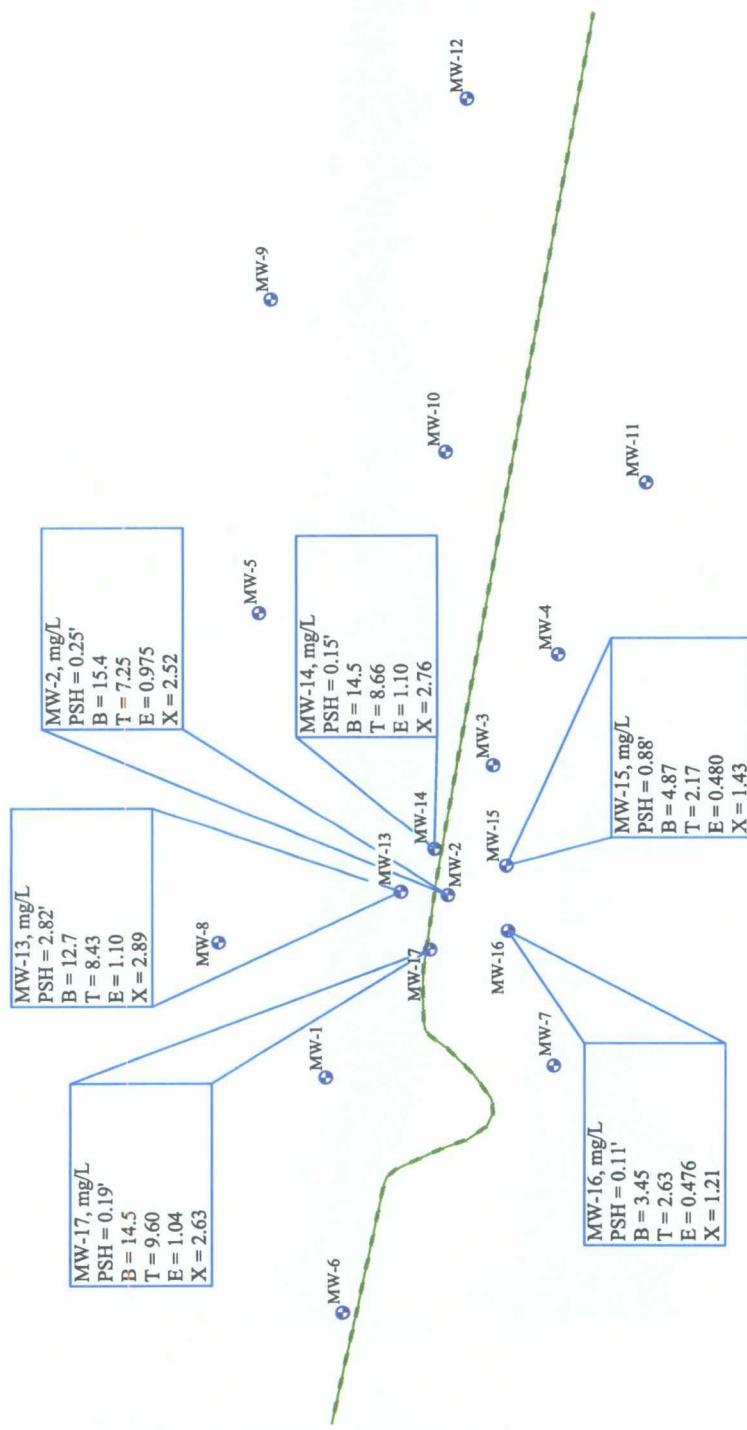


#### Legend

- Monitor Well
- Pipeline
- PSH Plume Thickness Contour Line
- 2.0' - PSH Plume Thickness



Scale in Feet  
0 40 80



Legend  
• Monitor Well  
— Pipeline

**TAT-ON-LPE**  
TAT-ON-LPE

Date: 03/23/2009  
Scale: 1" = 80'  
Drawn By: SJA

Lovington Deep 6"

SRS # 2002-10312, NMOCRD REF. # AP-0029

SE 1/4 of the NE 1/4, Sec. 6, T17S, R36E, Lea County, New Mexico  
Figure 4 - Groundwater Concentration in Wells With PSH Map, - 09/20/2008

## **APPENDIX B**

### **Tables**

Table 1 - Summary of Historical Fluid Level Measurements

Table 2 - Summary of Groundwater Analytical Results

Table 3 - Summary of Groundwater Poly-Aromatic Hydrocarbon (PAH)  
Analytical Results

Table 4 - Summary of PSH Monitor Wells Groundwater Analytical Results



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-1	03/04/03	3,915.51		63.81	3,851.70	
	09/18/03			63.95	3,851.56	
	11/10/03			63.97	3,851.54	
	04/14/04			64.04	3,851.47	
	05/06/04			64.01	3,851.50	
	06/04/04			64.04	3,851.47	
	06/16/04			64.05	3,851.46	
	07/09/04			64.03	3,851.48	
	07/20/04			64.04	3,851.47	
	09/10/04			64.08	3,851.43	
	09/23/04			64.04	3,851.47	
	10/01/04			63.43	3,852.08	
	10/21/04			63.60	3,851.91	
	11/03/04			63.70	3,851.81	
	11/18/04			63.72	3,851.79	
	12/13/04			63.50	3,852.01	
	12/20/04			63.56	3,851.95	
	01/10/05			63.51	3,852.00	
	01/25/05			63.49	3,852.02	
	02/18/05			63.51	3,852.00	
	03/30/05			63.42	3,852.09	
	05/03/05			63.43	3,852.08	
	05/20/05			63.40	3,852.11	
	08/23/05			63.38	3,852.13	
	11/22/05			63.40	3,852.11	
	01/16/06			63.38	3,852.13	
	02/17/06			63.39	3,852.12	
	03/17/06			63.33	3,852.18	
	03/24/06			63.31	3,852.20	
	05/12/06			63.54	3,851.97	
	05/30/06			63.47	3,852.04	
	06/09/06			63.31	3,852.20	
	07/07/06			63.49	3,852.02	
	07/14/06			63.49	3,852.02	
	08/08/06			63.35	3,852.16	
	08/25/06			63.58	3,851.93	
	09/15/06			63.41	3,852.10	
	09/29/06			63.47	3,852.04	
	10/13/06			63.41	3,852.10	
	10/20/06			63.41	3,852.10	
	10/27/06			63.49	3,852.02	
	11/10/06			63.48	3,852.03	
	11/20/06			63.48	3,852.03	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-1 (cont.)	12/01/06			63.50	3,852.01	
	12/08/06			63.50	3,852.01	
	12/15/06			63.51	3,852.00	
	12/27/06			63.57	3,851.94	
	01/05/07			63.55	3,851.96	
	01/15/07			63.58	3,851.93	
	01/29/07			63.59	3,851.92	
	02/08/07			63.33	3,852.18	
	02/20/07			63.65	3,851.86	
	03/06/07			63.05	3,852.46	
	03/15/07			63.64	3,851.87	
	04/04/07			63.44	3,852.07	
	04/11/07			63.55	3,851.96	
	04/18/07			63.55	3,851.96	
	04/24/07			63.65	3,851.86	
	05/22/07			63.67	3,851.84	
	06/19/07			63.94	3,851.57	
	08/08/07			63.65	3,851.86	
	08/17/07			63.68	3,851.83	
	08/24/07			63.67	3,851.84	
	09/19/07			63.96	3,851.55	
	10/03/07			63.98	3,851.53	
	11/15/07			63.74	3,851.77	
	12/04/07			63.80	3,851.71	
	03/18/08			63.88	3,851.63	
	04/11/08			63.88	3,851.63	
	05/09/08			64.88	3,850.63	
	06/03/08			63.90	3,851.61	
	06/26/08			63.95	3,851.56	
	08/28/08			63.98	3,851.53	
	09/20/08			64.03	3,851.48	
	10/29/08			64.03	3,851.48	
	12/23/08			64.04	3,851.47	
MW-2	03/04/03	3,915.04				
	06/17/03		62.29	70.02	3,851.98	7.73
	08/14/03		62.34	70.04	3,851.93	7.70
	08/28/03		62.50	69.94	3,851.80	7.44
	09/18/03		62.51	69.95	3,851.79	7.44
	10/13/03		62.50	69.96	3,851.79	7.46
	10/24/03		62.35	70.05	3,851.92	7.70
	11/10/03		62.45	69.59	3,851.88	7.14
	11/17/03		62.38	69.98	3,851.90	7.60



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-2 (cont.)	11/18/03		62.95	67.37	3,851.65	4.42
	12/04/03		62.57	69.75	3,851.75	7.18
	02/09/04		62.45	69.87	3,851.85	7.42
	03/15/04		62.42	69.95	3,851.87	7.53
	03/25/04		62.43	69.95	3,851.86	7.52
	04/14/04		62.68	69.42	3,851.69	6.74
	05/06/04		62.75	70.31	3,851.53	7.56
	06/04/04		62.77	70.33	3,851.51	7.56
	06/16/04		62.73	69.51	3,851.63	6.78
	07/09/04		62.40	69.97	3,851.88	7.57
	07/20/04		63.20	68.95	3,851.27	5.75
	09/10/04		62.52	69.70	3,851.80	7.18
	09/23/04		62.49	69.69	3,851.83	7.20
	10/01/04		60.50	71.07	3,853.48	10.57
	10/21/04		61.96	68.57	3,852.42	6.61
	11/03/04		62.27	68.22	3,852.18	5.95
	11/18/04		62.43	67.81	3,852.07	5.38
	12/13/04		62.05	68.29	3,852.37	6.24
	12/20/04		62.04	68.31	3,852.37	6.27
	01/10/05		62.11	68.29	3,852.31	6.18
	01/25/05		62.10	68.21	3,852.33	6.11
	02/18/05		62.06	68.27	3,852.36	6.21
	03/30/05		62.02	68.30	3,852.39	6.28
	05/03/05		62.04	68.24	3,852.38	6.20
	05/20/05		62.03	68.16	3,852.40	6.13
	08/23/05		61.94	68.23	3,852.47	6.29
	11/22/05		62.05	68.20	3,852.38	6.15
	12/08/05		61.99	68.25	3,852.42	6.26
	01/16/06		62.00	68.20	3,852.42	6.20
	02/17/06		62.15	67.60	3,852.35	5.45
	03/03/06		62.06	68.00	3,852.39	5.94
	03/10/06		62.05	67.87	3,852.41	5.82
	03/17/06		62.12	67.71	3,852.36	5.59
	03/24/06		62.05	67.95	3,852.40	5.90
	03/31/06		62.07	67.91	3,851.89	5.29
	04/07/06		62.11	67.89	3,852.35	5.78
	04/13/06		62.11	67.80	3,852.36	5.69
	04/21/06		62.12	67.86	3,852.35	5.74
	04/28/06		62.09	67.91	3,852.47	5.82
	05/05/06		62.14	67.77	3,852.34	5.63
	05/12/06		62.14	67.81	3,852.33	5.67
	05/19/06		62.11	67.97	3,852.34	5.86
	05/30/06		62.01	67.99	3,852.43	5.98



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-2 (cont.)	06/02/06		62.00	67.83	3,852.46	5.83
	06/09/06		62.04	67.81	3,852.42	5.77
	06/16/06		62.11	67.91	3,852.35	5.80
	06/30/06		62.05	67.97	3,852.40	5.92
	07/07/06		62.07	67.96	3,852.38	5.89
	07/14/06		62.08	67.96	3,852.37	5.88
	07/21/06		62.06	68.01	3,852.38	5.95
	07/28/06		62.15	67.98	3,852.31	5.83
	08/25/06		62.05	68.02	3,852.39	5.97
	09/15/06		62.07	68.04	3,852.37	5.97
	09/22/06		62.10	68.11	3,851.51	5.09
	09/29/06		62.11	67.91	3,852.35	5.80
	10/06/06		62.16	67.91	3,852.31	5.75
	10/13/06		62.11	68.02	3,852.34	5.91
	10/20/06		62.25	67.87	3,852.23	5.62
	10/27/06		62.09	67.97	3,852.36	5.88
	11/03/06		62.09	67.97	3,852.36	5.88
	11/10/06		62.17	68.09	3,852.28	5.92
	11/20/06		62.17	67.95	3,852.29	5.78
	12/01/06		62.20	68.08	3,852.25	5.88
	12/08/06		62.20	68.08	3,852.25	5.88
	12/15/06		62.21	68.02	3,852.25	5.81
	12/27/06		62.19	68.27	3,852.24	6.08
	01/05/07		62.21	68.46	3,852.21	6.25
	01/15/07		62.21	68.91	3,852.16	6.70
	01/29/07		63.01	68.05	3,851.53	5.04
	02/08/07		62.25	68.07	3,852.21	5.82
	02/20/07		62.33	68.35	3,852.11	6.02
	03/06/07		62.37	68.41	3,852.07	6.04
	03/15/07		62.30	68.21	3,852.15	5.91
	04/04/07		63.58	68.25	3,850.99	4.67
	04/11/07		62.34	68.31	3,852.10	5.97
	04/18/07		62.34	68.31	3,852.10	5.97
	04/24/07		62.36	68.13	3,852.10	5.77
	05/22/07		62.33	63.28	3,852.62	0.95
	06/19/07		62.40	68.30	3,852.05	5.90
	08/08/07		62.36	68.32	3,852.08	5.96
	08/17/07		62.34	68.21	3,852.11	5.87
	08/24/07		62.37	68.12	3,852.10	5.75
	09/19/07		62.36	68.24	3,852.09	5.88
	10/03/07		62.41	68.32	3,852.04	5.91
	10/11/07		62.45	68.22	3,852.01	5.77
	10/18/07		62.44	68.17	3,852.03	5.73



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-2 (cont.)	12/03/07		62.44	68.36	3,852.01	5.92
	01/02/08		62.59	68.46	3,851.86	5.87
	02/07/08		62.63	68.58	3,851.82	5.95
	02/11/08		62.64	68.60	3,851.80	5.96
	03/18/08		63.03	66.88	3,851.63	3.85
	04/02/08		63.24	66.14	3,851.51	2.90
	04/11/08		63.56	63.93	3,851.44	0.37
	04/14/08		63.77	64.00	3,851.25	0.23
	04/29/08		63.78	64.04	3,851.23	0.26
	05/07/08		63.82	64.03	3,851.20	0.21
	05/12/08		63.81	64.03	3,851.21	0.22
	06/03/08		63.92	64.18	3,851.09	0.26
	06/26/08		64.07	64.31	3,850.95	0.24
	07/23/08		63.76	64.02	3,851.25	0.26
	08/28/08		63.71	63.95	3,851.31	0.24
	09/20/08		63.74	63.99	3,851.28	0.25
	10/29/08		63.35	65.79	3,851.45	2.44
	12/23/08		63.53	64.96	3,851.37	1.43
MW-3	03/04/03	3,915.24		64.01	3,851.23	
	09/18/03			64.14	3,851.10	
	11/10/03			64.15	3,851.09	
	04/14/04			64.20	3,851.04	
	05/06/04			64.20	3,851.04	
	06/04/04			64.23	3,851.01	
	06/16/04			64.24	3,851.00	
	07/09/04			64.23	3,851.01	
	07/20/04			64.23	3,851.01	
	09/10/04			64.25	3,850.99	
	09/23/04			64.25	3,850.99	
	10/01/04			63.41	3,851.83	
	10/21/04			63.71	3,851.53	
	11/03/04			63.83	3,851.41	
	11/18/04			63.84	3,851.40	
	12/13/04			63.65	3,851.59	
	12/20/04			63.73	3,851.51	
	01/10/05			63.70	3,851.54	
	01/25/05			63.64	3,851.60	
	02/18/05			63.67	3,851.57	
	03/30/05			63.54	3,851.70	
	05/03/05			63.59	3,851.65	
	05/20/05			63.56	3,851.68	
	08/23/05			63.51	3,851.73	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-3 (cont.)	11/22/05			63.50	3,851.74	
	01/16/06			63.55	3,851.69	
	02/17/06			63.58	3,851.66	
	03/17/06			63.58	3,851.66	
	03/24/06			63.59	3,851.65	
	04/13/06			63.60	3,851.64	
	05/12/06			63.62	3,851.62	
	05/30/06			63.68	3,851.56	
	06/09/06			63.58	3,851.66	
	07/07/06			63.69	3,851.55	
	07/14/06			63.70	3,851.54	
	08/08/06			63.49	3,851.75	
	08/25/06			63.79	3,851.45	
	09/15/06			63.54	3,851.70	
	09/29/06			63.61	3,851.63	
	10/13/06			63.59	3,851.65	
	10/20/06			63.55	3,851.69	
	10/27/06			63.64	3,851.60	
	11/10/06			62.63	3,852.61	
	11/20/06			63.64	3,851.60	
	12/01/06			63.74	3,851.50	
	12/08/06			63.72	3,851.52	
	12/15/06			63.75	3,851.49	
	12/27/06			63.77	3,851.47	
	01/05/07			63.77	3,851.47	
	01/15/07			63.78	3,851.46	
	01/29/07			63.76	3,851.48	
	02/08/07			63.48	3,851.76	
	02/20/07			63.79	3,851.45	
	03/06/07			63.79	3,851.45	
	03/15/07			63.78	3,851.46	
	04/04/07			63.50	3,851.74	
	04/11/07			63.78	3,851.46	
	04/18/07			63.85	3,851.39	
	04/24/07			63.82	3,851.42	
	05/22/07			63.83	3,851.41	
	06/19/07			63.79	3,851.45	
	08/08/07			63.80	3,851.44	
	08/17/07			63.82	3,851.42	
	08/24/07			63.82	3,851.42	
	09/19/07			63.84	3,851.40	
	10/03/07			63.81	3,851.43	
	12/03/07			63.98	3,851.26	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-3 (cont.)	03/18/08			64.04	3,851.20	
	04/11/08			64.05	3,851.19	
	05/09/08			64.06	3,851.18	
	06/03/08			64.08	3,851.16	
	06/26/08			64.13	3,851.11	
	08/28/08			64.16	3,851.08	
	09/20/08			64.21	3,851.03	
	10/29/08			64.20	3,851.04	
	12/23/08			64.21	3,851.03	
MW-4	03/04/03	3,915.30		64.25	3,851.05	
	09/18/03			64.35	3,850.95	
	11/10/03			64.38	3,850.92	
	04/14/04			64.43	3,850.87	
	05/06/04			64.41	3,850.89	
	06/04/04			64.47	3,850.83	
	06/16/04			64.47	3,850.83	
	07/09/04			64.47	3,850.83	
	07/20/04			64.45	3,850.85	
	09/10/04			64.48	3,850.82	
	09/23/04			64.53	3,850.77	
	10/01/04			63.95	3,851.35	
	10/21/04			64.05	3,851.25	
	11/03/04			64.11	3,851.19	
	11/18/04			64.13	3,851.17	
	12/13/04			63.93	3,851.37	
	12/20/04			64.01	3,851.29	
	01/10/05			63.96	3,851.34	
	01/25/05			63.92	3,851.38	
	02/18/05			63.95	3,851.35	
	03/30/05			63.85	3,851.45	
	05/03/05			63.82	3,851.48	
	05/20/05			63.82	3,851.48	
	08/23/05			63.48	3,851.82	
	11/22/05			63.72	3,851.58	
	01/16/06			63.81	3,851.49	
	02/17/06			63.80	3,851.50	
	03/17/06			63.81	3,851.49	
	03/24/06			63.80	3,851.50	
	05/12/06			63.79	3,851.51	
	05/30/06			63.84	3,851.46	
	06/09/06			63.81	3,851.49	
	07/07/06			63.87	3,851.43	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-4 (cont.)	07/14/06			63.87	3,851.43	
	08/08/06			63.72	3,851.58	
	08/25/06			63.96	3,851.34	
	09/15/06			63.81	3,851.49	
	09/29/06			63.84	3,851.46	
	10/13/06			63.81	3,851.49	
	10/20/06			63.77	3,851.53	
	10/27/06			63.90	3,851.40	
	11/10/06			63.88	3,851.42	
	11/20/06			63.89	3,851.41	
	12/01/06			63.94	3,851.36	
	12/08/06			63.93	3,851.37	
	12/15/06			63.93	3,851.37	
	12/27/06			63.98	3,851.32	
	01/05/07			63.98	3,851.32	
	01/15/07			64.02	3,851.28	
	01/29/07			63.98	3,851.32	
	02/08/07			63.70	3,851.60	
	02/20/07			64.02	3,851.28	
	03/06/07			63.96	3,851.34	
	03/15/07			64.05	3,851.25	
	04/04/07			63.82	3,851.48	
	04/11/07			64.05	3,851.25	
	04/18/07			64.05	3,851.25	
	04/24/07			64.04	3,851.26	
	05/22/07			64.05	3,851.25	
	06/19/07			64.04	3,851.26	
	08/08/07			64.02	3,851.28	
	08/17/07			64.04	3,851.26	
	08/24/07			64.03	3,851.27	
	09/19/07			64.06	3,851.24	
	10/03/07			64.08	3,851.22	
	12/03/07			64.18	3,851.12	
	03/18/08			64.27	3,851.03	
	04/11/08			64.26	3,851.04	
	05/09/08			64.27	3,851.03	
	06/03/08			64.28	3,851.02	
	06/26/08			64.36	3,850.94	
	08/28/08			64.37	3,850.93	
	09/20/08			64.43	3,850.87	
	10/29/08			64.41	3,850.89	
	12/23/08			64.42	3,850.88	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-5	03/04/03	3,915.26		64.21	3,851.05	
	09/18/03			64.39	3,850.87	
	11/10/03			64.42	3,850.84	
	04/14/04			64.46	3,850.80	
	05/06/04			64.45	3,850.81	
	06/04/04			64.46	3,850.80	
	06/16/04			64.49	3,850.77	
	07/09/04			64.45	3,850.81	
	07/20/04			64.47	3,850.79	
	09/10/04			64.51	3,850.75	
	09/23/04			64.53	3,850.73	
	10/01/04			64.02	3,851.24	
	10/21/04			64.04	3,851.22	
	11/03/04			64.13	3,851.13	
	11/18/04			64.19	3,851.07	
	12/13/04			63.91	3,851.35	
	12/20/04			63.94	3,851.32	
	01/10/05			63.94	3,851.32	
	01/25/05			63.88	3,851.38	
	02/18/05			63.90	3,851.36	
	03/30/05			63.81	3,851.45	
	05/03/05			63.83	3,851.43	
	05/20/05			63.79	3,851.47	
	08/23/05			63.75	3,851.51	
	11/22/05			63.80	3,851.46	
	01/16/06			63.80	3,851.46	
	02/17/06			63.83	3,851.43	
	03/17/06			63.78	3,851.48	
	03/24/05			63.77	3,851.49	
	04/13/06			63.81	3,851.45	
	05/12/06			63.81	3,851.45	
	05/30/06			63.82	3,851.44	
	06/09/06			63.77	3,851.49	
	07/07/06			63.86	3,851.40	
	07/14/06			63.87	3,851.39	
	08/08/06			63.77	3,851.49	
	08/25/06			63.95	3,851.31	
	09/15/06			63.81	3,851.45	
	09/29/06			63.87	3,851.39	
	10/13/06			63.85	3,851.41	
	10/20/06			63.81	3,851.45	
	10/27/06			63.91	3,851.35	
	11/10/06			63.90	3,851.36	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-5 (cont.)	11/20/06			63.88	3,851.38	
	12/01/06			63.92	3,851.34	
	12/08/06			63.90	3,851.36	
	12/15/06			63.93	3,851.33	
	12/27/06			63.95	3,851.31	
	01/05/07			63.96	3,851.30	
	01/15/07			63.99	3,851.27	
	01/29/07			63.99	3,851.27	
	02/08/07			63.75	3,851.51	
	02/20/07			64.09	3,851.17	
	03/06/07			64.02	3,851.24	
	03/15/07			64.05	3,851.21	
	04/04/07			63.86	3,851.40	
	04/11/07			64.06	3,851.20	
	04/18/07			64.07	3,851.19	
	04/24/07			63.82	3,851.44	
	05/22/07			64.08	3,851.18	
	06/19/07			64.04	3,851.22	
	08/08/07			64.04	3,851.22	
	08/17/07			64.08	3,851.18	
	08/24/07			64.08	3,851.18	
	09/19/07			64.09	3,851.17	
	10/03/07			64.11	3,851.15	
	11/15/07			64.21	3,851.05	
	12/03/07			64.22	3,851.04	
	03/18/08			64.31	3,850.95	
MW-6	04/11/08			64.31	3,850.95	
	05/09/08			64.33	3,850.93	
	06/03/08			64.33	3,850.93	
	06/26/08			64.39	3,850.87	
	08/28/08			64.42	3,850.84	
	09/20/08			64.46	3,850.80	
	10/29/08			64.47	3,850.79	
	12/23/08			64.47	3,850.79	
	11/18/04	3,915.45				
	12/13/04			63.26	3,852.19	
	12/20/04			63.32	3,852.13	
	01/10/05			63.30	3,852.15	
	01/25/05			63.23	3,852.22	
	02/18/05			63.27	3,852.18	
	03/30/05			63.18	3,852.27	
	05/03/05			63.19	3,852.26	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-6 (cont.)	05/20/05			63.14	3,852.31	
	08/23/05			63.12	3,852.33	
	11/22/05			63.14	3,852.31	
	01/16/06			63.15	3,852.30	
	02/17/06			63.15	3,852.30	
	03/17/06			63.12	3,852.33	
	03/24/06			63.11	3,852.34	
	04/13/06			63.15	3,852.30	
	05/12/06			63.19	3,852.26	
	05/30/06			63.19	3,852.26	
	06/09/06			63.10	3,852.35	
	07/07/06			63.20	3,852.25	
	07/14/06			63.21	3,852.24	
	08/08/06			63.08	3,852.37	
	08/25/06			63.28	3,852.17	
	09/15/06			63.17	3,852.28	
	09/29/06			63.20	3,852.25	
	10/13/06			63.14	3,852.31	
	10/20/06			63.15	3,852.30	
	10/27/06			63.22	3,852.23	
	11/10/06			63.22	3,852.23	
	11/20/06			63.23	3,852.22	
	12/01/06			63.29	3,852.16	
	12/08/06			63.29	3,852.16	
	12/27/06			63.33	3,852.12	
	01/05/07			63.35	3,852.10	
	01/15/07			63.37	3,852.08	
	01/29/07			63.35	3,852.10	
	02/08/07			63.07	3,852.38	
	02/20/07			63.34	3,852.11	
	03/06/07			63.35	3,852.10	
	03/15/07			63.38	3,852.07	
	04/04/07			63.18	3,852.27	
	04/11/07			63.40	3,852.05	
	04/18/07			63.40	3,852.05	
	04/24/07			63.40	3,852.05	
	05/22/07			63.40	3,852.05	
	06/19/07			63.39	3,852.06	
	08/08/07			63.39	3,852.06	
	08/17/07			63.41	3,852.04	
	08/24/07			63.39	3,852.06	
	09/19/07			63.43	3,852.02	
	10/03/07			63.42	3,852.03	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-6 (cont.)	11/15/07			63.50	3,851.95	
	12/03/07			63.52	3,851.93	
	03/18/08			63.61	3,851.84	
	04/11/08			63.62	3,851.83	
	05/09/08			63.64	3,851.81	
	06/03/08			63.64	3,851.81	
	06/26/08			63.69	3,851.76	
	08/28/08			63.72	3,851.73	
	09/20/08			63.77	3,851.68	
	10/29/08			63.79	3,851.66	
	12/23/08			63.78	3,851.67	
MW-7	11/18/04	3,914.73				
	12/13/04			62.94	3,851.79	
	12/20/04			63.00	3,851.73	
	01/10/05			62.98	3,851.75	
	01/25/05			62.92	3,851.81	
	02/18/05			62.94	3,851.79	
	03/30/05			62.85	3,851.88	
	05/03/05			62.84	3,851.89	
	05/20/05			62.81	3,851.92	
	08/23/05			62.80	3,851.93	
	11/22/05			62.78	3,851.95	
	01/16/06			62.81	3,851.92	
	02/17/06			62.81	3,851.92	
	03/17/06			62.80	3,851.93	
	03/24/06			62.81	3,851.92	
	04/13/06			62.81	3,851.92	
	05/12/06			63.84	3,850.89	
	05/30/06			62.85	3,851.88	
	06/09/06			62.80	3,851.93	
	07/07/06			62.89	3,851.84	
	07/14/06			62.90	3,851.83	
	08/08/06			62.76	3,851.97	
	08/25/06			62.99	3,851.74	
	09/15/06			62.85	3,851.88	
	09/29/06			62.87	3,851.86	
	10/13/06			62.78	3,851.95	
	10/20/06			62.81	3,851.92	
	10/27/06			63.10	3,851.63	
	11/10/06			62.89	3,851.84	
	11/20/06			62.88	3,851.85	
	12/01/06			63.05	3,851.68	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-7 (cont.)	12/08/06			63.91	3,850.82	
	12/15/06			62.93	3,851.80	
	12/27/06			63.98	3,850.75	
	01/05/07			63.98	3,850.75	
	01/15/07			62.99	3,851.74	
	01/29/07			63.00	3,851.73	
	02/08/07			62.74	3,851.99	
	02/20/07			63.02	3,851.71	
	03/06/07			63.10	3,851.63	
	03/15/07			63.02	3,851.71	
	04/01/07			62.86	3,851.87	
	04/11/07			63.03	3,851.70	
	04/18/07			63.06	3,851.67	
	04/24/07			63.05	3,851.68	
	05/22/07			63.08	3,851.65	
	06/19/07			63.05	3,851.68	
	08/08/07			63.06	3,851.67	
	08/17/07			63.02	3,851.71	
	08/24/07			63.06	3,851.67	
	09/19/07			63.08	3,851.65	
	10/03/07			63.10	3,851.63	
	11/15/07			63.17	3,851.56	
	12/03/07			63.19	3,851.54	
	03/18/08			63.29	3,851.44	
	04/11/08			63.30	3,851.43	
	05/09/08			63.30	3,851.43	
	06/03/08			63.33	3,851.40	
	06/26/08			63.37	3,851.36	
	08/28/08			63.40	3,851.33	
	09/20/08			63.45	3,851.28	
	10/29/08			63.47	3,851.26	
	12/23/08			63.46	3,851.27	
MW-8	11/18/04	3,915.19		63.64	3,851.55	
	12/13/04			63.45	3,851.74	
	12/20/04			63.50	3,851.69	
	01/10/05			63.49	3,851.70	
	01/25/05			63.43	3,851.76	
	02/18/05			63.47	3,851.72	
	03/30/05			63.37	3,851.82	
	05/03/05			63.38	3,851.81	
	05/20/05			63.36	3,851.83	
	08/23/05			63.34	3,851.85	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-8 (cont.)	11/22/05			63.35	3,851.84	
	01/16/06			63.37	3,851.82	
	02/17/06			63.38	3,851.81	
	03/17/06			63.35	3,851.84	
	03/24/06			63.34	3,851.85	
	04/13/06			63.39	3,851.80	
	05/12/06			63.35	3,851.84	
	05/30/06			63.40	3,851.79	
	06/09/06			63.34	3,851.85	
	07/07/06			63.44	3,851.75	
	07/14/06			63.43	3,851.76	
	08/08/06			63.31	3,851.88	
	08/25/06			63.56	3,851.63	
	09/15/06			63.38	3,851.81	
	09/22/06			63.42	3,851.77	
	10/13/06			63.41	3,851.78	
	10/20/06			67.37	3,847.82	
	10/27/06			63.46	3,851.73	
	11/10/06			63.46	3,851.73	
	11/20/06			62.44	3,852.75	
	12/01/06			63.48	3,851.71	
	12/08/06			63.46	3,851.73	
	12/15/06			63.48	3,851.71	
	12/27/06			63.51	3,851.68	
	01/05/07			63.51	3,851.68	
	01/15/07			63.54	3,851.65	
	01/29/07			63.56	3,851.63	
	02/08/07			63.30	3,851.89	
	02/20/07			63.57	3,851.62	
	03/06/07			63.58	3,851.61	
	03/15/07			63.60	3,851.59	
	04/04/07			63.40	3,851.79	
	04/11/07			63.90	3,851.29	
	04/18/07			63.62	3,851.57	
	04/24/07			63.62	3,851.57	
	05/22/07			63.64	3,851.55	
	06/19/07			63.60	3,851.59	
	08/08/07			63.60	3,851.59	
	08/17/07			63.64	3,851.55	
	08/24/07			63.63	3,851.56	
	09/19/07			63.66	3,851.53	
	10/03/07			63.67	3,851.52	
	11/15/07			63.41	3,851.78	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-8 (cont.)	12/03/07			63.76	3,851.43	
	03/18/08			63.85	3,851.34	
	04/11/08			63.85	3,851.34	
	05/09/08			63.86	3,851.33	
	06/03/08			63.88	3,851.31	
	06/26/08			63.93	3,851.26	
	08/28/08			63.95	3,851.24	
	09/20/08			64.00	3,851.19	
	10/29/08			64.02	3,851.17	
	12/23/08			64.02	3,851.17	
MW-9	11/18/04	3,913.92		63.48	3,850.44	
	12/13/04			63.29	3,850.63	
	12/20/04			63.32	3,850.60	
	01/10/05			63.30	3,850.62	
	01/25/05			63.27	3,850.65	
	02/18/05			63.23	3,850.69	
	03/30/05			63.19	3,850.73	
	05/03/05			63.21	3,850.71	
	05/20/05			63.18	3,850.74	
	08/23/05			63.13	3,850.79	
	11/22/05			63.20	3,850.72	
	01/16/06			63.17	3,850.75	
	02/17/06			62.68	3,851.24	
	03/17/06			62.65	3,851.27	
	03/24/06			62.66	3,851.26	
	04/13/06			63.19	3,850.73	
	05/12/06			63.22	3,850.70	
	05/30/06			63.14	3,850.78	
	06/09/06			62.64	3,851.28	
	07/07/06			63.26	3,850.66	
	07/14/06			63.27	3,850.65	
	08/08/06			63.16	3,850.76	
	08/25/06			63.37	3,850.55	
	09/15/06			63.19	3,850.73	
	09/29/06			63.25	3,850.67	
	10/13/06			63.23	3,850.69	
	10/20/06			63.20	3,850.72	
	10/27/06			63.29	3,850.63	
	11/10/06			62.79	3,851.13	
	11/20/06			63.27	3,850.65	
	12/01/06			63.31	3,850.61	
	12/08/06			63.29	3,850.63	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-9 (cont.)	12/15/06			63.31	3,850.61	
	12/27/06			63.37	3,850.55	
	01/05/07			63.33	3,850.59	
	01/15/07			63.36	3,850.56	
	01/29/07			63.37	3,850.55	
	02/08/07			63.12	3,850.80	
	02/20/07			63.41	3,850.51	
	03/06/07			63.02	3,850.90	
	03/15/07			62.92	3,851.00	
	03/15/07			62.94	3,850.98	
	04/04/07			62.70	3,851.22	
	04/11/07			62.94	3,850.98	
	04/18/07			62.92	3,851.00	
	04/24/07			62.96	3,850.96	
	05/22/07			62.96	3,850.96	
	06/19/07			62.91	3,851.01	
	08/08/07			62.91	3,851.01	
	08/17/07			62.94	3,850.98	
	08/24/07			62.69	3,851.23	
	09/19/07			62.98	3,850.94	
	10/03/07			62.98	3,850.94	
	11/15/07			63.13	3,850.79	
	12/03/07			63.08	3,850.84	
	03/18/08			63.21	3,850.71	
	04/11/08			63.19	3,850.73	
	05/09/08			63.19	3,850.73	
	06/03/08			63.19	3,850.73	
	06/26/08			63.26	3,850.66	
	08/28/08			63.28	3,850.64	
	09/20/08			63.32	3,850.60	
	10/29/08			63.32	3,850.60	
	12/23/08			63.33	3,850.59	
MW-10	11/18/04	3,914.96		63.73	3,851.23	
	12/13/04			63.89	3,851.07	
	12/20/04			63.92	3,851.04	
	01/10/05			63.89	3,851.07	
	01/25/05			63.86	3,851.10	
	02/18/05			63.82	3,851.14	
	03/30/05			63.75	3,851.21	
	05/03/05			63.74	3,851.22	
	05/20/05			63.72	3,851.24	
	08/23/05			63.68	3,851.28	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-10 (cont.)	11/22/05			63.40	3,851.56	
	01/16/06			63.73	3,851.23	
	02/17/06			63.75	3,851.21	
	03/17/06			63.71	3,851.25	
	03/24/06			63.70	3,851.26	
	04/13/06			63.72	3,851.24	
	05/12/06			63.74	3,851.22	
	05/30/06			63.75	3,851.21	
	06/09/06			63.69	3,851.27	
	07/07/06			63.79	3,851.17	
	07/14/06			63.78	3,851.18	
	08/08/06			63.68	3,851.28	
	08/25/06			63.92	3,851.04	
	09/15/06			63.72	3,851.24	
	09/29/06			63.77	3,851.19	
	10/13/06			63.71	3,851.25	
	10/20/06			63.72	3,851.24	
	10/27/06			63.81	3,851.15	
	11/10/06			63.80	3,851.16	
	12/01/06			63.83	3,851.13	
	12/08/06			63.81	3,851.15	
	12/15/06			63.84	3,851.12	
	12/27/06			63.84	3,851.12	
	01/05/07			63.86	3,851.10	
	01/15/07			63.90	3,851.06	
	01/29/07			63.90	3,851.06	
	02/08/07			63.65	3,851.31	
	02/20/07			63.95	3,851.01	
	03/06/07			63.92	3,851.04	
	03/15/07			63.96	3,851.00	
	04/04/07			63.75	3,851.21	
	04/11/07			63.96	3,851.00	
	04/18/07			63.96	3,851.00	
	04/24/07			63.97	3,850.99	
	05/22/07			63.99	3,850.97	
	06/19/07			63.96	3,851.00	
	08/08/07			63.97	3,850.99	
	08/17/07			63.98	3,850.98	
	08/24/07			63.99	3,850.97	
	09/19/07			63.99	3,850.97	
	10/03/07			64.02	3,850.94	
	11/15/07			64.09	3,850.87	
	12/03/07			64.12	3,850.84	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-10 (cont.)	03/18/08			64.21	3,850.75	
	04/11/08			64.21	3,850.75	
	05/09/08			64.23	3,850.73	
	06/03/08			64.24	3,850.72	
	06/26/08			64.30	3,850.66	
	08/28/08			64.34	3,850.62	
	09/20/08			64.38	3,850.58	
	10/29/08			64.36	3,850.60	
	12/23/08			64.37	3,850.59	
MW-11	11/18/04	3,914.40				
	12/13/04			63.31	3,851.09	
	12/20/04			63.33	3,851.07	
	01/10/05			63.31	3,851.09	
	01/25/05			63.29	3,851.11	
	02/18/05			63.32	3,851.08	
	03/30/05			63.16	3,851.24	
	05/03/05			63.19	3,851.21	
	05/20/05			63.14	3,851.26	
	08/23/05			63.11	3,851.29	
	11/22/05			63.05	3,851.35	
	01/16/06			63.11	3,851.29	
	02/17/06			63.12	3,851.28	
	03/17/06			63.10	3,851.30	
	03/24/06			63.11	3,851.29	
	04/13/06			63.13	3,851.27	
	05/12/06			63.11	3,851.29	
	05/30/06			63.15	3,851.25	
	06/09/06			63.10	3,851.30	
	07/07/06			63.20	3,851.20	
	07/14/06			63.21	3,851.19	
	08/08/06			63.05	3,851.35	
	08/25/06			63.29	3,851.11	
	09/15/06			63.12	3,851.28	
	09/29/06			63.19	3,851.21	
	10/13/06			63.16	3,851.24	
	10/20/06			67.09	3,847.31	
	10/27/06			63.41	3,850.99	
	11/10/06			63.21	3,851.19	
	11/20/06			63.19	3,851.21	
	12/01/05			63.25	3,851.15	
	12/08/06			63.24	3,851.16	
	12/15/06			63.26	3,851.14	



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-11 (cont.)	12/27/06			63.29	3,851.11	
	01/05/07			63.23	3,851.17	
	01/15/07			63.28	3,851.12	
	01/29/07			63.28	3,851.12	
	02/08/07			63.02	3,851.38	
	02/20/07			63.31	3,851.09	
	03/06/07			63.36	3,851.04	
	03/15/07			63.31	3,851.09	
	04/04/07			63.11	3,851.29	
	04/11/07			63.35	3,851.05	
	04/18/07			63.35	3,851.05	
	04/24/07			63.35	3,851.05	
	05/22/07			63.36	3,851.04	
	06/19/07			63.33	3,851.07	
	08/08/07			63.34	3,851.06	
	08/17/07			63.36	3,851.04	
	08/24/07			63.36	3,851.04	
	09/19/07			63.88	3,850.52	
	10/03/07			63.39	3,851.01	
	11/15/07			63.47	3,850.93	
	12/03/07			63.52	3,850.88	
	03/18/08			63.59	3,850.81	
	04/11/08			63.59	3,850.81	
	05/09/08			63.61	3,850.79	
	06/03/08			63.62	3,850.78	
	06/26/08			63.68	3,850.72	
	08/28/08			63.70	3,850.70	
	09/20/08			63.76	3,850.64	
	10/29/08			63.74	3,850.66	
	12/23/08			63.75	3,850.65	
MW-12	07/07/06			63.34		
	07/14/06			63.35		
	07/21/06			63.37		
	07/27/06			63.33		
	08/08/06			63.21		
	08/25/06			63.48		
	09/15/06			63.27		
	10/13/06			63.31		
	10/20/06			63.28		
	10/27/06			63.37		
	11/10/06			63.36		
	11/20/06			63.34		



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-12 (cont.)	12/01/06			63.40		
	12/08/06			63.35		
	12/15/06			63.38		
	12/27/06			63.40		
	01/05/07			63.41		
	01/15/07			63.48		
	01/29/07			63.46		
	02/08/07			63.22		
	02/20/07			63.50		
	03/06/07			63.47		
	03/15/07			63.51		
	04/04/07			63.32		
	04/11/07			63.54		
	04/18/07			63.52		
	04/24/07			63.53		
	05/22/07			63.55		
	06/19/07			63.52		
	08/08/07	3,913.97		63.53	3,850.44	
	08/17/07			63.57	3,850.40	
	08/24/07			63.55	3,850.42	
	09/19/07			63.57	3,850.40	
	10/03/07			63.57	3,850.40	
	11/15/07			63.68	3,850.29	
	12/03/07			63.67	3,850.30	
	03/18/08			63.78	3,850.19	
	04/11/08			63.79	3,850.18	
	05/09/08			63.79	3,850.18	
	06/03/08			63.80	3,850.17	
	06/26/08			63.86	3,850.11	
	08/28/08			63.98	3,849.99	
	09/20/08			63.94	3,850.03	
	10/29/08			63.93	3,850.04	
	12/23/08			63.94	3,850.03	
MW-13	07/07/06		63.35	67.01		3.66
	07/14/06		63.37	67.00		3.63
	07/21/06		63.31	67.06		3.75
	07/28/06		63.28	67.23		3.95
	08/25/06		63.51	67.09		3.58
	09/15/06		62.79	68.96		6.17
	09/29/06		62.90	67.05		4.15
	10/06/06		63.10	68.07		4.97
	10/13/06		62.93	68.81		5.88



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-13 (cont.)	10/20/06		63.00	67.90		4.90
	10/27/06		62.97	67.77		4.80
	11/03/06		63.39	67.09		3.70
	11/10/06		62.97	67.80		4.83
	11/20/06		63.01	68.47		5.46
	12/01/06		62.94	68.90		5.96
	12/08/06		62.92	67.68		4.76
	12/15/06		63.11	68.33		5.22
	12/27/06		62.86	67.81		4.95
	01/05/07		62.87	67.79		4.92
	01/15/07		63.03	68.11		5.08
	01/29/07		63.08	69.00		5.92
	02/08/07		63.03	68.89		5.86
	02/20/07		63.10	69.09		5.99
	03/06/07		63.09	68.41		5.32
	03/15/07		63.06	69.05		5.99
	04/04/07		63.12	69.05		5.93
	04/11/07		63.11	69.14		6.03
	04/18/07		63.10	69.09		5.99
	04/24/07		63.96	68.02		4.06
	05/22/07		63.15	69.14		5.99
	06/19/07		63.16	69.60		6.44
	08/08/07	3,915.83	63.08	69.13	3,852.15	6.05
	08/17/07		63.14	68.96	3,852.11	5.82
	08/24/07		63.21	68.57	3,852.08	5.36
	09/19/07		63.10	69.12	3,852.13	6.02
	10/03/07		63.19	69.14	3,852.05	5.95
	10/11/07		63.24	68.81	3,852.03	5.57
	10/18/07		63.29	68.56	3,852.01	5.27
	12/03/07		63.17	69.22	3,852.06	6.05
	01/02/08		61.59	69.37	3,853.46	7.78
	02/07/08		63.36	69.46	3,851.86	6.10
	02/11/08		63.35	68.47	3,851.97	5.12
	03/18/08		63.45	69.36	3,851.79	5.91
	04/02/08		63.47	69.46	3,851.76	5.99
	04/11/08		63.31	69.47	3,851.90	6.16
	04/14/08		63.75	68.22	3,851.63	4.47
	04/29/08		64.34	65.65	3,851.36	1.31
	05/07/08		64.41	65.63	3,851.30	1.22
	05/12/08		64.30	66.07	3,851.35	1.77
	06/03/08		64.54	65.71	3,851.17	1.17
	06/26/08		64.69	65.96	3,851.01	1.27
	08/28/08		63.96	67.14	3,851.55	3.18



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-13 (cont.)	09/20/08		64.06	66.88	3,851.49	2.82
	10/29/08		64.26	65.87	3,851.41	1.61
	12/23/08		64.41	65.30	3,851.33	0.89
MW-14	07/07/06		63.97	64.15		0.18
	07/14/06		63.96	64.16		0.20
	07/21/06		63.87	64.45		0.58
	07/28/06		63.80	64.64		0.84
	08/25/06		64.09	64.81		0.72
	09/15/06		63.45	65.92		2.47
	09/29/06		63.45	66.56		3.11
	10/06/06		63.68	65.29		1.61
	10/13/06		63.56	65.15		1.59
	10/20/06		63.92	65.66		1.74
	10/27/06		63.62	65.59		1.97
	11/03/06		63.97	66.99		3.02
	11/10/06		63.42	66.39		2.97
	11/20/06		63.77	65.51		1.74
	12/01/06		63.51	66.21		2.70
	12/08/06		63.43	65.66		2.23
	12/15/06		63.39	66.96		3.57
	12/27/06		63.37	65.79		2.42
	01/05/07		63.41	65.72		2.31
	01/15/07		63.18	67.39		4.21
	01/29/07		63.71	66.20		2.49
	02/08/07		63.64	65.64		2.00
	02/20/07		62.30	68.28		5.98
	03/06/07		63.09	68.41		5.32
	03/15/07		63.50	66.93		3.43
	04/04/07		63.73	66.40		2.67
	04/11/07		63.55	66.86		3.31
	04/18/07		64.44	67.35		2.91
	04/24/07		63.81	65.67		1.86
	05/22/07		63.61	66.68		3.07
	06/19/07		63.32	68.28		4.96
	08/08/07	3,915.72	63.06	69.04	3,852.06	5.98
	08/17/07		63.45	67.34	3,851.88	3.89
	08/24/07		63.87	65.34	3,851.70	1.47
	09/19/07		63.63	66.91	3,851.76	3.28
	10/03/07		63.50	67.46	3,851.82	3.96
	10/11/07		63.92	65.47	3,851.65	1.55
	10/18/07		63.80	65.98	3,851.70	2.18
	12/03/07		63.31	68.60	3,851.88	5.29



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-14 (cont.)	01/02/08		63.33	69.28	3,851.80	5.95
	02/07/08		63.63	68.03	3,851.65	4.40
	02/11/08		63.63	68.02	3,851.65	4.39
	03/18/08		63.92	66.85	3,851.51	2.93
	04/02/08		64.04	66.84	3,851.40	2.80
	04/11/08		64.34	64.42	3,851.37	0.08
	04/14/08		64.50	64.69	3,851.20	0.19
	04/29/08		64.54	64.73	3,851.16	0.19
	05/07/08		64.56	64.72	3,851.14	0.16
	05/12/08		64.54	64.70	3,851.16	0.16
	06/03/08		64.66	64.84	3,851.04	0.18
	06/26/08		64.82	64.98	3,850.88	0.16
	07/23/08		64.52	64.68	3,851.18	0.16
	08/28/08		64.45	64.50	3,851.27	0.05
	09/20/08		64.51	64.66	3,851.20	0.15
	10/29/08		64.46	64.79	3,851.23	0.33
	12/23/08		64.48	64.73	3,851.22	0.25
MW-15	07/07/06			63.75		
	07/14/06			63.76		
	07/21/06			63.74		
	08/08/06			63.61		
	08/25/06			63.88		
	09/15/06			63.68		
	09/29/06			64.73		
	10/06/06			63.73		
	10/13/06			63.71		
	10/20/06			63.66		
	10/27/06			63.74		
	11/10/06			63.74		
	11/20/06			63.74		
	12/01/06			63.78		
	12/08/06			63.78		
	12/15/06			63.79		
	12/27/06			63.85		
MW-16	01/05/07			63.81		
	01/15/07			63.86		
	01/29/07			63.87		
	02/08/07	63.76		63.77		0.01
	02/20/07			63.88		
	03/06/07	62.27		68.14		5.87
MW-17	03/15/07	63.88		63.93		0.05
	04/04/07	63.94		64.02		0.08



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-15 (cont.)	04/11/07	63.90	64.01			0.11
	04/18/07	63.91	63.98			0.07
	04/24/07	63.90	63.97			0.07
	05/22/07	63.91	64.01			0.10
	06/19/07	63.96	64.10			0.14
	08/08/07	3,915.84	63.84	64.06	3,851.98	0.22
	08/17/07	63.90	64.10		3,851.92	0.20
	08/24/07	63.88	64.10		3,851.94	0.22
	09/19/07	63.90	64.10		3,851.92	0.20
	10/03/07	63.93	64.20		3,851.88	0.27
	10/11/07	63.88	64.17		3,851.93	0.29
	10/18/07	63.87	64.23		3,851.93	0.36
	12/03/07	63.94	64.41		3,851.85	0.47
	01/02/08	64.06	64.64		3,851.72	0.58
	02/07/08	64.06	64.79		3,851.71	0.73
	02/11/08	64.06	67.78		3,851.41	3.72
	03/18/08	64.08	64.94		3,851.67	0.86
	04/02/08	64.27	64.37		3,851.56	0.10
	04/11/08	64.12	64.30		3,851.70	0.18
	04/14/08	64.29	69.43		3,851.04	5.14
	04/29/08	64.29	64.56		3,851.52	0.27
	05/07/08	64.31	64.62		3,851.50	0.31
	05/12/08	64.29	64.63		3,851.52	0.34
	06/03/08	64.41	64.85		3,851.39	0.44
	06/26/08	64.54	65.07		3,851.25	0.53
	08/28/08	64.12	64.92		3,851.64	0.80
	09/20/08	64.15	65.03		3,851.60	0.88
	10/29/08	64.28	64.38		3,851.55	0.10
	12/23/08	64.26	64.51		3,851.56	0.25
MW-16	07/07/06		63.60			
	07/14/06		63.62			
	07/21/06		63.57			
	08/08/06		63.47			
	09/15/06	63.56	63.58			0.06
	09/29/06	63.54	63.64			0.10
	10/06/06	63.53	63.68			0.15
	10/13/06	63.50	63.59			0.09
	10/20/06	63.67	64.19			0.52
	10/27/06	63.55	63.77			0.22
	11/10/06	63.51	63.79			0.28
	11/20/06	63.51	63.62			0.11
	12/01/06	63.54	63.64			0.10



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-16 (cont.)	12/08/06		63.60	63.62		0.02
	12/15/06			63.63		
	12/27/06			63.69		
	01/05/07			63.69		
	01/15/07			63.76		
	01/29/07			63.89		
	02/08/07		63.55	63.91		0.36
	02/20/07		63.62	64.10		0.48
	03/06/07		63.61	64.28		0.67
	03/15/07		63.60	64.33		0.73
	04/04/07		63.58	64.59		1.01
	04/11/07		63.55	64.59		1.04
	04/18/07		63.56	64.67		1.11
	04/24/07		63.55	64.72		1.17
	05/22/07		63.31	64.96		1.65
	06/19/07		63.52	65.28		1.76
	08/08/07	3,915.43	63.39	65.59	3,851.82	2.20
	08/17/07		63.44	65.28	3,851.81	1.84
	08/24/07		63.42	65.30	3,851.82	1.88
	09/19/07		63.57	64.76	3,851.74	1.19
	10/03/07		63.57	64.99	3,851.72	1.42
	10/11/07		63.72	64.26	3,851.66	0.54
	10/18/07		63.69	64.37	3,851.67	0.68
	12/03/07		63.57	65.21	3,851.70	1.64
	01/02/08		63.59	65.87	3,851.61	2.28
	02/07/08		63.69	65.67	3,851.54	1.98
	02/11/08		63.68	65.66	3,851.55	1.98
	03/18/08		64.03	64.20	3,851.38	0.17
	04/02/08		64.02	64.68	3,851.34	0.66
	04/11/08		63.83	64.77	3,851.51	0.94
	04/14/08		64.14	64.27	3,851.28	0.13
	04/29/08		64.16	64.30	3,851.26	0.14
	05/07/08		64.17	64.31	3,851.25	0.14
	05/12/08		64.16	64.31	3,851.26	0.15
	06/03/08		64.30	64.44	3,851.12	0.14
	06/26/08		64.45	64.59	3,850.97	0.14
	07/23/08		64.12	64.28	3,851.29	0.16
	08/28/08		64.09	64.23	3,851.33	0.14
	09/20/08		64.11	64.22	3,851.31	0.11
	10/29/08		63.97	64.95	3,851.36	0.98
	12/23/08		64.11	64.29	3,851.30	0.18



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-17	07/07/06		63.30	65.54		2.24
	07/14/06		63.29	65.55		2.26
	07/21/06		63.28	65.56		2.28
	07/28/06		63.21	65.87		2.66
	08/25/06		63.39	65.69		2.30
	09/15/06		62.66	68.07		5.41
	09/29/06		62.75	67.95		5.20
	10/06/06		63.02	66.70		3.68
	10/13/06		62.80	67.78		4.98
	10/20/06		63.34	66.72		3.38
	10/27/06		62.82	67.74		4.92
	11/03/06		63.62	65.91		2.29
	11/10/06		62.88	66.89		4.01
	11/20/06		62.85	67.47		4.62
	12/01/06		62.74	68.20		5.46
	12/08/06		62.74	67.25		4.51
	12/15/06		63.01	67.05		4.04
	12/27/06		62.66	67.41		4.75
	01/05/07		62.71	67.46		4.75
	01/15/07		62.81	67.21		4.40
	01/29/07		62.85	68.26		5.41
	02/08/07		62.82	67.92		5.10
	02/20/07		62.82	68.39		5.57
	03/06/07		62.82	68.38		5.56
	03/15/07		62.87	68.38		5.51
	04/04/07		62.93	68.38		5.45
	04/11/07		62.81	68.45		5.64
	04/18/07		62.90	68.44		5.54
	04/24/07		63.24	68.49		5.25
	05/22/07		62.91	68.28		5.37
	06/19/07		62.92	68.84		5.92
	08/08/07	3,915.59	62.89	68.42	3,852.15	5.53
	08/17/07		62.92	68.26	3,852.14	5.34
	08/24/07		62.97	68.01	3,852.12	5.04
	09/19/07		62.90	68.39	3,852.14	5.49
	10/03/07		62.95	68.47	3,852.09	5.52
	10/11/07		62.98	68.27	3,852.08	5.29
	10/18/07		63.03	68.11	3,852.05	5.08
	12/03/07		62.97	68.49	3,852.07	5.52
	01/02/08		63.11	68.64	3,851.93	5.53
	02/07/08		63.11	68.74	3,851.92	5.63
	03/18/08		63.48	67.44	3,851.71	3.96
	04/02/08		63.62	67.05	3,851.63	3.43



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-17 (cont.)	04/11/08		63.58	63.58	3,852.01	0.00
	04/14/08		63.46	67.91	3,851.69	4.45
	04/29/08		64.24	64.46	3,851.33	0.22
	05/07/08		64.30	64.36	3,851.28	0.06
	05/12/08		64.30	64.34	3,851.29	0.04
	06/03/08		64.42	64.52	3,851.16	0.10
	06/26/08		64.56	64.73	3,851.01	0.17
	07/23/08		64.24	64.41	3,851.33	0.17
	08/28/08		64.18	64.38	3,851.39	0.20
	09/20/08		64.22	64.41	3,851.35	0.19
	10/29/08		63.92	65.71	3,851.49	1.79
	12/23/08		64.08	65.10	3,851.41	1.02

\* Corrected Groundwater Elevation = Top of Casing Elevation - (Depth to Water Below Top of Casing - (SG)(PSH Thickness)).

Total manual recovery



**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCRD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes
NMWQCC Remedial Limits		0.010	0.750	0.750	0.620
MW-1	03/18/08	<0.00100	<0.00100	<0.00100	<0.00100
	06/26/08	<0.00100	<0.00100	<0.00100	<0.00100
	09/20/08	0.00610	0.00250	<0.00100	<0.00100
	12/23/08	0.00140	<0.00100	<0.00100	<0.00100
MW-2	03/18/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	06/26/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	09/20/08	15.4	7.25	0.975	2.52
	12/23/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
MW-3	03/18/08	12.4	1.65	0.646	1.18
	06/26/08	11.2	1.410	0.655	0.775
	09/20/08	12.4	1.19	0.782	0.714
	12/23/08	7.97	0.437	0.412	0.294
MW-4	03/18/08	<0.00100	<0.00100	<0.00100	<0.00100
	06/26/08	0.0353	0.00370	0.00230	0.00290
	09/20/08	0.0757	0.00930	0.00620	0.00720
	12/23/08	0.00610	<0.00100	<0.00100	<0.00100
MW-5	03/18/08	0.0335	<0.00100	<0.00100	0.0492
	06/26/08	0.0525	0.00350	0.00250	0.0267
	09/20/08	0.0653	0.00580	0.00390	0.0469
	12/23/08	0.00360	<0.00100	<0.00100	0.0117
MW-6	03/18/08	<0.00100	<0.00100	<0.00100	<0.00100
	06/26/08	<0.00100	<0.00100	<0.00100	<0.00100
	09/20/08	<0.00100	<0.00100	<0.00100	<0.00100
	12/23/08	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	03/18/08	<0.00100	<0.00100	<0.00100	<0.00100
	06/26/08	<0.00100	<0.00100	<0.00100	<0.00100
	09/20/08	<0.00100	<0.00100	<0.00100	<0.00100
	12/23/08	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	03/18/08	<0.00100	<0.00100	<0.00100	<0.00100
	06/26/08	<0.00100	<0.00100	<0.00100	<0.00100
	09/20/08	<0.00100	<0.00100	<0.00100	<0.00100
	12/23/08	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	03/18/08	<0.00100	<0.00100	<0.00100	<0.00100
	06/26/08	<0.00100	<0.00100	<0.00100	<0.00100
	09/20/08	<0.00100	<0.00100	<0.00100	<0.00100
	12/23/08	<0.00100	<0.00100	<0.00100	<0.00100



**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCD REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes
MW-10	03/18/08	<b>9.80</b>	<0.100	0.194	0.184
	06/26/08	<b>8.70</b>	<0.0500	0.159	0.0964
	09/20/08	<b>7.70</b>	<0.0500	<0.0500	<0.0500
	12/23/08	<b>10.2</b>	<0.0500	0.0955	0.0973
MW-11	03/18/08	<0.00100	<0.00100	<0.00100	0.00120
	06/26/08	<0.00100	<0.00100	<0.00100	<0.00100
	09/20/08	0.00110	<0.00100	<0.00100	<0.00100
	12/23/08	<b>0.106</b>	<0.00100	0.00210	0.00160
MW-12	03/18/08	<b>0.559</b>	<0.0100	0.0726	0.0373
	06/26/08	<b>0.701</b>	<0.00500	0.0584	0.0503
	09/20/08	<b>0.791</b>	<0.0150	0.0478	0.0517
	12/23/08	<b>0.840</b>	<0.0100	0.0372	0.0452
MW-13	03/18/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	06/26/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	09/20/08	<b>12.7</b>	<b>8.43</b>	<b>1.10</b>	<b>2.89</b>
	12/23/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
MW-14	03/18/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	06/26/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	09/20/08	<b>14.5</b>	<b>8.66</b>	<b>1.10</b>	<b>2.76</b>
	12/23/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
MW-15	03/18/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	06/26/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	09/20/08	<b>4.87</b>	<b>2.17</b>	<b>0.480</b>	<b>1.43</b>
	12/23/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
MW-16	03/18/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	06/26/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	09/20/08	<b>3.45</b>	<b>2.63</b>	<b>0.476</b>	<b>1.21</b>
	12/23/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
MW-17	03/18/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	06/26/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			
	09/20/08	<b>14.5</b>	<b>9.60</b>	<b>1.04</b>	<b>2.63</b>
	12/23/08	Not Sampled Due to Presence of Phase Separated Hydrocarbons			

*Bolded values are in excess of the NMWQCC Remediation Limits*



TABLE 3  
 SUMMARY OF GROUNDWATER POLY-AROMATIC  
 HYDROCARBON (PAH) ANALYTICAL RESULTS  
 PLAINS MARKETING, L.P. - SRS # 2002-10312  
 LOVINGTON DEEP 6"  
 NMOCD REF. # AB-037  
 LEA COUNTY, NEW MEXICO  
 TALON/LPE PROJECT NUMBER: PLAINS046SPL

All concentrations are in mg/L

Sample Location	Sample Date	Acenaphthene	Anthracene	Benzol[a]-anthracene	Benzol[a,h]-anthracene	Dibenzofuran	Fluoranthene	Indeno[1,2,3-cd]pyrene	1-Methylimidaphthalene	2-Methylimidaphthalene	Naphthalene	Phenanthrene	Pyrene	
MW-1	09/20/08	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
MW-3	09/20/08	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
MW-4	09/20/08	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
MW-5	09/20/08	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
MW-6	09/20/08	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
MW-7	09/20/08	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
MW-8	09/20/08	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
MW-9	09/20/08	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
MW-10	09/20/08	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
MW-11	09/20/08	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
MW-12	09/20/08	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
NMVOCC Remedial Limits						0.007								0.030

<sup>1</sup> *Bolded* values are in excess of the NMW/QCC Remediation Thresholds

**TABLE 4**  
**SUMMARY OF PSH MONITOR WELLS GROUNDWATER ANALYTICAL RESULTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10312**  
**LOVINGTON DEEP 6"**  
**NMOCID REF. # AP-037**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS046SPL**

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Xyline	TPH DRO	Total TPH	Aceanaphthalene	Benzol[a]anthracene	Benzol[b]-Fluoranthene	Benzol[g,h]-perylene	Benzol[k]-Fluoranthene	Chrysene	Dibenzofuran	Fluoranthene	Indeno[1,2,3-cd]pyrene	1-Methylimidaphthalene	2-Methylimidaphthalene	Phenanthrene	Pyrrole					
MW-2	09/20/08	<b>15.4</b>	<b>7.25</b>	<b>2.52</b>	<b>6.35</b>	<b>71.6</b>	<b>77.95</b>	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000533	<0.000200	0.00168	<0.000200	0.00477	<0.000200	0.0456	0.0361	<b>0.0581</b>	0.00321	<0.000200		
MW-13	09/20/08	<b>12.7</b>	<b>8.43</b>	<b>1.10</b>	<b>2.89</b>	<b>49.4</b>	<b>72.2</b>	121.6	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.00105	0.00710	0.00105	0.236	<b>0.106</b>	0.01195	0.00862				
MW-14	09/20/08	<b>14.5</b>	<b>8.66</b>	<b>1.10</b>	<b>2.76</b>	<b>7.44</b>	<b>71.6</b>	79.04	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.00141	<0.000200	0.00396	<0.000200	0.0362	0.0441	<b>0.0471</b>	0.00249	<0.000200		
MW-15	09/20/08	<b>4.87</b>	<b>2.17</b>	<b>0.480</b>	<b>1.43</b>	<b>57.5</b>	<b>27.2</b>	84.7	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.00145	<0.000200	0.00319	0.000418	0.0111	<0.000200	0.0817	0.0902	<b>0.0451</b>	0.00866	0.000670
MW-16	09/20/08	<b>3.45</b>	<b>2.63</b>	<b>0.476</b>	<b>1.21</b>	<b>&lt;5.00</b>	<b>21.8</b>	21.8	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.00103	<0.000200	0.00303	<0.000200	0.0230	0.0202	0.0230	0.00209	<0.000200		
MW-17	09/20/08	<b>14.5</b>	<b>9.60</b>	<b>1.04</b>	<b>2.63</b>	<b>8.95</b>	<b>73.8</b>	82.75	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.00108	<0.000200	0.00305	0.000800	<0.000200	0.0643	0.0773	<b>0.0585</b>	0.00625	<0.000200	
<b>NMW/QCC Remedial Limits</b>																									
0.01																									
0.75																									
0.62																									
0.0007																									
0.030																									

*<sup>1</sup>Bolded values are in excess of the NMW/QCC Remediation limits.  
RTEx, TPH and PAH analysis per the NMOCID in monitor wells that contain PSH.*

## **APPENDIX C**

### **Laboratory Analytical Data Reports and Chain of Custody Documentation**

# TRACEANALYSIS, INC.

5701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 806•378•1296 806•794•1238 FAX 806•794•1238  
200 East Sunset Road, Suite E El Paso, Texas 79922 866•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 Hemis Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260  
E-Mail: lab@traceanalysis.com

## Analytical and Quality Control Report

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

Report Date: March 24, 2008

Work Order: 8031918



Order #: SRS 2002-10312  
Project Location: Hobbs, NM  
Project Name: Lovington Deep 6 inch  
Project Number: Plains 046SPL

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
154059	MW-6	water	2008-03-18	14:18	2008-03-19
154060	MW-8	water	2008-03-18	14:24	2008-03-19
154061	MW-7	water	2008-03-18	14:28	2008-03-19
154062	MW-9	water	2008-03-18	14:32	2008-03-19
154063	MW-12	water	2008-03-18	14:37	2008-03-19
154064	MW-11	water	2008-03-18	14:42	2008-03-19
154065	MW-10	water	2008-03-18	14:48	2008-03-19
154066	MW-1	water	2008-03-18	14:53	2008-03-19
154067	MW-3	water	2008-03-18	15:00	2008-03-19
154068	MW-5	water	2008-03-18	15:08	2008-03-19
154069	MW-4	water	2008-03-18	15:12	2008-03-19

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 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



---

Dr. Blair Leftwich, Director

**Standard Flags**

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

## Analytical Report

### Sample: 154059 - MW-6

Analysis: BTEX, Total BTEX  
QC Batch: 46760  
Prep Batch: 40218

Analytical Method: S 8021B  
Date Analyzed: 2008-03-21  
Sample Preparation: 2008-03-21

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

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
Total BTEX		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.107	mg/L	1	0.100	107	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0998	mg/L	1	0.100	100	40.1 - 136

### Sample: 154060 - MW-8

Analysis: BTEX, Total BTEX  
QC Batch: 46760  
Prep Batch: 40218

Analytical Method: S 8021B  
Date Analyzed: 2008-03-21  
Sample Preparation: 2008-03-21

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

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
Total BTEX		<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	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.103	mg/L	1	0.100	103	40.1 - 136

### Sample: 154061 - MW-7

Analysis: BTEX, Total BTEX  
QC Batch: 46760  
Prep Batch: 40218

Analytical Method: S 8021B  
Date Analyzed: 2008-03-21  
Sample Preparation: 2008-03-21

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

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

*continued ...*

*sample 154061 continued ...*

Parameter	Flag	Result	Units	Dilution	RL
Xylene		<0.00100	mg/L	1	0.00100
Total BTEX		<0.00100	mg/L	1	0.00100
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		0.109	mg/L	1	109
4-Bromofluorobenzene (4-BFB)		0.109	mg/L	1	109

**Sample: 154062 - MW-9**

Analysis: BTEX, Total BTEX	Analytical Method: S 8021B	Prep Method: S 5030B
QC Batch: 46760	Date Analyzed: 2008-03-21	Analyzed By: DC
Prep Batch: 40218	Sample Preparation: 2008-03-21	Prepared By: DC

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
Total BTEX		<0.00100	mg/L	1	0.00100
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		0.108	mg/L	1	108
4-Bromofluorobenzene (4-BFB)		0.109	mg/L	1	109

**Sample: 154063 - MW-12**

Analysis: BTEX, Total BTEX	Analytical Method: S 8021B	Prep Method: S 5030B
QC Batch: 46760	Date Analyzed: 2008-03-21	Analyzed By: DC
Prep Batch: 40218	Sample Preparation: 2008-03-21	Prepared By: DC

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.559	mg/L	10	0.00100
Toluene		<0.0100	mg/L	10	0.00100
Ethylbenzene		0.0726	mg/L	10	0.00100
Xylene		0.0373	mg/L	10	0.00100
Total BTEX		0.669	mg/L	10	0.00100
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		1.12	mg/L	10	112
4-Bromofluorobenzene (4-BFB)		1.09	mg/L	10	109

**Sample: 154064 - MW-11**

Analysis: BTEX, Total BTEX  
QC Batch: 46760  
Prep Batch: 40218

Analytical Method: S 8021B  
Date Analyzed: 2008-03-21  
Sample Preparation: 2008-03-21

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

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		0.00120	mg/L	1	0.00100
Total BTEX		0.00120	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike	Percent Recovery	Recovery Limits
					Amount		
Trifluorotoluene (TFT)		0.109	mg/L	1	0.100	109	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.108	mg/L	1	0.100	108	40.1 - 136

**Sample: 154065 - MW-10**

Analysis: BTEX, Total BTEX  
QC Batch: 46760  
Prep Batch: 40218

Analytical Method: S 8021B  
Date Analyzed: 2008-03-21  
Sample Preparation: 2008-03-21

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

Parameter	Flag	RL		Dilution	RL
		Result	Units		
Benzene		9.80	mg/L	100	0.00100
Toluene		<0.100	mg/L	100	0.00100
Ethylbenzene		0.194	mg/L	100	0.00100
Xylene		0.184	mg/L	100	0.00100
Total BTEX		10.2	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike	Percent Recovery	Recovery Limits
					Amount		
Trifluorotoluene (TFT)		10.7	mg/L	100	10.0	107	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		10.9	mg/L	100	10.0	109	40.1 - 136

**Sample: 154066 - MW-1**

Analysis: BTEX, Total BTEX  
QC Batch: 46760  
Prep Batch: 40218

Analytical Method: S 8021B  
Date Analyzed: 2008-03-21  
Sample Preparation: 2008-03-21

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

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
Total BTEX		<0.00100	mg/L	1	0.00100

Report Date: March 24, 2008  
Plains 046SPL

Work Order: 8031918  
Lovington Deep 6 inch

Page Number: 6 of 9  
Hobbs, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.108	mg/L	1	0.100	108	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.108	mg/L	1	0.100	108	40.1 - 136

**Sample: 154067 - MW-3**

Analysis: BTEX, Total BTEX  
QC Batch: 46760  
Prep Batch: 40218

Analytical Method: S 8021B  
Date Analyzed: 2008-03-21  
Sample Preparation: 2008-03-21

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<b>12.4</b>	mg/L	100	0.00100
Toluene		<b>1.65</b>	mg/L	100	0.00100
Ethylbenzene		<b>0.646</b>	mg/L	100	0.00100
Xylene		<b>1.18</b>	mg/L	100	0.00100
Total BTEX		<b>15.9</b>	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		10.8	mg/L	100	10.0	108	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		10.8	mg/L	100	10.0	108	40.1 - 136

**Sample: 154068 - MW-5**

Analysis: BTEX, Total BTEX  
QC Batch: 46760  
Prep Batch: 40218

Analytical Method: S 8021B  
Date Analyzed: 2008-03-21  
Sample Preparation: 2008-03-21

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<b>0.0335</b>	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<b>0.0492</b>	mg/L	1	0.00100
Total BTEX		<b>0.0827</b>	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.107	mg/L	1	0.100	107	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.111	mg/L	1	0.100	111	40.1 - 136

**Sample: 154069 - MW-4**

Analysis: BTEX, Total BTEX  
QC Batch: 46760  
Prep Batch: 40218

Analytical Method: S 8021B  
Date Analyzed: 2008-03-21  
Sample Preparation: 2008-03-21

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

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		
Total BTEX		<0.00100	mg/L	1	0.00100		
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.107	mg/L	1	0.100	107	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.104	mg/L	1	0.100	104	40.1 - 136

**Method Blank (1) QC Batch: 46760**

QC Batch: 46760      Date Analyzed: 2008-03-21      Analyzed By: DC  
Prep Batch: 40218      QC Preparation: 2008-03-21      Prepared By: DC

Parameter	Flag	Result	Units	MDL	Units	RL	
Benzene		<0.000300	mg/L		mg/L	0.001	
Toluene		<0.000200	mg/L		mg/L	0.001	
Ethylbenzene		<0.000500	mg/L		mg/L	0.001	
Xylene		<0.000400	mg/L		mg/L	0.001	
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.106	mg/L	1	0.100	106	77.2 - 129.1
4-Bromofluorobenzene (4-BFB)		0.0917	mg/L	1	0.100	92	69.1 - 122.3

**Laboratory Control Spike (LCS-1)**

QC Batch: 46760      Date Analyzed: 2008-03-21      Analyzed By: DC  
Prep Batch: 40218      QC Preparation: 2008-03-21      Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.107	mg/L	1	0.100	<0.00110	107	84 - 119.7
Toluene	0.110	mg/L	1	0.100	<0.00100	110	84.9 - 118.2
Ethylbenzene	0.113	mg/L	1	0.100	<0.00100	113	84.4 - 118.6
Xylene	0.342	mg/L	1	0.300	<0.00290	114	84.8 - 117.8

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.109	mg/L	1	0.100	<0.00110	109	84 - 119.7	2	20
Toluene	0.111	mg/L	1	0.100	<0.00100	111	84.9 - 118.2	1	20
Ethylbenzene	0.112	mg/L	1	0.100	<0.00100	112	84.4 - 118.6	1	20
Xylene	0.342	mg/L	1	0.300	<0.00290	114	84.8 - 117.8	0	20

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

Report Date: March 24, 2008  
Plains 046SPL

Work Order: 8031918  
Lovington Deep 6 inch

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Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.110	0.105	mg/L	1	0.100	110	105	80 - 128.3
4-Bromofluorobenzene (4-BFB)	0.0981	0.0954	mg/L	1	0.100	98	95	67.7 - 126.3

**Matrix Spike (MS-1)** Spiked Sample: 154063

QC Batch: 46760  
Prep Batch: 40218

Date Analyzed: 2008-03-21  
QC Preparation: 2008-03-21

Analyzed By: DC  
Prepared By: DC

Param	MS	Spike Amount	Matrix Result	Rec.			
	Result			Units	Dil.	Rec.	Limit
Benzene	1.69	mg/L	0.559	113	10	1.00	77.5 - 121.1
Toluene	1.08	mg/L	<0.0100	108	10	1.00	78.8 - 119.6
Ethylbenzene	1.18	mg/L	0.0726	111	10	1.00	77.9 - 120.5
Xylene	3.38	mg/L	0.0373	111	10	3.00	78.3 - 119.4

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.69	mg/L	10	1.00	0.559	113	77.5 - 121.1	0	20
Toluene	1.07	mg/L	10	1.00	<0.0100	107	78.8 - 119.6	1	20
Ethylbenzene	1.18	mg/L	10	1.00	0.0726	111	77.9 - 120.5	0	20
Xylene	3.39	mg/L	10	3.00	0.0373	112	78.3 - 119.4	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)	1.06	1.05	mg/L	10	1	106	105	86.6 - 118.9
4-Bromofluorobenzene (4-BFB)	1.10	1.11	mg/L	10	1	110	111	59.4 - 127.3

### **Standard (ICV-1)**

QC Batch: 46760

Date Analyzed: 2008-03-21

Analyzed By: DC

Param	Flag	Units	ICVs	ICVs	ICVs	Percent	Date
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	Analyzed
Benzene		mg/L	0.100	0.108	108	85 - 115	2008-03-21
Toluene		mg/L	0.100	0.113	113	85 - 115	2008-03-21
Ethylbenzene		mg/L	0.100	0.108	108	85 - 115	2008-03-21
Xylene		mg/L	0.300	0.324	108	85 - 115	2008-03-21

### **Standard (CCV-1)**

QC Batch: 46760

Date Analyzed: 2008-03-21

Analyzed By: DC

Param	Flag	Units	CCVs	CCVs	CCVs	Percent	Date
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	Analyzed
Benzene		mg/L	0.100	0.107	107	85 - 115	2008-03-21

*continued . . .*

*standard continued ...*

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.100	0.110	110	85 - 115	2008-03-21
Ethylbenzene		mg/L	0.100	0.111	111	85 - 115	2008-03-21
Xylene		mg/L	0.300	0.334	111	85 - 115	2008-03-21

# TraceAnalysis, Inc.

email: lab@traceanalysis.com

Company Name:

Talon LPE

Address: (Street, City, Zip)

2901 Rawlin Hwy

Contact Person:

Shawna Smith

Invoice to:

(if different from above)

Project #:

PLAINS O&G SPL

Project Location (including state):

New Mexico

Field Code

LAB#

(ABUSE  
ONLY)

Phone #: 432-522-2133

Fax #: 522-4180

E-mail: Camille Reynolds

ssmith@texdompe.com

Project Name:

Deep 6"

Sampler Signature: *C. Smith*

Sample ID: 8021B

PRESERVATIVE & METHOD

MATRIX

SAMPLING

TIME

DATE

ICP

NaOH

H<sub>2</sub>SO<sub>4</sub>

HNO<sub>3</sub>

HCl

SLUDGE

AIR

SOL

WATER

SLURGE

AIR

SOL

## ANALYSIS REQUEST (Circle or Specify Method No.)

PCBs 8082 / 608	GC/MS Vol. 8260B / 624	RCI	TCLP Pesticides	TCLP Semivolatile	Moisture Content	Hold	Turn Around Time if different from standard
PAH 8270C / 625	PAH 8015 GRO / DRO / TVHC	TPH 418.1 / TX1005 Ex(C35)	Total Metals Ag As Ba Cd Cr Pb Se Hg	Total Metals Ag As Ba Cd Cr Pb Se Hg	6010B/200.7		
TPH 8015 GRO / DRO / TVHC	TPEX 8021B / 602 / 8260B / 624	MTEB 8021B / 602 / 8260B / 624	MTEB 8021B / 602 / 8260B / 624	TPEX 8021B / 602 / 8260B / 624	PAH 8270C / 625	TPH 418.1 / TX1005 Ex(C35)	PCBs 8082 / 608
PAH 8270C / 625	TPH 418.1 / TX1005 Ex(C35)	TPEX 8021B / 602 / 8260B / 624	MTEB 8021B / 602 / 8260B / 624	TPEX 8021B / 602 / 8260B / 624	PAH 8270C / 625	TPEX 8021B / 602 / 8260B / 624	TCLP Volatiles
TCLP Volatiles	TCLP Semivolatile						
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	Total Metals Ag As Ba Cd Cr Pb Se Hg	Total Metals Ag As Ba Cd Cr Pb Se Hg	Total Metals Ag As Ba Cd Cr Pb Se Hg	Total Metals Ag As Ba Cd Cr Pb Se Hg	Total Metals Ag As Ba Cd Cr Pb Se Hg	Total Metals Ag As Ba Cd Cr Pb Se Hg	Total Metals Ag As Ba Cd Cr Pb Se Hg
6010B/200.7	6010B/200.7	6010B/200.7	6010B/200.7	6010B/200.7	6010B/200.7	6010B/200.7	6010B/200.7
3-18-08 2:24	3-18-08 2:28	3-18-08 2:32	3-18-08 2:37	2:42	2:48	2:53	3-18-08 2:24
3-18-08 2:24	3-18-08 2:28	3-18-08 2:32	3-18-08 2:37	2:42	2:48	2:53	3-18-08 2:24

REMARKS:  
All tests - Miland

Time: 3-19-08 13:15

Date: Received by: *John D.*

Time: 3-19-08 13:15

Date: Received at Laboratory by: *John D.*

Time: 3-19-08 13:15

Date: Received at Laboratory by: *John D.*

Time: 3-19-08 13:15

Date: Received at Laboratory by: *John D.*

Time: 3-19-08 13:15

Date: Received at Laboratory by: *John D.*

Time: 3-19-08 13:15

Date: Received at Laboratory by: *John D.*

Headspace  N  V  I  N

Temp Z/C  C  F  K

Conn. R.  T  F  C

Carrier # \_\_\_\_\_

Dry Weight Basis Required

TRRP Report Required

Check If Special Reporting Limits Are Needed

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

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# TRACEANALYSIS, INC.

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6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260  
E-Mail: lab@traceanalysis.com

## NELAP Certifications

Lubbock T104704219-08-TX      El Paso T104704221-08-TX      Midland T104704392-08-TX

## Analytical and Quality Control Report

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

Report Date: July 1, 2008

Work Order: 8062645



Order #: SRS 2002-10312  
Project Location: Hobbs, NM  
Project Name: Lovington Deep 6 inch  
Project Number: Plains 046SPL

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
164817	MW-11	water	2008-06-26	12:06	2008-06-26
164818	MW-3	water	2008-06-26	12:11	2008-06-26
164819	MW-1	water	2008-06-26	11:40	2008-06-26
164820	MW-4	water	2008-06-26	12:23	2008-06-26
164821	MW-5	water	2008-06-26	12:45	2008-06-26
164822	MW-6	water	2008-06-26	11:08	2008-06-26
164823	MW-7	water	2008-06-26	11:54	2008-06-26
164824	MW-8	water	2008-06-26	12:02	2008-06-26
164825	MW-9	water	2008-06-26	12:30	2008-06-26
164826	MW-10	water	2008-06-26	12:35	2008-06-26

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 12 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



---

Dr. Blair Leftwich, Director

**Standard Flags**

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

## Case Narrative

Samples for project Lovington Deep 6 inch were received by TraceAnalysis, Inc. on 2008-06-26 and assigned to work order 8062645. Samples for work order 8062645 were received intact without headspace and at a temperature of 3.0.

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

Test	Method
BTEX	<u>S 8021B</u>

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 8062645 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: July 1, 2008  
Plains 046SPL

Work Order: 8062645  
Lovington Deep 6 inch

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Hobbs, NM

## Analytical Report

Sample: 164817 - MW-11

Laboratory: Midland  
Analysis: BTEX, Total BTEX  
QC Batch: 49841  
Prep Batch: 42777

Analytical Method: S 8021B  
Date Analyzed: 2008-06-27  
Sample Preparation: 2008-06-27

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

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)		0.0874	mg/L	1	0.100	87	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0875	mg/L	1	0.100	88	52 - 124.1

Sample: 164818 - MW-3

Laboratory: Midland  
Analysis: BTEX, Total BTEX  
QC Batch: 49841  
Prep Batch: 42777

Analytical Method: S 8021B  
Date Analyzed: 2008-06-27  
Sample Preparation: 2008-06-27

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		11.2	mg/L	50	0.00100
Toluene		1.41	mg/L	50	0.00100
Ethylbenzene		0.655	mg/L	50	0.00100
Xylene		0.775	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.16	mg/L	50	5.00	83	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		4.25	mg/L	50	5.00	85	52 - 124.1

Sample: 164819 - MW-1

Laboratory: Midland  
Analysis: BTEX, Total BTEX  
QC Batch: 49841  
Prep Batch: 42777

Analytical Method: S 8021B  
Date Analyzed: 2008-06-27  
Sample Preparation: 2008-06-27

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

Report Date: July 1, 2008  
Plains 046SPL

Work Order: 8062645  
Lovington Deep 6 inch

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Hobbs, NM

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)		0.0872	mg/L	1	0.100	87	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0877	mg/L	1	0.100	88	52 - 124.1

**Sample: 164820 - MW-4**

Laboratory: Midland  
Analysis: BTEX, Total BTEX  
QC Batch: 49841  
Prep Batch: 42777

Analytical Method: S 8021B  
Date Analyzed: 2008-06-27  
Sample Preparation: 2008-06-27

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.0353	mg/L	1	0.00100
Toluene		0.00370	mg/L	1	0.00100
Ethylbenzene		0.00230	mg/L	1	0.00100
Xylene		0.00290	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0850	mg/L	1	0.100	85	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0858	mg/L	1	0.100	86	52 - 124.1

**Sample: 164821 - MW-5**

Laboratory: Midland  
Analysis: BTEX, Total BTEX  
QC Batch: 49862  
Prep Batch: 42778

Analytical Method: S 8021B  
Date Analyzed: 2008-06-28  
Sample Preparation: 2008-06-27

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.0525	mg/L	1	0.00100
Toluene		0.00350	mg/L	1	0.00100
Ethylbenzene		0.00250	mg/L	1	0.00100
Xylene		0.0267	mg/L	1	0.00100

Report Date: July 1, 2008  
Plains 046SPL

Work Order: 8062645  
Lovington Deep 6 inch

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0952	mg/L	1	0.100	95	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0951	mg/L	1	0.100	95	52 - 124.1

**Sample: 164822 - MW-6**

Laboratory: Midland  
Analysis: BTEX, Total BTEX  
QC Batch: 49862  
Prep Batch: 42778

Analytical Method: S 8021B  
Date Analyzed: 2008-06-28  
Sample Preparation: 2008-06-27

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

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)		0.0938	mg/L	1	0.100	94	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0920	mg/L	1	0.100	92	52 - 124.1

**Sample: 164823 - MW-7**

Laboratory: Midland  
Analysis: BTEX, Total BTEX  
QC Batch: 49862  
Prep Batch: 42778

Analytical Method: S 8021B  
Date Analyzed: 2008-06-28  
Sample Preparation: 2008-06-27

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

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)		0.0942	mg/L	1	0.100	94	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0924	mg/L	1	0.100	92	52 - 124.1

Report Date: July 1, 2008  
Plains 046SPL

Work Order: 8062645  
Lovington Deep 6 inch

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**Sample: 164824 - MW-8**

Laboratory: Midland  
Analysis: BTEX, Total BTEX  
QC Batch: 49862  
Prep Batch: 42778

Analytical Method: S 8021B  
Date Analyzed: 2008-06-28  
Sample Preparation: 2008-06-27

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

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)		0.0948	mg/L	1	0.100	95	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0925	mg/L	1	0.100	92	52 - 124.1

**Sample: 164825 - MW-9**

Laboratory: Midland  
Analysis: BTEX, Total BTEX  
QC Batch: 49862  
Prep Batch: 42778

Analytical Method: S 8021B  
Date Analyzed: 2008-06-28  
Sample Preparation: 2008-06-27

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

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)		0.0957	mg/L	1	0.100	96	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0927	mg/L	1	0.100	93	52 - 124.1

**Sample: 164826 - MW-10**

Laboratory: Midland  
Analysis: BTEX, Total BTEX  
QC Batch: 49862  
Prep Batch: 42778

Analytical Method: S 8021B  
Date Analyzed: 2008-06-28  
Sample Preparation: 2008-06-27

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

Report Date: July 1, 2008  
Plains 046SPL

Work Order: 8062645  
Lovington Deep 6 inch

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Parameter	Flag	Result	Units	Dilution	RL
Benzene		8.70	mg/L	50	0.00100
Toluene		<0.0500	mg/L	50	0.00100
Ethylbenzene		0.159	mg/L	50	0.00100
Xylene		0.0964	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.74	mg/L	50	5.00	95	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		4.65	mg/L	50	5.00	93	52 - 124.1

**Method Blank (1) QC Batch: 49841**

QC Batch: 49841 Date Analyzed: 2008-06-27 Analyzed By: DC  
Prep Batch: 42777 QC Preparation: 2008-06-27 Prepared By: DC

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0886	mg/L	1	0.100	89	44.6 - 137.4
4-Bromofluorobenzene (4-BFB)		0.0887	mg/L	1	0.100	89	37.1 - 130.9

**Method Blank (1) QC Batch: 49862**

QC Batch: 49862 Date Analyzed: 2008-06-28 Analyzed By: DC  
Prep Batch: 42778 QC Preparation: 2008-06-27 Prepared By: DC

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0933	mg/L	1	0.100	93	44.6 - 137.4
4-Bromofluorobenzene (4-BFB)		0.0933	mg/L	1	0.100	93	37.1 - 130.9

Report Date: July 1, 2008  
Plains 046SPL

Work Order: 8062645  
Lovington Deep 6 inch

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### Laboratory Control Spike (LCS-1)

QC Batch: 49841  
Prep Batch: 42777

Date Analyzed: 2008-06-27  
QC Preparation: 2008-06-27

Analyzed By: DC  
Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0924	mg/L	1	0.100	<0.000200	92	71.7 - 120.5
Toluene	0.0932	mg/L	1	0.100	<0.000200	93	75.4 - 118.8
Ethylbenzene	0.0936	mg/L	1	0.100	<0.000200	94	73.5 - 118
Xylene	0.280	mg/L	1	0.300	<0.000300	93	72.9 - 118.2

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD Limit	
Benzene	0.0933	mg/L	1	0.100	<0.000200	93	71.7 - 120.5	1	20
Toluene	0.0939	mg/L	1	0.100	<0.000200	94	75.4 - 118.8	1	20
Ethylbenzene	0.0939	mg/L	1	0.100	<0.000200	94	73.5 - 118	0	20
Xylene	0.283	mg/L	1	0.300	<0.000300	94	72.9 - 118.2	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0908	0.0923	mg/L	1	0.100	91	92	38.2 - 131.6
4-Bromofluorobenzene (4-BFB)	0.0914	0.0930	mg/L	1	0.100	91	93	43.9 - 132.4

### Laboratory Control Spike (LCS-1)

QC Batch: 49862  
Prep Batch: 42778

Date Analyzed: 2008-06-28  
QC Preparation: 2008-06-27

Analyzed By: DC  
Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.100	mg/L	1	0.100	<0.000200	100	71.7 - 120.5
Toluene	0.101	mg/L	1	0.100	<0.000200	101	75.4 - 118.8
Ethylbenzene	0.100	mg/L	1	0.100	<0.000200	100	73.5 - 118
Xylene	0.301	mg/L	1	0.300	<0.000300	100	72.9 - 118.2

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD Limit	
Benzene	0.106	mg/L	1	0.100	<0.000200	106	71.7 - 120.5	6	20
Toluene	0.106	mg/L	1	0.100	<0.000200	106	75.4 - 118.8	5	20
Ethylbenzene	0.106	mg/L	1	0.100	<0.000200	106	73.5 - 118	6	20
Xylene	0.318	mg/L	1	0.300	<0.000300	106	72.9 - 118.2	6	20

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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)	0.0965	0.0996	mg/L	1	0.100	96	100	38.2 - 131.6
4-Bromofluorobenzene (4-BFB)	0.0962	0.0996	mg/L	1	0.100	96	100	43.9 - 132.4

Matrix Spike (MS-1) Spiked Sample: 164818

QC Batch: 49841 Date Analyzed: 2008-06-27 Analyzed By: DC  
Prep Batch: 42777 QC Preparation: 2008-06-27 Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	17.1	mg/L	50	5.00	11.2045	118	10 - 160.8
Toluene	5.97	mg/L	50	5.00	1.4099	91	10 - 160.7
Ethylbenzene	5.18	mg/L	50	5.00	0.6554	90	10 - 158.3
Xylene	14.2	mg/L	50	15.0	0.7749	90	10 - 158

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	16.1	mg/L	50	5.00	11.2045	98	10 - 160.8	6	20
Toluene	5.63	mg/L	50	5.00	1.4099	84	10 - 160.7	6	20
Ethylbenzene	4.88	mg/L	50	5.00	0.6554	84	10 - 158.3	6	20
Xylene	13.4	mg/L	50	15.0	0.7749	84	10 - 158	6	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)	4.37	4.09	mg/L	50	5	87	82	33.1 - 132.5	
4-Bromofluorobenzene (4-BFB)	4.53	4.27	mg/L	50	5	91	85	37.5 - 136	

Matrix Spike (MS-1) Spiked Sample: 164826

QC Batch: 49862 Date Analyzed: 2008-06-28 Analyzed By: DC  
Prep Batch: 42778 QC Preparation: 2008-06-27 Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	13.8	mg/L	50	5.00	8.6952	102	10 - 160.8
Toluene	5.02	mg/L	50	5.00	<0.0100	100	10 - 160.7
Ethylbenzene	5.16	mg/L	50	5.00	0.1588	100	10 - 158.3
Xylene	15.1	mg/L	50	15.0	0.0964	100	10 - 158

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

Report Date: July 1, 2008  
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Lovington Deep 6 inch

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Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Limit	RPD RPD	RPD Limit
Benzene	13.2	mg/L	50	5.00	8.6952	90	10 - 160.8	4	20
Toluene	4.80	mg/L	50	5.00	<0.0100	96	10 - 160.7	4	20
Ethylbenzene	4.94	mg/L	50	5.00	0.1588	96	10 - 158.3	4	20
Xylene	14.4	mg/L	50	15.0	0.0964	95	10 - 158	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)	4.96	4.76	mg/L	50	5	99	95	33.1 - 132.5
4-Bromofluorobenzene (4-BFB)	5.00	4.77	mg/L	50	5	100	95	37.5 - 136

### Standard (ICV-1)

QC Batch: 49841                          Date Analyzed: 2008-06-27                          Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0925	92	85 - 115	2008-06-27
Toluene		mg/L	0.100	0.0933	93	85 - 115	2008-06-27
Ethylbenzene		mg/L	0.100	0.0936	94	85 - 115	2008-06-27
Xylene		mg/L	0.300	0.282	94	85 - 115	2008-06-27

### Standard (CCV-1)

QC Batch: 49841                          Date Analyzed: 2008-06-27                          Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0854	85	85 - 115	2008-06-27
Toluene		mg/L	0.100	0.0859	86	85 - 115	2008-06-27
Ethylbenzene		mg/L	0.100	0.0859	86	85 - 115	2008-06-27
Xylene		mg/L	0.300	0.259	86	85 - 115	2008-06-27

### Standard (ICV-1)

QC Batch: 49862                          Date Analyzed: 2008-06-28                          Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.100	100	85 - 115	2008-06-28

*continued ...*

Report Date: July 1, 2008  
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Lovington Deep 6 inch

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*standard continued ...*

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.100	0.100	100	85 - 115	2008-06-28
Ethylbenzene		mg/L	0.100	0.100	100	85 - 115	2008-06-28
Xylene		mg/L	0.300	0.302	101	85 - 115	2008-06-28

**Standard (CCV-1)**

QC Batch: 49862

Date Analyzed: 2008-06-28

Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.100	100	85 - 115	2008-06-28
Toluene		mg/L	0.100	0.0997	100	85 - 115	2008-06-28
Ethylbenzene		mg/L	0.100	0.0980	98	85 - 115	2008-06-28
Xylene		mg/L	0.300	0.297	99	85 - 115	2008-06-28

# TraceAnalysis, Inc.

email: lab@traceanalysis.com

Company Name:

Talon LPCE

Address: (Street, City, Zip)

2301 Rankin Hwy  
Lubbock, Texas 79424

Contact Person:

Shawn Smith

Invoice to:

(If different from above)

Project #: PLAINS O40 SPL, SRS 2002-10312

Project Name: Camille Request

Project Location (including state):

New Mexico

Sampler Signature:

*Shawn Smith*

Chloro Lique Request

Phone #: 432-522-2133

Fax #:

E-mail: Camille.Request  
Shawn.Smith

## ANALYSIS REQUEST (Circle or Specify Method No.)

PAH 8270C / 625	TPH 8015 GRO / DRO / TVHC	GCMS Vol. 8260B / 624	GCMS Semi. Vol. 8270C / 625	PCBs 8082 / 608	Pesticides 8081A / 608	BOD, TSS, PH	Moisture Content	Hold
Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI			
PAH 8270C / 625	TPH 4181 / TX1005 / TX1005 Ext(C35)	BTEx 8021B / 602 / 8260B / 624	MTEB 8021B / 602 / 8260B / 624	MTBE 8021B / 602 / 8260B / 624	TCPs 8021B / 602 / 8260B / 624	PCBs 8082 / 608	PCBs 8082 / 608	PCBs 8082 / 608
Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI			
PAH 8270C / 625	TPH 8015 GRO / DRO / TVHC	GCMS Vol. 8260B / 624	GCMS Semi. Vol. 8270C / 625	PCBs 8082 / 608	Pesticides 8081A / 608	BOD, TSS, PH	Moisture Content	Hold

REMARKS:

All test - M: Shown

Dry Weight Basis Required

TRRP Report Required

Check If Special Reporting  
Limits Are Needed

FIELD CODE	# CONTAINERS	VOLUME / AMOUNT	MATRIX	PRESERVATIVE	METHOD	TIME	DATE	PROJECT	SAMPLING	
									SOIL	AIR
818 MW - 3	2	V	X	X	X	X	6-26-98 12:00	9021	80-275-9	X
819 MW - 1	2	V	X	X	X	X	6-26-98 11:41	9021	80-275-9	X
820 MW - 4	2	V	X	X	X	X	6-26-98 12:13	9021	80-275-9	X
821 MW - 5	2	V	X	X	X	X	6-26-98 12:45	9021	80-275-9	X
822 MW - 6	2	V	X	X	X	X	6-26-98 11:08	9021	80-275-9	X
823 MW - 7	2	V	X	X	X	X	6-26-98 11:54	9021	80-275-9	X
824 MW - 8	2	V	X	X	X	X	6-26-98 12:02	9021	80-275-9	X
825 MW - 9	2	V	X	X	X	X	6-26-98 12:30	9021	80-275-9	X
826 MW - 10	2	V	X	X	X	X	6-26-98 12:35	9021	80-275-9	X
827 MW - 11	2	V	X	X	X	X	6-26-98 12:35	9021	80-275-9	X
Relinquished by: Company: Date: Time: Received by: Company: Date: Time: Temp°c: LAB USE ONLY	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm		
Relinquished by: Company: Date: Time: Received by: Company: Date: Time: Temp°c: LAB USE ONLY	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm		
Relinquished by: Company: Date: Time: Received by: Company: Date: Time: Temp°c: LAB USE ONLY	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm	John Chay 7-26-98 3:40 pm John Talon Chay 3:40 pm		

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

ORIGINAL COPY

# TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

## NELAP Certifications

Lubbock T104704219-08-TX      El Paso T104704221-08-TX      Midland T104704392-08-TX

## Analytical and Quality Control Report

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

Report Date: July 1, 2008

Work Order: 8062646



Order #: SRS 2002-10312  
Project Location: Hobbs, NM  
Project Name: Lovington Deep 6 inch  
Project Number: Plains 046SPL

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
164827	MW-12	water	2008-06-26	12:19	2008-06-26

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 6 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



---

Dr. Blair Leftwich, Director

**Standard Flags**

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

## Case Narrative

Samples for project Lovington Deep 6 inch were received by TraceAnalysis, Inc. on 2008-06-26 and assigned to work order 8062646. Samples for work order 8062646 were received intact without headspace and at a temperature of 3.0.

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

Test	Method
BTEX	S 8021B

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 8062646 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: July 1, 2008  
Plains 046SPL

Work Order: 8062646  
Lovington Deep 6 inch

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## Analytical Report

Sample: 164827 - MW-12

Laboratory: Midland  
Analysis: BTEX, Total BTEX  
QC Batch: 49862  
Prep Batch: 42778

Analytical Method: S 8021B  
Date Analyzed: 2008-06-28  
Sample Preparation: 2008-06-27

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.701	mg/L	5	0.00100
Toluene		<0.00500	mg/L	5	0.00100
Ethylbenzene		0.0584	mg/L	5	0.00100
Xylene		0.0503	mg/L	5	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.475	mg/L	5	0.500	95	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.468	mg/L	5	0.500	94	52 - 124.1

Method Blank (1) QC Batch: 49862

QC Batch: 49862  
Prep Batch: 42778

Date Analyzed: 2008-06-28  
QC Preparation: 2008-06-27

Analyzed By: DC  
Prepared By: DC

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0933	mg/L	1	0.100	93	44.6 - 137.4
4-Bromofluorobenzene (4-BFB)		0.0933	mg/L	1	0.100	93	37.1 - 130.9

Laboratory Control Spike (LCS-1)

QC Batch: 49862  
Prep Batch: 42778

Date Analyzed: 2008-06-28  
QC Preparation: 2008-06-27

Analyzed By: DC  
Prepared By: DC

Report Date: July 1, 2008  
Plains 046SPL

Work Order: 8062646  
Lovington Deep 6 inch

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Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.100	mg/L	1	0.100	<0.000200	100	71.7 - 120.5
Toluene	0.101	mg/L	1	0.100	<0.000200	101	75.4 - 118.8
Ethylbenzene	0.100	mg/L	1	0.100	<0.000200	100	73.5 - 118
Xylene	0.301	mg/L	1	0.300	<0.000300	100	72.9 - 118.2

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD Limit
Benzene	0.106	mg/L	1	0.100	<0.000200	106	71.7 - 120.5	6
Toluene	0.106	mg/L	1	0.100	<0.000200	106	75.4 - 118.8	5
Ethylbenzene	0.106	mg/L	1	0.100	<0.000200	106	73.5 - 118	6
Xylene	0.318	mg/L	1	0.300	<0.000300	106	72.9 - 118.2	6

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)	0.0965	0.0996	mg/L	1	0.100	96	100	38.2 - 131.6
4-Bromofluorobenzene (4-BFB)	0.0962	0.0996	mg/L	1	0.100	96	100	43.9 - 132.4

### Matrix Spike (MS-1) Spiked Sample: 164826

QC Batch: 49862 Date Analyzed: 2008-06-28 Analyzed By: DC  
Prep Batch: 42778 QC Preparation: 2008-06-27 Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	13.8	mg/L	50	5.00	8.6952	102	10 - 160.8
Toluene	5.02	mg/L	50	5.00	<0.0100	100	10 - 160.7
Ethylbenzene	5.16	mg/L	50	5.00	0.1588	100	10 - 158.3
Xylene	15.1	mg/L	50	15.0	0.0964	100	10 - 158

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 Limit
Benzene	13.2	mg/L	50	5.00	8.6952	90	10 - 160.8	4
Toluene	4.80	mg/L	50	5.00	<0.0100	96	10 - 160.7	4
Ethylbenzene	4.94	mg/L	50	5.00	0.1588	96	10 - 158.3	4
Xylene	14.4	mg/L	50	15.0	0.0964	95	10 - 158	5

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)	4.96	4.76	mg/L	50	5	99	95	33.1 - 132.5

*continued ...*

Report Date: July 1, 2008  
Plains 046SPL

Work Order: 8062646  
Lovington Deep 6 inch

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*matrix spikes continued . . .*

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	5.00	4.77	mg/L	50	5	100	95	37.5 - 136

### Standard (ICV-1)

QC Batch: 49862    Date Analyzed: 2008-06-28    Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.100	100	85 - 115	2008-06-28
Toluene		mg/L	0.100	0.100	100	85 - 115	2008-06-28
Ethylbenzene		mg/L	0.100	0.100	100	85 - 115	2008-06-28
Xylene		mg/L	0.300	0.302	101	85 - 115	2008-06-28

### Standard (CCV-1)

QC Batch: 49862    Date Analyzed: 2008-06-28    Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.100	100	85 - 115	2008-06-28
Toluene		mg/L	0.100	0.0997	100	85 - 115	2008-06-28
Ethylbenzene		mg/L	0.100	0.0980	98	85 - 115	2008-06-28
Xylene		mg/L	0.300	0.297	99	85 - 115	2008-06-28

# TraceAnalysis, Inc.

email: lab@traceanalysis.com

Phone # 432-522-2133

Fax #: 432-522-2133

Company Name:

Talmage

(Street, City, Zip)

2301 Rankin Hwy

Address:

Shawna Smith

Contact Person:

Invoice to:

(If different from above)

Project #:

Project Name:

Project #:

Project Name:

Lovington

Date:

Dec 06

Sampler Signature:

Shawna Smith

Sample Request:

8/26/06

Method:

Chromatograph

Sample Type:

Water

Volume / Amount:

5 L

# CONTAINERS:

2

MATRIX:

Water

METHOD:

8021B / 8260B / 624

SAMPLING:

8/26/06

TIME:

8:45 AM

DATE:

8/26/06

ICP:

X

HNO<sub>3</sub>:

X

H<sub>2</sub>SO<sub>4</sub>:

X

NaOH:

X

SLUDGE:

X

AIR:

X

SOLID:

X

WATER:

V

PRESERVATIVE:

8/26/06

TIME:

8:45 AM

DATE:

8/26/06

ICP:

X

HNO<sub>3</sub>:

X

H<sub>2</sub>SO<sub>4</sub>:

X

NaOH:

X

SLUDGE:

X

AIR:

X

SOLID:

X

WATER:

V

PRESERVATIVE:

8/26/06

TIME:

8:45 AM

DATE:

8/26/06

ICP:

X

HNO<sub>3</sub>:

X

H<sub>2</sub>SO<sub>4</sub>:

X

NaOH:

X

SLUDGE:

X

AIR:

X

SOLID:

X

WATER:

V

PRESERVATIVE:

8/26/06

TIME:

8:45 AM

DATE:

8/26/06

ICP:

X

HNO<sub>3</sub>:

X

H<sub>2</sub>SO<sub>4</sub>:

X

NaOH:

X

SLUDGE:

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AIR:

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SOLID:

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WATER:

V

PRESERVATIVE:

8/26/06

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8:45 AM

DATE:

8/26/06

ICP:

X

HNO<sub>3</sub>:

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H<sub>2</sub>SO<sub>4</sub>:

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NaOH:

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HNO<sub>3</sub>:

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HNO<sub>3</sub>:

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NaOH:

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WATER:

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PRESERVATIVE:

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8/26/06

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HNO<sub>3</sub>:

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H<sub>2</sub>SO<sub>4</sub>:

X

NaOH:

X

SLUDGE:

X

AIR:

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SOLID:

X

WATER:

V

PRESERVATIVE:

8/26/06

TIME:

8:45 AM

DATE:

8/26/06

ICP:

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HNO<sub>3</sub>:

X

H<sub>2</sub>SO<sub>4</sub>:

X

NaOH:

X

SLUDGE:

X

AIR:

X

SOLID:

X

WATER:

V

PRESERVATIVE:

8/26/06

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HNO<sub>3</sub>:

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H<sub>2</sub>SO<sub>4</sub>:

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NaOH:

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SLUDGE:

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AIR:

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WATER:

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PRESERVATIVE:

8/26/06

TIME:

8:45 AM

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8/26/06

ICP:

X

HNO<sub>3</sub>:

X

H<sub>2</sub>SO<sub>4</sub>:

X

NaOH:

X

SLUDGE:

X

AIR:

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SOLID:

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WATER:

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PRESERVATIVE:

8/26/06

TIME:

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DATE:

8/26/06

ICP:

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HNO<sub>3</sub>:

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H<sub>2</sub>SO<sub>4</sub>:

X

NaOH:

X

SLUDGE:

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AIR:

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SOLID:

X

WATER:

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PRESERVATIVE:

8/26/06

TIME:

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8/26/06

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HNO<sub>3</sub>:

# 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  
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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

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

Report Date: October 1, 2008

Work Order: 8092210



Order #: SRS 2002-10312  
Project Location: Lovington, NM  
Project Name: Lovington Deep 6 inch  
Project Number: Plains 046SPL

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
174135	MW-1	water	2008-09-20	13:05	2008-09-22
174136	MW-2	water	2008-09-20	14:50	2008-09-22
174137	MW-3	water	2008-09-20	13:19	2008-09-22
174138	MW-4	water	2008-09-20	13:33	2008-09-22
174139	MW-5	water	2008-09-20	13:43	2008-09-22

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
174140	MW-6	water	2008-09-20	10:10	2008-09-22
174141	MW-7	water	2008-09-20	10:50	2008-09-22
174142	MW-8	water	2008-09-20	10:30	2008-09-22
174143	MW-9	water	2008-09-20	11:20	2008-09-22
174144	MW-10	water	2008-09-20	11:35	2008-09-22
174145	MW-11	water	2008-09-20	12:00	2008-09-22
174146	MW-12	water	2008-09-20	12:30	2008-09-22
174147	MW-13	water	2008-09-20	15:25	2008-09-22
174148	MW-14	water	2008-09-20	15:45	2008-09-22
174149	MW-15	water	2008-09-20	12:24	2008-09-22
174150	MW-16	water	2008-09-20	12:53	2008-09-22
174151	MW-17	water	2008-09-20	13:10	2008-09-22

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 45 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

#### Standard Flags

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

## Case Narrative

Samples for project Lovington Deep 6 inch were received by TraceAnalysis, Inc. on 2008-09-22 and assigned to work order 8092210. Samples for work order 8092210 were received intact without headspace and at a temperature of 2.1 deg. C.

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

Test	Method
BTEX	S 8021B
PAH	S 8270C
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 8092210 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

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

## Analytical Report

Sample: 174135 - MW-1

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52654  
Prep Batch: 45121

Analytical Method: S 8021B  
Date Analyzed: 2008-09-23  
Sample Preparation: 2008-09-23

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<b>0.00610</b>	mg/L	1	0.00100
Toluene		<b>0.00250</b>	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)		0.0892	mg/L	1	0.100	89	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0913	mg/L	1	0.100	91	52 - 124.1

Sample: 174135 - MW-1

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 52820  
Prep Batch: 45266

Analytical Method: S 8270C  
Date Analyzed: 2008-09-26  
Sample Preparation: 2008-09-25

Prep Method: S 3510C  
Analyzed By: DS  
Prepared By: DS

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

continued ...

Report Date: October 1, 2008  
Plains 046SPL

Work Order: 8092210  
Lovington Deep 6 inch

Page Number: 5 of 45  
Lovington, NM

sample 174135 continued ...

Parameter	Flag	Result	Units	Dilution	RL		
Indeno(1,2,3-cd)pyrene		<0.000200	mg/L	1	0.000200		
Dibenzo(a,h)anthracene		<0.000200	mg/L	1	0.000200		
Benzo(g,h,i)perylene		<0.000200	mg/L	1	0.000200		
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0719	mg/L	1	0.0800	90	37.4 - 123
2-Fluorobiphenyl		0.0719	mg/L	1	0.0800	90	34.3 - 130
Terphenyl-d14		0.0746	mg/L	1	0.0800	93	10 - 252

Sample: 174136 - MW-2

Laboratory: Midland  
Analysis: BTEX                          Analytical Method: S 8021B                          Prep Method: S 5030B  
QC Batch: 52712                          Date Analyzed: 2008-09-24                          Analyzed By: DC  
Prep Batch: 45164                          Sample Preparation: 2008-09-23                          Prepared By: DC

Parameter	Flag	Result	Units	Dilution	RL		
Benzene		15.4	mg/L	50	0.00100		
Toluene		7.25	mg/L	50	0.00100		
Ethylbenzene		0.975	mg/L	50	0.00100		
Xylene		2.52	mg/L	50	0.00100		
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.48	mg/L	50	5.00	90	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		4.66	mg/L	50	5.00	93	52 - 124.1

Sample: 174136 - MW-2

Laboratory: Lubbock  
Analysis: PAH                          Analytical Method: S 8270C                          Prep Method: S 3510C  
QC Batch: 52820                          Date Analyzed: 2008-09-26                          Analyzed By: DS  
Prep Batch: 45266                          Sample Preparation: 2008-09-25                          Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.0581	mg/L	1	0.000200
2-Methylnaphthalene		0.0561	mg/L	1	0.000200
1-Methylnaphthalene		0.0456	mg/L	1	0.000200

continued ...

Report Date: October 1, 2008  
Plains 046SPL

Work Order: 8092210  
Lovington Deep 6 inch

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sample 174136 continued ...

Parameter	Flag	Result	Units	Dilution	RL
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.00168	mg/L	1	0.000200
Fluorene		0.00477	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.00321	mg/L	1	0.000200
Fluoranthene		<0.000200	mg/L	1	0.000200
Pyrene		<0.000200	mg/L	1	0.000200
Benzo(a)anthracene		<0.000200	mg/L	1	0.000200
Chrysene		0.000533	mg/L	1	0.000200
Benzo(b)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(k)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(a)pyrene		<0.000200	mg/L	1	0.000200
Indeno(1,2,3-cd)pyrene		<0.000200	mg/L	1	0.000200
Dibenzo(a,h)anthracene		<0.000200	mg/L	1	0.000200
Benzo(g,h,i)perylene		<0.000200	mg/L	1	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0721	mg/L	1	0.0800	90	37.4 - 123
2-Fluorobiphenyl		0.0614	mg/L	1	0.0800	77	34.3 - 130
Terphenyl-d14		0.0732	mg/L	1	0.0800	92	10 - 252

**Sample: 174136 - MW-2**

Laboratory: Midland  
Analysis: TPH DRO  
QC Batch: 52748  
Prep Batch: 45205

Analytical Method: Mod. 8015B  
Date Analyzed: 2008-09-26  
Sample Preparation: 2008-09-26

Prep Method: N/A  
Analyzed By: LD  
Prepared By: LD

Parameter	Flag	Result	Units	Dilution	RL		
DRO		6.35	mg/L	1	5.00		
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.0	mg/L	1	10.0	130	70 - 130

Report Date: October 1, 2008  
Plains 046SPL

Work Order: 8092210  
Lovington Deep 6 inch

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Lovington, NM

**Sample: 174136 - MW-2**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52720  
Prep Batch: 45164

Analytical Method: S 8015B  
Date Analyzed: 2008-09-24  
Sample Preparation: 2008-09-23

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		71.6	mg/L	50	0.100
<hr/>					
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		4.68	mg/L	50	94
4-Bromofluorobenzene (4-BFB)		4.69	mg/L	50	94

**Sample: 174137 - MW-3**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52654  
Prep Batch: 45121

Analytical Method: S 8021B  
Date Analyzed: 2008-09-23  
Sample Preparation: 2008-09-23

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		12.4	mg/L	100	0.00100
Toluene		1.19	mg/L	100	0.00100
Ethylbenzene		0.782	mg/L	100	0.00100
Xylene		0.714	mg/L	100	0.00100
<hr/>					
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		8.87	mg/L	100	89
4-Bromofluorobenzene (4-BFB)		9.15	mg/L	100	92

**Sample: 174137 - MW-3**

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 52820  
Prep Batch: 45266

Analytical Method: S 8270C  
Date Analyzed: 2008-09-26  
Sample Preparation: 2008-09-25

Prep Method: S 3510C  
Analyzed By: DS  
Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.0393	mg/L	1	0.000200

*continued ...*

Report Date: October 1, 2008  
Plains 046SPL

Work Order: 8092210  
Lovington Deep 6 inch

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Lovington, NM

sample 174137 continued ...

Parameter	Flag	Result	Units	Dilution	RL
2-Methylnaphthalene		0.0287	mg/L	1	0.000200
1-Methylnaphthalene		0.0292	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.000935	mg/L	1	0.000200
Fluorene		0.00338	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.00118	mg/L	1	0.000200
Fluoranthene		<0.000200	mg/L	1	0.000200
Pyrene		<0.000200	mg/L	1	0.000200
Benzo(a)anthracene		<0.000200	mg/L	1	0.000200
Chrysene		<0.000200	mg/L	1	0.000200
Benzo(b)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(k)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(a)pyrene		<0.000200	mg/L	1	0.000200
Indeno(1,2,3-cd)pyrene		<0.000200	mg/L	1	0.000200
Dibenzo(a,h)anthracene		<0.000200	mg/L	1	0.000200
Benzo(g,h,i)perylene		<0.000200	mg/L	1	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0640	mg/L	1	0.0800	80	37.4 - 123
2-Fluorobiphenyl		0.0590	mg/L	1	0.0800	74	34.3 - 130
Terphenyl-d14		0.0716	mg/L	1	0.0800	90	10 - 252

Sample: 174138 - MW-4

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52654  
Prep Batch: 45121

Analytical Method: S 8021B  
Date Analyzed: 2008-09-23  
Sample Preparation: 2008-09-23

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.0757	mg/L	1	0.00100
Toluene		0.00930	mg/L	1	0.00100
Ethylbenzene		0.00620	mg/L	1	0.00100
Xylene		0.00720	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0900	mg/L	1	0.100	90	65.1 - 116.8

continued ...

Report Date: October 1, 2008  
Plains 046SPL

Work Order: 8092210  
Lovington Deep 6 inch

Page Number: 9 of 45  
Lovington, NM

*sample continued ...*

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		0.0923	mg/L	1	0.100	92	52 - 124.1

**Sample: 174138 - MW-4**

Laboratory: Lubbock

Analysis: PAH

QC Batch: 52820

Prep Batch: 45266

Analytical Method: S 8270C

Date Analyzed: 2008-09-26

Sample Preparation: 2008-09-25

Prep Method: S 3510C

Analyzed By: DS

Prepared By: DS

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0633	mg/L	1	0.0800	79	37.4 - 123
2-Fluorobiphenyl		0.0610	mg/L	1	0.0800	76	34.3 - 130
Terphenyl-d14		0.0708	mg/L	1	0.0800	88	10 - 252

**Sample: 174139 - MW-5**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52654  
Prep Batch: 45121

Analytical Method: S 8021B  
Date Analyzed: 2008-09-23  
Sample Preparation: 2008-09-23

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.0653	mg/L	1	0.00100
Toluene		0.00580	mg/L	1	0.00100
Ethylbenzene		0.00390	mg/L	1	0.00100
Xylene		0.0469	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0876	mg/L	1	0.100	88	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0917	mg/L	1	0.100	92	52 - 124.1

**Sample: 174139 - MW-5**

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 52820  
Prep Batch: 45266

Analytical Method: S 8270C  
Date Analyzed: 2008-09-26  
Sample Preparation: 2008-09-25

Prep Method: S 3510C  
Analyzed By: DS  
Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.000274	mg/L	1	0.000200
2-Methylnaphthalene		<0.000200	mg/L	1	0.000200
1-Methylnaphthalene		0.000548	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		<0.000200	mg/L	1	0.000200
Fluorene		<0.000200	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		<0.000200	mg/L	1	0.000200
Fluoranthene		<0.000200	mg/L	1	0.000200
Pyrene		<0.000200	mg/L	1	0.000200
Benzo(a)anthracene		<0.000200	mg/L	1	0.000200
Chrysene		<0.000200	mg/L	1	0.000200
Benzo(b)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(k)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(a)pyrene		<0.000200	mg/L	1	0.000200
Indeno(1,2,3-cd)pyrene		<0.000200	mg/L	1	0.000200
Dibenzo(a,h)anthracene		<0.000200	mg/L	1	0.000200

*continued ...*

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*sample 174139 continued ...*

Parameter	Flag	Result	Units	Dilution	RL		
Benzo(g,h,i)perylene		<0.000200	mg/L	1	0.000200		
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limits	
Nitrobenzene-d5		0.0652	mg/L	1	0.0800	82	37.4 - 123
2-Fluorobiphenyl		0.0657	mg/L	1	0.0800	82	34.3 - 130
Terphenyl-d14		0.0732	mg/L	1	0.0800	92	10 - 252

**Sample: 174140 - MW-6**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52654  
Prep Batch: 45121

Analytical Method: S 8021B  
Date Analyzed: 2008-09-23  
Sample Preparation: 2008-09-23

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

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)		0.0909	mg/L	1	0.100	91	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0921	mg/L	1	0.100	92	52 - 124.1

**Sample: 174140 - MW-6**

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 52820  
Prep Batch: 45266

Analytical Method: S 8270C  
Date Analyzed: 2008-09-26  
Sample Preparation: 2008-09-25

Prep Method: S 3510C  
Analyzed By: DS  
Prepared By: DS

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

*continued ...*

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sample 174140 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0583	mg/L	1	0.0800	73	37.4 - 123
2-Fluorobiphenyl		0.0605	mg/L	1	0.0800	76	34.3 - 130
Terphenyl-d14		0.0687	mg/L	1	0.0800	86	10 - 252

Sample: 174141 - MW-7

Laboratory: Midland  
Analysis: BTEX                                  Analytical Method: S 8021B                                  Prep Method: S 5030B  
QC Batch: 52654                                  Date Analyzed: 2008-09-23                                  Analyzed By: DC  
Prep Batch: 45121                                  Sample Preparation: 2008-09-23                                  Prepared By: DC

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)		0.0866	mg/L	1	0.100	87	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0880	mg/L	1	0.100	88	52 - 124.1

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**Sample: 174141 - MW-7**

Laboratory: Lubbock

Analysis: PAH

QC Batch: 52849

Prep Batch: 45290

Analytical Method: S 8270C

Date Analyzed: 2008-09-29

Sample Preparation: 2008-09-26

Prep Method: S 3510C

Analyzed By: DS

Prepared By: DS

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0650	mg/L	1	0.0800	81	37.4 - 123
2-Fluorobiphenyl		0.0610	mg/L	1	0.0800	76	34.3 - 130
Terphenyl-d14		0.0741	mg/L	1	0.0800	93	10 - 252

**Sample: 174142 - MW-8**

Laboratory: Midland

Analysis: BTEX

QC Batch: 52654

Prep Batch: 45121

Analytical Method: S 8021B

Date Analyzed: 2008-09-23

Sample Preparation: 2008-09-23

Prep Method: S 5030B

Analyzed By: DC

Prepared By: DC

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

*continued ...*

*sample 174142 continued ...*

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0897	mg/L	1	0.100	90	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0908	mg/L	1	0.100	91	52 - 124.1

**Sample: 174142 - MW-8**

Laboratory: Lubbock

Analysis: PAH

QC Batch: 52849

Prep Batch: 45290

Analytical Method: S 8270C

Date Analyzed: 2008-09-29

Sample Preparation: 2008-09-26

Prep Method: S 3510C

Analyzed By: DS

Prepared By: DS

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0668	mg/L	1	0.0800	84	37.4 - 123
2-Fluorobiphenyl		0.0599	mg/L	1	0.0800	75	34.3 - 130
Terphenyl-d14		0.0722	mg/L	1	0.0800	90	10 - 252

**Sample: 174143 - MW-9**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52654  
Prep Batch: 45121

Analytical Method: S 8021B  
Date Analyzed: 2008-09-23  
Sample Preparation: 2008-09-23

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

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)		0.0870	mg/L	1	0.100	87	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0886	mg/L	1	0.100	89	52 - 124.1

**Sample: 174143 - MW-9**

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 52849  
Prep Batch: 45290

Analytical Method: S 8270C  
Date Analyzed: 2008-09-29  
Sample Preparation: 2008-09-26

Prep Method: S 3510C  
Analyzed By: DS  
Prepared By: DS

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

*continued ...*

*sample 174143 continued ...*

Parameter	Flag	Result	Units	Dilution	RL
Benzo(g,h,i)perylene		<0.000200	mg/L	1	0.000200
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Nitrobenzene-d5		0.0637	mg/L	1	80
2-Fluorobiphenyl		0.0606	mg/L	1	76
Terphenyl-d14		0.0696	mg/L	1	87

**Sample: 174144 - MW-10**

Laboratory: Midland

Analysis: BTEX

Analytical Method: S 8021B

Prep Method: S 5030B

QC Batch: 52654

Date Analyzed: 2008-09-23

Analyzed By: DC

Prep Batch: 45121

Sample Preparation: 2008-09-23

Prepared By: DC

Parameter	Flag	Result	Units	Dilution	RL
Benzene		7.70	mg/L	50	0.00100
Toluene		<0.0500	mg/L	50	0.00100
Ethylbenzene		<0.0500	mg/L	50	0.00100
Xylene		<0.0500	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.43	mg/L	50	5.00	89	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		4.52	mg/L	50	5.00	90	52 - 124.1

**Sample: 174144 - MW-10**

Laboratory: Lubbock

Analysis: PAH

Analytical Method: S 8270C

Prep Method: S 3510C

QC Batch: 52849

Date Analyzed: 2008-09-29

Analyzed By: DS

Prep Batch: 45290

Sample Preparation: 2008-09-26

Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.00709	mg/L	1	0.000200
2-Methylnaphthalene		0.00343	mg/L	1	0.000200
1-Methylnaphthalene		0.00979	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200

*continued ...*

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sample 174144 continued ...

Parameter	Flag	Result	Units	Dilution	RL
Dibenzofuran		0.000517	mg/L	1	0.000200
Fluorene		0.00126	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.000618	mg/L	1	0.000200
Fluoranthene		<0.000200	mg/L	1	0.000200
Pyrene		<0.000200	mg/L	1	0.000200
Benzo(a)anthracene		<0.000200	mg/L	1	0.000200
Chrysene		<0.000200	mg/L	1	0.000200
Benzo(b)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(k)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(a)pyrene		<0.000200	mg/L	1	0.000200
Indeno(1,2,3-cd)pyrene		<0.000200	mg/L	1	0.000200
Dibenzo(a,h)anthracene		<0.000200	mg/L	1	0.000200
Benzo(g,h,i)perylene		<0.000200	mg/L	1	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0659	mg/L	1	0.0800	82	37.4 - 123
2-Fluorobiphenyl		0.0602	mg/L	1	0.0800	75	34.3 - 130
Terphenyl-d14		0.0718	mg/L	1	0.0800	90	10 - 252

Sample: 174145 - MW-11

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52654  
Prep Batch: 45121

Analytical Method: S 8021B  
Date Analyzed: 2008-09-23  
Sample Preparation: 2008-09-23

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.00110	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)		0.0919	mg/L	1	0.100	92	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0922	mg/L	1	0.100	92	52 - 124.1

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**Sample: 174145 - MW-11**

Laboratory:	Lubbock	Analytical Method:	S 8270C	Prep Method:	S 3510C
Analysis:	PAH	Date Analyzed:	2008-09-29	Analyzed By:	DS
QC Batch:	52849	Sample Preparation:	2008-09-26	Prepared By:	DS
Prep Batch:	45290				

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0633	mg/L	1	0.0800	79	37.4 - 123
2-Fluorobiphenyl		0.0557	mg/L	1	0.0800	70	34.3 - 130
Terphenyl-d14		0.0717	mg/L	1	0.0800	90	10 - 252

**Sample: 174146 - MW-12**

Laboratory:	Midland	Analytical Method:	S 8021B	Prep Method:	S 5030B
Analysis:	BTEX	Date Analyzed:	2008-09-23	Analyzed By:	DC
QC Batch:	52654	Sample Preparation:	2008-09-23	Prepared By:	DC
Prep Batch:	45121				

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.791	mg/L	15	0.00100
Toluene		<0.0150	mg/L	15	0.00100

*continued ...*

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Parameter	Flag	Result	Units	Dilution	RL
Ethylbenzene		0.0478	mg/L	15	0.00100
Xylene		0.0517	mg/L	15	0.00100
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		1.38	mg/L	15	92
4-Bromofluorobenzene (4-BFB)		1.40	mg/L	15	93

Sample: 174146 - MW-12

Laboratory: Lubbock

Analysis: PAH

QC Batch: 52849

Prep Batch: 45290

Analytical Method: S 8270C

Date Analyzed: 2008-09-29

Sample Preparation: 2008-09-26

Prep Method: S 3510C

Analyzed By: DS

Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.00353	mg/L	1	0.000200
2-Methylnaphthalene		0.00355	mg/L	1	0.000200
1-Methylnaphthalene		0.00405	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		<0.000200	mg/L	1	0.000200
Fluorene		<0.000200	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		<0.000200	mg/L	1	0.000200
Fluoranthene		<0.000200	mg/L	1	0.000200
Pyrene		<0.000200	mg/L	1	0.000200
Benzo(a)anthracene		<0.000200	mg/L	1	0.000200
Chrysene		<0.000200	mg/L	1	0.000200
Benzo(b)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(k)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(a)pyrene		<0.000200	mg/L	1	0.000200
Indeno(1,2,3-cd)pyrene		<0.000200	mg/L	1	0.000200
Dibenzo(a,h)anthracene		<0.000200	mg/L	1	0.000200
Benzo(g,h,i)perylene		<0.000200	mg/L	1	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0530	mg/L	1	0.0800	66	37.4 - 123
2-Fluorobiphenyl		0.0556	mg/L	1	0.0800	70	34.3 - 130
Terphenyl-d14		0.0676	mg/L	1	0.0800	84	10 - 252

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**Sample: 174147 - MW-13**

Laboratory: Midland

Analysis: BTEX

QC Batch: 52712

Prep Batch: 45164

Analytical Method: S 8021B

Date Analyzed: 2008-09-24

Sample Preparation: 2008-09-23

Prep Method: S 5030B

Analyzed By: DC

Prepared By: DC

Parameter	Flag	Result	Units	Dilution	RL
Benzene		12.7	mg/L	100	0.00100
Toluene		8.43	mg/L	100	0.00100
Ethylbenzene		1.10	mg/L	100	0.00100
Xylene		2.89	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		8.66	mg/L	100	10.0	87	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		8.98	mg/L	100	10.0	90	52 - 124.1

**Sample: 174147 - MW-13**

Laboratory: Lubbock

Analysis: PAH

QC Batch: 52849

Prep Batch: 45290

Analytical Method: S 8270C

Date Analyzed: 2008-09-29

Sample Preparation: 2008-09-26

Prep Method: S 3510C

Analyzed By: DS

Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene	1	0.106	mg/L	1	0.000200
2-Methylnaphthalene	2	0.236	mg/L	1	0.000200
1-Methylnaphthalene	3	0.198	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.00710	mg/L	1	0.000200
Fluorene		0.0222	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.0195	mg/L	1	0.000200
Fluoranthene		0.00105	mg/L	1	0.000200
Pyrene		0.00862	mg/L	1	0.000200
Benzo(a)anthracene		<0.000200	mg/L	1	0.000200
Chrysene		<0.000200	mg/L	1	0.000200
Benzo(b)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(k)fluoranthene		<0.000200	mg/L	1	0.000200

*continued ...*

<sup>1</sup>Estimated concentration value greater than standard range.

<sup>2</sup>Estimated concentration value greater than standard range.

<sup>3</sup>Estimated concentration value greater than standard range.

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sample 174147 continued ...

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0652	mg/L	1	0.0800	82	37.4 - 123
2-Fluorobiphenyl		0.0575	mg/L	1	0.0800	72	34.3 - 130
Terphenyl-d14	4	0.542	mg/L	1	0.0800	678	10 - 252

Sample: 174147 - MW-13

Laboratory: Midland  
Analysis: TPH DRO  
QC Batch: 52764  
Prep Batch: 45205

Analytical Method: Mod. 8015B  
Date Analyzed: 2008-09-27  
Sample Preparation: 2008-09-26

Prep Method: N/A  
Analyzed By: LD  
Prepared By: LD

Parameter	Flag	Result	Units	Dilution	RL
DRO		49.4	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triaccontane		9.12	mg/L	1	10.0	91	70 - 130

Sample: 174147 - MW-13

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52720  
Prep Batch: 45164

Analytical Method: S 8015B  
Date Analyzed: 2008-09-24  
Sample Preparation: 2008-09-23

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		72.2	mg/L	100	0.100

<sup>4</sup>8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		9.10	mg/L	100	10.0	91	70 - 130
4-Bromofluorobenzene (4-BFB)		9.06	mg/L	100	10.0	91	70 - 130

Sample: 174148 - MW-14

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52712  
Prep Batch: 45164

Analytical Method: S 8021B  
Date Analyzed: 2008-09-24  
Sample Preparation: 2008-09-23

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		14.5	mg/L	50	0.00100
Toluene		8.66	mg/L	50	0.00100
Ethylbenzene		1.10	mg/L	50	0.00100
Xylene		2.76	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.78	mg/L	50	5.00	96	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		4.90	mg/L	50	5.00	98	52 - 124.1

Sample: 174148 - MW-14

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 52849  
Prep Batch: 45290

Analytical Method: S 8270C  
Date Analyzed: 2008-09-29  
Sample Preparation: 2008-09-26

Prep Method: S 3510C  
Analyzed By: DS  
Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.0471	mg/L	1	0.000200
2-Methylnaphthalene		0.0441	mg/L	1	0.000200
1-Methylnaphthalene		0.0362	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.00141	mg/L	1	0.000200
Fluorene		0.00396	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.00249	mg/L	1	0.000200
Fluoranthene		<0.000200	mg/L	1	0.000200
Pyrene		<0.000200	mg/L	1	0.000200
Benzo(a)anthracene		<0.000200	mg/L	1	0.000200

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Parameter	Flag	Result	Units	Dilution	RL
Chrysene		<b>0.000337</b>	mg/L	1	0.000200
Benzo(b)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(k)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(a)pyrene		<0.000200	mg/L	1	0.000200
Indeno(1,2,3-cd)pyrene		<0.000200	mg/L	1	0.000200
Dibenzo(a,h)anthracene		<0.000200	mg/L	1	0.000200
Benzo(g,h,i)perylene		<0.000200	mg/L	1	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0569	mg/L	1	0.0800	71	37.4 - 123
2-Fluorobiphenyl		0.0509	mg/L	1	0.0800	64	34.3 - 130
Terphenyl-d14		0.0717	mg/L	1	0.0800	90	10 - 252

**Sample: 174148 - MW-14**

Laboratory: Midland  
Analysis: TPH DRO  
QC Batch: 52764  
Prep Batch: 45205

Analytical Method: Mod. 8015B  
Date Analyzed: 2008-09-27  
Sample Preparation: 2008-09-26

Prep Method: N/A  
Analyzed By: LD  
Prepared By: LD

Parameter	Flag	Result	Units	Dilution	RL
DRO		<b>7.44</b>	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	<sup>5</sup>	13.7	mg/L	1	10.0	137	70 - 130

**Sample: 174148 - MW-14**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52720  
Prep Batch: 45164

Analytical Method: S 8015B  
Date Analyzed: 2008-09-24  
Sample Preparation: 2008-09-23

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		<b>71.6</b>	mg/L	50	0.100

<sup>5</sup>High surrogate recovery. Sample non-detect, result bias high.

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.00	mg/L	50	5.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)		4.96	mg/L	50	5.00	99	70 - 130

**Sample: 174149 - MW-15**

Laboratory: Midland

Analysis: BTEX

QC Batch: 52712

Prep Batch: 45164

Analytical Method: S 8021B

Date Analyzed: 2008-09-24

Sample Preparation: 2008-09-23

Prep Method: S 5030B

Analyzed By: DC

Prepared By: DC

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		4.87		mg/L	50	0.00100
Toluene		2.17		mg/L	50	0.00100
Ethylbenzene		0.480		mg/L	50	0.00100
Xylene		1.43		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	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		4.52	mg/L	50	5.00	90	52 - 124.1

**Sample: 174149 - MW-15**

Laboratory: Lubbock

Analysis: PAH

QC Batch: 52849

Prep Batch: 45290

Analytical Method: S 8270C

Date Analyzed: 2008-09-29

Sample Preparation: 2008-09-26

Prep Method: S 3510C

Analyzed By: DS

Prepared By: DS

Parameter	Flag	Result	RL	Units	Dilution	RL
Naphthalene		0.0451		mg/L	1	0.000200
2-Methylnaphthalene		0.0902		mg/L	1	0.000200
1-Methylnaphthalene		0.0817		mg/L	1	0.000200
Acenaphthylene		<0.000200		mg/L	1	0.000200
Acenaphthene		<0.000200		mg/L	1	0.000200
Dibenzofuran		0.00319		mg/L	1	0.000200
Fluorene		0.0111		mg/L	1	0.000200
Anthracene		<0.000200		mg/L	1	0.000200
Phenanthrene		0.00866		mg/L	1	0.000200
Fluoranthene		0.000418		mg/L	1	0.000200
Pyrene		0.000670		mg/L	1	0.000200
Benzo(a)anthracene		<0.000200		mg/L	1	0.000200

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Parameter	Flag	Result	Units	Dilution	RL
Chrysene		0.00145	mg/L	1	0.000200
Benzo(b)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(k)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(a)pyrene		<0.000200	mg/L	1	0.000200
Indeno(1,2,3-cd)pyrene		<0.000200	mg/L	1	0.000200
Dibenzo(a,h)anthracene		<0.000200	mg/L	1	0.000200
Benzo(g,h,i)perylene		<0.000200	mg/L	1	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0700	mg/L	1	0.0800	88	37.4 - 123
2-Fluorobiphenyl		0.0561	mg/L	1	0.0800	70	34.3 - 130
Terphenyl-d14		0.0757	mg/L	1	0.0800	95	10 - 252

**Sample: 174149 - MW-15**

Laboratory: Midland  
Analysis: TPH DRO  
QC Batch: 52764  
Prep Batch: 45205

Analytical Method: Mod. 8015B  
Date Analyzed: 2008-09-27  
Sample Preparation: 2008-09-26

Prep Method: N/A  
Analyzed By: LD  
Prepared By: LD

Parameter	Flag	Result	Units	Dilution	RL
DRO		57.5	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		12.1	mg/L	1	10.0	121	70 - 130

**Sample: 174149 - MW-15**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52720  
Prep Batch: 45164

Analytical Method: S 8015B  
Date Analyzed: 2008-09-24  
Sample Preparation: 2008-09-23

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		27.2	mg/L	50	0.100

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.58	mg/L	50	5.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)		4.57	mg/L	50	5.00	91	70 - 130

**Sample: 174150 - MW-16**

Laboratory: Midland

Analysis: BTEX

QC Batch: 52712

Prep Batch: 45164

Analytical Method: S 8021B

Date Analyzed: 2008-09-24

Sample Preparation: 2008-09-23

Prep Method: S 5030B

Analyzed By: DC

Prepared By: DC

Parameter	Flag	Result	Units	Dilution	RL
Benzene		3.45	mg/L	20	0.00100
Toluene		2.63	mg/L	20	0.00100
Ethylbenzene		0.476	mg/L	20	0.00100
Xylene		1.21	mg/L	20	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.79	mg/L	20	2.00	90	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		1.85	mg/L	20	2.00	92	52 - 124.1

**Sample: 174150 - MW-16**

Laboratory: Lubbock

Analysis: PAH

QC Batch: 52849

Prep Batch: 45290

Analytical Method: S 8270C

Date Analyzed: 2008-09-29

Sample Preparation: 2008-09-26

Prep Method: S 3510C

Analyzed By: DS

Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.0239	mg/L	1	0.000200
2-Methylnaphthalene		0.0230	mg/L	1	0.000200
1-Methylnaphthalene		0.0202	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.00103	mg/L	1	0.000200
Fluorene		0.00303	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.00209	mg/L	1	0.000200
Fluoranthene		<0.000200	mg/L	1	0.000200
Pyrene		<0.000200	mg/L	1	0.000200
Benzo(a)anthracene		<0.000200	mg/L	1	0.000200

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sample 174150 continued . . .

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0480	mg/L	1	0.0800	60	37.4 - 123
2-Fluorobiphenyl		0.0446	mg/L	1	0.0800	56	34.3 - 130
Terphenyl-d14		0.0686	mg/L	1	0.0800	86	10 - 252

**Sample: 174150 - MW-16**

Laboratory: Midland  
Analysis: TPH DRO  
QC Batch: 52764  
Prep Batch: 45205

Analytical Method: Mod. 8015B  
Date Analyzed: 2008-09-27  
Sample Preparation: 2008-09-26

Prep Method: N/A  
Analyzed By: LD  
Prepared By: LD

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

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

**Sample: 174150 - MW-16**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52720  
Prep Batch: 45164

Analytical Method: S 8015B  
Date Analyzed: 2008-09-24  
Sample Preparation: 2008-09-23

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		21.8	mg/L	20	0.100

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.87	mg/L	20	2.00	94	70 - 130
4-Bromofluorobenzene (4-BFB)		1.90	mg/L	20	2.00	95	70 - 130

**Sample: 174151 - MW-17**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52712  
Prep Batch: 45164

Analytical Method: S 8021B  
Date Analyzed: 2008-09-24  
Sample Preparation: 2008-09-23

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		14.5	mg/L	50	0.00100
Toluene		9.60	mg/L	50	0.00100
Ethylbenzene		1.04	mg/L	50	0.00100
Xylene		2.63	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.52	mg/L	50	5.00	90	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		4.66	mg/L	50	5.00	93	52 - 124.1

**Sample: 174151 - MW-17**

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 52849  
Prep Batch: 45290

Analytical Method: S 8270C  
Date Analyzed: 2008-09-29  
Sample Preparation: 2008-09-26

Prep Method: S 3510C  
Analyzed By: DS  
Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.0585	mg/L	1	0.000200
2-Methylnaphthalene		0.0773	mg/L	1	0.000200
1-Methylnaphthalene		0.0643	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.00256	mg/L	1	0.000200
Fluorene		0.00800	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.00625	mg/L	1	0.000200
Fluoranthene		0.000305	mg/L	1	0.000200
Pyrene		<0.000200	mg/L	1	0.000200
Benzo(a)anthracene		<0.000200	mg/L	1	0.000200

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Parameter	Flag	Result	Units	Dilution	RL
Chrysene		0.00108	mg/L	1	0.000200
Benzo(b)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(k)fluoranthene		<0.000200	mg/L	1	0.000200
Benzo(a)pyrene		<0.000200	mg/L	1	0.000200
Indeno(1,2,3-cd)pyrene		<0.000200	mg/L	1	0.000200
Dibenzo(a,h)anthracene		<0.000200	mg/L	1	0.000200
Benzo(g,h,i)perylene		<0.000200	mg/L	1	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0703	mg/L	1	0.0800	88	37.4 - 123
2-Fluorobiphenyl		0.0557	mg/L	1	0.0800	70	34.3 - 130
Terphenyl-d14		0.0762	mg/L	1	0.0800	95	10 - 252

Sample: 174151 - MW-17

Laboratory: Midland  
Analysis: TPH DRO  
QC Batch: 52764  
Prep Batch: 45205

Analytical Method: Mod. 8015B  
Date Analyzed: 2008-09-27  
Sample Preparation: 2008-09-26

Prep Method: N/A  
Analyzed By: LD  
Prepared By: LD

Parameter	Flag	Result	Units	Dilution	RL
DRO		8.95	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		10.7	mg/L	1	10.0	107	70 - 130

Sample: 174151 - MW-17

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52720  
Prep Batch: 45164

Analytical Method: S 8015B  
Date Analyzed: 2008-09-24  
Sample Preparation: 2008-09-23

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		73.8	mg/L	50	0.100

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.76	mg/L	50	5.00	95	70 - 130
4-Bromofluorobenzene (4-BFB)		4.76	mg/L	50	5.00	95	70 - 130

Method Blank (1) QC Batch: 52654

QC Batch: 52654 Date Analyzed: 2008-09-23 Analyzed By: DC  
Prep Batch: 45121 QC Preparation: 2008-09-23 Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000500	mg/L	0.001
Toluene		<0.000700	mg/L	0.001
Ethylbenzene		<0.000700	mg/L	0.001
Xylene		<0.00180	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0885	mg/L	1	0.100	88	44.6 - 137.4
4-Bromofluorobenzene (4-BFB)		0.0898	mg/L	1	0.100	90	37.1 - 130.9

Method Blank (1) QC Batch: 52712

QC Batch: 52712 Date Analyzed: 2008-09-24 Analyzed By: DC  
Prep Batch: 45164 QC Preparation: 2008-09-23 Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000500	mg/L	0.001
Toluene		<0.000700	mg/L	0.001
Ethylbenzene		<0.000700	mg/L	0.001
Xylene		<0.00180	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0882	mg/L	1	0.100	88	44.6 - 137.4
4-Bromofluorobenzene (4-BFB)		0.0886	mg/L	1	0.100	89	37.1 - 130.9

Method Blank (1) QC Batch: 52720

QC Batch: 52720 Date Analyzed: 2008-09-24 Analyzed By: DC  
Prep Batch: 45164 QC Preparation: 2008-09-23 Prepared By: DC

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Parameter	Flag	MDL		Units	RL		
		Result					
GRO		0.0899		mg/L	0.1		
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0903	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0880	mg/L	1	0.100	88	50 - 130

Method Blank (1) QC Batch: 52748

QC Batch: 52748  
Prep Batch: 45205

Date Analyzed: 2008-09-26  
QC Preparation: 2008-09-26

Analyzed By: LD  
Prepared By: LD

Parameter	Flag	MDL Result	Units	RL			
DRO		<2.44	mg/L	5			
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		12.5	mg/L	1	10.0	125	70 - 130

Method Blank (1) QC Batch: 52764

QC Batch: 52764  
Prep Batch: 45205

Date Analyzed: 2008-09-27  
QC Preparation: 2008-09-26

Analyzed By: LD  
Prepared By: LD

Parameter	Flag	MDL		Units	RL		
		Result	<2.44				
DRO				mg/L	5		
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limits	
n-Triacontane		12.4	mg/L	1	10.0	124	70 - 130

**Method Blank (1)**      QC Batch: 52820

QC Batch: 52820  
Prep Batch: 45266

Date Analyzed: 2008-09-26  
QC Preparation: 2008-09-25

Analyzed By: DS  
Prepared By: DS

Parameter	Flag	MDL Result	Units	RL
Naphthalene		<0.0000730	mg/L	0.0002

*method blank continued ...*

Parameter	Flag	MDL Result	Units	RL
2-Methylnaphthalene		<0.0000509	mg/L	0.0002
1-Methylnaphthalene		<0.0000748	mg/L	0.0002
Acenaphthylene		<0.0000767	mg/L	0.0002
Acenaphthene		<0.000142	mg/L	0.0002
Dibenzofuran		<0.0000470	mg/L	0.0002
Fluorene		<0.0000569	mg/L	0.0002
Anthracene		<0.0000876	mg/L	0.0002
Phenanthrene		<0.0000552	mg/L	0.0002
Fluoranthene		<0.0000954	mg/L	0.0002
Pyrene		<0.0000497	mg/L	0.0002
Benzo(a)anthracene		<0.0000328	mg/L	0.0002
Chrysene		<0.0000990	mg/L	0.0002
Benzo(b)fluoranthene		<0.0000684	mg/L	0.0002
Benzo(k)fluoranthene		<0.0000830	mg/L	0.0002
Benzo(a)pyrene		<0.0000549	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0000869	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0000605	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0000681	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0563	mg/L	1	0.0800	70	10 - 146
2-Fluorobiphenyl		0.0516	mg/L	1	0.0800	64	10 - 141
Terphenyl-d14		0.0654	mg/L	1	0.0800	82	10 - 266

Method Blank (1) QC Batch: 52849

QC Batch:

52849

Date Analyzed: 2008-09-29

Analyzed By: DS

Prep Batch: 45290

QC Preparation: 2008-09-26

Prepared By: DS

Parameter	Flag	MDL Result	Units	RL
Naphthalene		<0.0000730	mg/L	0.0002
2-Methylnaphthalene		<0.0000509	mg/L	0.0002
1-Methylnaphthalene		<0.0000748	mg/L	0.0002
Acenaphthylene		<0.0000767	mg/L	0.0002
Acenaphthene		<0.000142	mg/L	0.0002
Dibenzofuran		<0.0000470	mg/L	0.0002
Fluorene		<0.0000569	mg/L	0.0002
Anthracene		<0.0000876	mg/L	0.0002
Phenanthrene		<0.0000552	mg/L	0.0002
Fluoranthene		<0.0000954	mg/L	0.0002
Pyrene		<0.0000497	mg/L	0.0002

*continued ...*

*method blank continued ...*

Parameter	Flag	MDL Result	Units	RL
Benzo(a)anthracene		<0.0000328	mg/L	0.0002
Chrysene		<0.0000990	mg/L	0.0002
Benzo(b)fluoranthene		<0.0000684	mg/L	0.0002
Benzo(k)fluoranthene		<0.0000830	mg/L	0.0002
Benzo(a)pyrene		<0.0000549	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0000869	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0000605	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0000681	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0582	mg/L	1	0.0800	73	10 - 146
2-Fluorobiphenyl		0.0489	mg/L	1	0.0800	61	10 - 141
Terphenyl-d14		0.0665	mg/L	1	0.0800	83	10 - 266

#### Laboratory Control Spike (LCS-1)

QC Batch: 52654  
 Prep Batch: 45121

Date Analyzed: 2008-09-23  
 QC Preparation: 2008-09-23

Analyzed By: DC  
 Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0959	mg/L	1	0.100	<0.000500	96	71.7 - 120.5
Toluene	0.0966	mg/L	1	0.100	<0.000700	97	75.4 - 118.8
Ethylbenzene	0.0958	mg/L	1	0.100	<0.000700	96	73.5 - 118
Xylene	0.289	mg/L	1	0.300	<0.00180	96	72.9 - 118.2

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.0936	mg/L	1	0.100	<0.000500	94	71.7 - 120.5	2	20
Toluene	0.0934	mg/L	1	0.100	<0.000700	93	75.4 - 118.8	3	20
Ethylbenzene	0.0937	mg/L	1	0.100	<0.000700	94	73.5 - 118	2	20
Xylene	0.283	mg/L	1	0.300	<0.00180	94	72.9 - 118.2	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec.
Trifluorotoluene (TFT)	0.0899	0.0907	mg/L	1	0.100	90	91	38.2 - 131.6
4-Bromofluorobenzene (4-BFB)	0.0939	0.0938	mg/L	1	0.100	94	94	43.9 - 132.4

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### Laboratory Control Spike (LCS-1)

QC Batch: 52712      Date Analyzed: 2008-09-24      Analyzed By: DC  
Prep Batch: 45164      QC Preparation: 2008-09-23      Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Limit
Benzene	0.102	mg/L	1	0.100	<0.000500	102	71.7 - 120.5
Toluene	0.104	mg/L	1	0.100	<0.000700	104	75.4 - 118.8
Ethylbenzene	0.103	mg/L	1	0.100	<0.000700	103	73.5 - 118
Xylene	0.313	mg/L	1	0.300	<0.00180	104	72.9 - 118.2

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Limit	
Benzene	0.104	mg/L	1	0.100	<0.000500	104	71.7 - 120.5	2	20
Toluene	0.106	mg/L	1	0.100	<0.000700	106	75.4 - 118.8	2	20
Ethylbenzene	0.104	mg/L	1	0.100	<0.000700	104	73.5 - 118	1	20
Xylene	0.317	mg/L	1	0.300	<0.00180	106	72.9 - 118.2	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0912	0.0958	mg/L	1	0.100	91	96	38.2 - 131.6
4-Bromofluorobenzene (4-BFB)	0.0957	0.0998	mg/L	1	0.100	96	100	43.9 - 132.4

### Laboratory Control Spike (LCS-1)

QC Batch: 52720      Date Analyzed: 2008-09-24      Analyzed By: DC  
Prep Batch: 45164      QC Preparation: 2008-09-23      Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Limit
GRO	0.788	mg/L	1	1.00	0.0899	70	70 - 130

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Limit	
GRO	0.790	mg/L	1	1.00	0.0899	70	70 - 130	0	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0969	0.0919	mg/L	1	0.100	97	92	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0957	0.0924	mg/L	1	0.100	96	92	70 - 130

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#### Laboratory Control Spike (LCS-1)

QC Batch: 52748                          Date Analyzed: 2008-09-26                          Analyzed By: LD  
Prep Batch: 45205                          QC Preparation: 2008-09-26                          Prepared By: LD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	25.1	mg/L	1	25.0	<2.44	100	70 - 130

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	22.7	mg/L	1	25.0	<2.44	91	70 - 130	10	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	10.5	10.2	mg/L	1	10.0	105	102	70 - 130

#### Laboratory Control Spike (LCS-1)

QC Batch: 52764                          Date Analyzed: 2008-09-27                          Analyzed By: LD  
Prep Batch: 45205                          QC Preparation: 2008-09-26                          Prepared By: LD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	24.9	mg/L	1	25.0	<2.44	100	70 - 130

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	23.4	mg/L	1	25.0	<2.44	94	70 - 130	6	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	10.5	10.7	mg/L	1	10.0	105	107	70 - 130

#### Laboratory Control Spike (LCS-1)

QC Batch: 52820                          Date Analyzed: 2008-09-26                          Analyzed By: DS  
Prep Batch: 45266                          QC Preparation: 2008-09-25                          Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene	0.0446	mg/L	1	0.0800	<0.0000730	56	10 - 141
2-Methylnaphthalene	0.0477	mg/L	1	0.0800	<0.0000509	60	50 - 150
1-Methylnaphthalene	0.0471	mg/L	1	0.0800	<0.0000748	59	50 - 150
Acenaphthylene	0.0575	mg/L	1	0.0800	<0.0000767	72	10 - 152
Acenaphthene	0.0547	mg/L	1	0.0800	<0.000142	68	10 - 151
Dibenzofuran	0.0569	mg/L	1	0.0800	<0.0000470	71	10 - 148
Fluorene	0.0633	mg/L	1	0.0800	<0.0000569	79	10 - 172
Anthracene	0.0558	mg/L	1	0.0800	<0.0000876	70	22.5 - 172
Phenanthrene	0.0556	mg/L	1	0.0800	<0.0000552	70	19.6 - 172
Fluoranthene	0.0616	mg/L	1	0.0800	<0.0000954	77	17.3 - 187
Pyrene	0.0600	mg/L	1	0.0800	<0.0000497	75	14.9 - 199
Benzo(a)anthracene	0.0581	mg/L	1	0.0800	<0.0000328	73	19.4 - 185
Chrysene	0.0608	mg/L	1	0.0800	<0.0000990	76	18.4 - 188
Benzo(b)fluoranthene	0.0594	mg/L	1	0.0800	<0.0000684	74	10 - 193
Benzo(k)fluoranthene	0.0611	mg/L	1	0.0800	<0.0000830	76	27.8 - 196
Benzo(a)pyrene	0.0668	mg/L	1	0.0800	<0.0000549	84	12.4 - 205
Indeno(1,2,3-cd)pyrene	0.0702	mg/L	1	0.0800	<0.0000869	88	10 - 198
Dibenzo(a,h)anthracene	0.0696	mg/L	1	0.0800	<0.0000605	87	10 - 172
Benzo(g,h,i)perylene	0.0689	mg/L	1	0.0800	<0.0000681	86	10 - 186

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
Naphthalene	0.0454	mg/L	1	0.0800	<0.0000730	57	10 - 141	2	20
2-Methylnaphthalene	0.0473	mg/L	1	0.0800	<0.0000509	59	50 - 150	1	20
1-Methylnaphthalene	0.0472	mg/L	1	0.0800	<0.0000748	59	50 - 150	0	20
Acenaphthylene	0.0577	mg/L	1	0.0800	<0.0000767	72	10 - 152	0	20
Acenaphthene	0.0560	mg/L	1	0.0800	<0.000142	70	10 - 151	2	20
Dibenzofuran	0.0584	mg/L	1	0.0800	<0.0000470	73	10 - 148	3	20
Fluorene	0.0670	mg/L	1	0.0800	<0.0000569	84	10 - 172	6	20
Anthracene	0.0568	mg/L	1	0.0800	<0.0000876	71	22.5 - 172	2	20
Phenanthrene	0.0574	mg/L	1	0.0800	<0.0000552	72	19.6 - 172	3	20
Fluoranthene	0.0601	mg/L	1	0.0800	<0.0000954	75	17.3 - 187	2	20
Pyrene	0.0624	mg/L	1	0.0800	<0.0000497	78	14.9 - 199	4	20
Benzo(a)anthracene	0.0587	mg/L	1	0.0800	<0.0000328	73	19.4 - 185	1	20
Chrysene	0.0619	mg/L	1	0.0800	<0.0000990	77	18.4 - 188	2	20
Benzo(b)fluoranthene	0.0601	mg/L	1	0.0800	<0.0000684	75	10 - 193	1	20
Benzo(k)fluoranthene	0.0621	mg/L	1	0.0800	<0.0000830	78	27.8 - 196	2	20
Benzo(a)pyrene	0.0678	mg/L	1	0.0800	<0.0000549	85	12.4 - 205	2	20
Indeno(1,2,3-cd)pyrene	0.0726	mg/L	1	0.0800	<0.0000869	91	10 - 198	3	20
Dibenzo(a,h)anthracene	0.0721	mg/L	1	0.0800	<0.0000605	90	10 - 172	4	20
Benzo(g,h,i)perylene	0.0718	mg/L	1	0.0800	<0.0000681	90	10 - 186	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
Nitrobenzene-d5	0.0574	0.0589	mg/L	1	0.0800	72	74	10 - 165
2-Fluorobiphenyl	0.0530	0.0524	mg/L	1	0.0800	66	66	10 - 157
Terphenyl-d14	0.0684	0.0707	mg/L	1	0.0800	86	88	10 - 220

### Laboratory Control Spike (LCS-1)

QC Batch: 52849  
 Prep Batch: 45290

Date Analyzed: 2008-09-29  
 QC Preparation: 2008-09-26

Analyzed By: DS  
 Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene	0.0566	mg/L	1	0.0800	<0.0000730	71	10 - 141
2-Methylnaphthalene	0.0587	mg/L	1	0.0800	<0.0000509	73	50 - 150
1-Methylnaphthalene	0.0582	mg/L	1	0.0800	<0.0000748	73	50 - 150
Acenaphthylene	0.0703	mg/L	1	0.0800	<0.0000767	88	10 - 152
Acenaphthene	0.0666	mg/L	1	0.0800	<0.000142	83	10 - 151
Dibenzofuran	0.0663	mg/L	1	0.0800	<0.0000470	83	10 - 148
Fluorene	0.0775	mg/L	1	0.0800	<0.0000569	97	10 - 172
Anthracene	0.0692	mg/L	1	0.0800	<0.0000876	86	22.5 - 172
Phenanthrene	0.0691	mg/L	1	0.0800	<0.0000552	86	19.6 - 172
Fluoranthene	0.0748	mg/L	1	0.0800	<0.0000954	94	17.3 - 187
Pyrene	0.0715	mg/L	1	0.0800	<0.0000497	89	14.9 - 199
Benzo(a)anthracene	0.0690	mg/L	1	0.0800	<0.0000328	86	19.4 - 185
Chrysene	0.0733	mg/L	1	0.0800	<0.0000990	92	18.4 - 188
Benzo(b)fluoranthene	0.0719	mg/L	1	0.0800	<0.0000684	90	10 - 193
Benzo(k)fluoranthene	0.0748	mg/L	1	0.0800	<0.0000830	94	27.8 - 196
Benzo(a)pyrene	0.0812	mg/L	1	0.0800	<0.0000549	102	12.4 - 205
Indeno(1,2,3-cd)pyrene	0.0847	mg/L	1	0.0800	<0.0000869	106	10 - 198
Dibenzo(a,h)anthracene	0.0847	mg/L	1	0.0800	<0.0000605	106	10 - 172
Benzo(g,h,i)perylene	0.0839	mg/L	1	0.0800	<0.0000681	105	10 - 186

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
Naphthalene	0.0588	mg/L	1	0.0800	<0.0000730	74	10 - 141	4	20
2-Methylnaphthalene	0.0596	mg/L	1	0.0800	<0.0000509	74	50 - 150	2	20
1-Methylnaphthalene	0.0587	mg/L	1	0.0800	<0.0000748	73	50 - 150	1	20
Acenaphthylene	0.0740	mg/L	1	0.0800	<0.0000767	92	10 - 152	5	20
Acenaphthene	0.0699	mg/L	1	0.0800	<0.000142	87	10 - 151	5	20
Dibenzofuran	0.0698	mg/L	1	0.0800	<0.0000470	87	10 - 148	5	20
Fluorene	0.0800	mg/L	1	0.0800	<0.0000569	100	10 - 172	3	20
Anthracene	0.0713	mg/L	1	0.0800	<0.0000876	89	22.5 - 172	3	20
Phenanthrene	0.0712	mg/L	1	0.0800	<0.0000552	89	19.6 - 172	3	20
Fluoranthene	0.0781	mg/L	1	0.0800	<0.0000954	98	17.3 - 187	4	20

*continued . . .*

*control spikes continued . . .*

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	RPD Limit	RPD Limit	
Pyrene	0.0758	mg/L	1	0.0800	<0.0000497	95	14.9 - 199	6	20
Benzo(a)anthracene	0.0726	mg/L	1	0.0800	<0.0000328	91	19.4 - 185	5	20
Chrysene	0.0765	mg/L	1	0.0800	<0.0000990	96	18.4 - 188	4	20
Benzo(b)fluoranthene	0.0755	mg/L	1	0.0800	<0.0000684	94	10 - 193	5	20
Benzo(k)fluoranthene	0.0776	mg/L	1	0.0800	<0.0000830	97	27.8 - 196	4	20
Benzo(a)pyrene	0.0850	mg/L	1	0.0800	<0.0000549	106	12.4 - 205	5	20
Indeno(1,2,3-cd)pyrene	0.0895	mg/L	1	0.0800	<0.0000869	112	10 - 198	6	20
Dibenzo(a,h)anthracene	0.0888	mg/L	1	0.0800	<0.0000605	111	10 - 172	5	20
Benzo(g,h,i)perylene	0.0879	mg/L	1	0.0800	<0.0000681	110	10 - 186	5	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Nitrobenzene-d5	0.0675	0.0696	mg/L	1	0.0800	84	87	10 - 165
2-Fluorobiphenyl	0.0618	0.0674	mg/L	1	0.0800	77	84	10 - 157
Terphenyl-d14	0.0754	0.0797	mg/L	1	0.0800	94	100	10 - 220

Matrix Spike (MS-1) Spiked Sample: 174071

QC Batch: 52654	Date Analyzed: 2008-09-23	Analyzed By: DC
Prep Batch: 45121	QC Preparation: 2008-09-23	Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit
Benzene	3.30	mg/L	10	1.00	2.815	48	10 - 160.8
Toluene	0.900	mg/L	10	1.00	<0.00700	90	10 - 160.7
Ethylbenzene	0.946	mg/L	10	1.00	0.0575	89	10 - 158.3
Xylene	2.79	mg/L	10	3.00	0.089	90	10 - 158

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.	RPD Limit
Benzene	3.57	mg/L	10	1.00	2.815	76	10 - 160.8
Toluene	1.00	mg/L	10	1.00	<0.00700	100	10 - 160.7
Ethylbenzene	1.06	mg/L	10	1.00	0.0575	100	10 - 158.3
Xylene	3.13	mg/L	10	3.00	0.089	101	10 - 158

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)	0.872	0.922	mg/L	10	1	87	92	33.1 - 132.5
4-Bromofluorobenzene (4-BFB)	0.904	0.958	mg/L	10	1	90	96	37.5 - 136

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**Matrix Spike (MS-1) Spiked Sample: 174136**

QC Batch: 52712 Date Analyzed: 2008-09-24 Analyzed By: DC  
Prep Batch: 45164 QC Preparation: 2008-09-23 Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	20.8	mg/L	50	5.00	15.4129	108	10 - 160.8
Toluene	12.5	mg/L	50	5.00	7.2486	105	10 - 160.7
Ethylbenzene	5.88	mg/L	50	5.00	0.9752	98	10 - 158.3
Xylene	17.2	mg/L	50	15.0	2.5159	98	10 - 158

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	20.2	mg/L	50	5.00	15.4129	96	10 - 160.8	3	20
Toluene	12.2	mg/L	50	5.00	7.2486	99	10 - 160.7	2	20
Ethylbenzene	5.84	mg/L	50	5.00	0.9752	97	10 - 158.3	1	20
Xylene	17.0	mg/L	50	15.0	2.5159	96	10 - 158	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)	4.59	4.44	mg/L	50	5	92	89	33.1 - 132.5
4-Bromofluorobenzene (4-BFB)	4.90	4.68	mg/L	50	5	98	94	37.5 - 136

**Matrix Spike (MS-1) Spiked Sample: 174151**

QC Batch: 52720 Date Analyzed: 2008-09-24 Analyzed By: DC  
Prep Batch: 45164 QC Preparation: 2008-09-23 Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	119	mg/L	50	50.0	73.8192	90	70 - 130

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	114	mg/L	50	50.0	73.8192	80	70 - 130	4	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	4.82	4.63	mg/L	50	5	96	93	70 - 130
4-Bromofluorobenzene (4-BFB)	4.97	4.78	mg/L	50	5	99	96	70 - 130

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**Matrix Spike (MS-1) Spiked Sample: 173739**

QC Batch: 52748  
Prep Batch: 45205

Date Analyzed: 2008-09-26  
QC Preparation: 2008-09-26

Analyzed By: LD  
Prepared By: LD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	31.4	mg/L	1	25.0	3.74	111	70 - 130

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	RPD Limit	
DRO	29.3	mg/L	1	25.0	3.74	102	70 - 130	7	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	<sup>6</sup> 14.2	13.6	mg/L	1	10	142	136	70 - 130

**Matrix Spike (MS-1) Spiked Sample: 174147**

QC Batch: 52764  
Prep Batch: 45205

Date Analyzed: 2008-09-27  
QC Preparation: 2008-09-26

Analyzed By: LD  
Prepared By: LD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	70.3	mg/L	1	25.0	49.43	83	70 - 130

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	RPD Limit	
DRO	81.1	mg/L	1	25.0	49.43	127	70 - 130	14	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	10.0	10.3	mg/L	1	10	100	103	70 - 130

**Standard (ICV-1)**

QC Batch: 52654

Date Analyzed: 2008-09-23

Analyzed By: DC

<sup>6</sup>High surrogate recovery due to peak interference.

<sup>7</sup>High surrogate recovery due to peak interference.

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Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.110	110	85 - 115	2008-09-23
Toluene		mg/L	0.100	0.110	110	85 - 115	2008-09-23
Ethylbenzene		mg/L	0.100	0.108	108	85 - 115	2008-09-23
Xylene		mg/L	0.300	0.328	109	85 - 115	2008-09-23

### Standard (CCV-1)

QC Batch: 52654    Date Analyzed: 2008-09-23    Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0919	92	85 - 115	2008-09-23
Toluene		mg/L	0.100	0.0919	92	85 - 115	2008-09-23
Ethylbenzene		mg/L	0.100	0.0913	91	85 - 115	2008-09-23
Xylene		mg/L	0.300	0.274	92	85 - 115	2008-09-23

### Standard (ICV-1)

QC Batch: 52712    Date Analyzed: 2008-09-24    Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.104	104	85 - 115	2008-09-24
Toluene		mg/L	0.100	0.106	106	85 - 115	2008-09-24
Ethylbenzene		mg/L	0.100	0.0998	100	85 - 115	2008-09-24
Xylene		mg/L	0.300	0.306	102	85 - 115	2008-09-24

### Standard (CCV-1)

QC Batch: 52712    Date Analyzed: 2008-09-24    Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.107	107	85 - 115	2008-09-24
Toluene		mg/L	0.100	0.0900	90	85 - 115	2008-09-24
Ethylbenzene		mg/L	0.100	0.0889	89	85 - 115	2008-09-24
Xylene		mg/L	0.300	0.271	90	85 - 115	2008-09-24

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### Standard (ICV-1)

QC Batch: 52720                          Date Analyzed: 2008-09-24                          Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.14	114	85 - 115	2008-09-24

### Standard (CCV-1)

QC Batch: 52720                          Date Analyzed: 2008-09-24                          Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.07	107	85 - 115	2008-09-24

### Standard (CCV-2)

QC Batch: 52748                          Date Analyzed: 2008-09-26                          Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	225	90	85 - 115	2008-09-26

### Standard (CCV-3)

QC Batch: 52748                          Date Analyzed: 2008-09-26                          Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	224	90	85 - 115	2008-09-26

### Standard (ICV-1)

QC Batch: 52764                          Date Analyzed: 2008-09-27                          Analyzed By: LD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	238	95	85 - 115	2008-09-27

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### Standard (CCV-1)

QC Batch: 52764

Date Analyzed: 2008-09-27

Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	222	89	85 - 115	2008-09-27

### Standard (CCV-2)

QC Batch: 52820

Date Analyzed: 2008-09-26

Analyzed By: DS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60.0	57.2	95	80 - 120	2008-09-26
2-Methylnaphthalene		mg/L	60.0	53.5	89	80 - 120	2008-09-26
1-Methylnaphthalene		mg/L	60.0	54.3	90	80 - 120	2008-09-26
Acenaphthylene		mg/L	60.0	58.8	98	80 - 120	2008-09-26
Acenaphthene		mg/L	60.0	57.7	96	80 - 120	2008-09-26
Dibenzofuran		mg/L	60.0	62.2	104	80 - 120	2008-09-26
Fluorene		mg/L	60.0	69.0	115	80 - 120	2008-09-26
Anthracene		mg/L	60.0	59.2	99	80 - 120	2008-09-26
Phenanthrene		mg/L	60.0	56.5	94	80 - 120	2008-09-26
Fluoranthene		mg/L	60.0	57.4	96	80 - 120	2008-09-26
Pyrene		mg/L	60.0	58.0	97	80 - 120	2008-09-26
Benzo(a)anthracene		mg/L	60.0	56.0	93	80 - 120	2008-09-26
Chrysene		mg/L	60.0	57.8	96	80 - 120	2008-09-26
Benzo(b)fluoranthene		mg/L	60.0	60.8	101	80 - 120	2008-09-26
Benzo(k)fluoranthene		mg/L	60.0	59.4	99	80 - 120	2008-09-26
Benzo(a)pyrene		mg/L	60.0	63.8	106	80 - 120	2008-09-26
Indeno(1,2,3-cd)pyrene		mg/L	60.0	69.4	116	80 - 120	2008-09-26
Dibenzo(a,h)anthracene		mg/L	60.0	70.0	117	80 - 120	2008-09-26
Benzo(g,h,i)perylene		mg/L	60.0	67.7	113	80 - 120	2008-09-26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5		59.3	mg/L	1	60.0	99	80 - 120
2-Fluorobiphenyl		53.6	mg/L	1	60.0	89	80 - 120
Terphenyl-d14		58.0	mg/L	1	60.0	97	80 - 120

### Standard (CCV-1)

QC Batch: 52849

Date Analyzed: 2008-09-29

Analyzed By: DS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60.0	56.4	94	80 - 120	2008-09-29
2-Methylnaphthalene		mg/L	60.0	52.3	87	80 - 120	2008-09-29
1-Methylnaphthalene		mg/L	60.0	53.4	89	80 - 120	2008-09-29
Acenaphthylene		mg/L	60.0	59.4	99	80 - 120	2008-09-29
Acenaphthene		mg/L	60.0	58.5	98	80 - 120	2008-09-29
Dibenzofuran		mg/L	60.0	61.9	103	80 - 120	2008-09-29
Fluorene		mg/L	60.0	68.5	114	80 - 120	2008-09-29
Anthracene		mg/L	60.0	58.8	98	80 - 120	2008-09-29
Phenanthrene		mg/L	60.0	56.6	94	80 - 120	2008-09-29
Fluoranthene		mg/L	60.0	57.8	96	80 - 120	2008-09-29
Pyrene		mg/L	60.0	59.2	99	80 - 120	2008-09-29
Benzo(a)anthracene		mg/L	60.0	56.3	94	80 - 120	2008-09-29
Chrysene		mg/L	60.0	58.3	97	80 - 120	2008-09-29
Benzo(b)fluoranthene		mg/L	60.0	60.8	101	80 - 120	2008-09-29
Benzo(k)fluoranthene		mg/L	60.0	60.5	101	80 - 120	2008-09-29
Benzo(a)pyrene		mg/L	60.0	64.4	107	80 - 120	2008-09-29
Indeno(1,2,3-cd)pyrene		mg/L	60.0	69.2	115	80 - 120	2008-09-29
Dibenzo(a,h)anthracene		mg/L	60.0	68.9	115	80 - 120	2008-09-29
Benzo(g,h,i)perylene		mg/L	60.0	67.1	112	80 - 120	2008-09-29

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5		61.2	mg/L	1	60.0	102	80 - 120
2-Fluorobiphenyl		56.0	mg/L	1	60.0	93	80 - 120
Terphenyl-d14		59.0	mg/L	1	60.0	98	80 - 120

### Standard (CCV-2)

QC Batch: 52849

Date Analyzed: 2008-09-29

Analyzed By: DS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60.0	56.8	95	80 - 120	2008-09-29
2-Methylnaphthalene		mg/L	60.0	52.9	88	80 - 120	2008-09-29
1-Methylnaphthalene		mg/L	60.0	54.2	90	80 - 120	2008-09-29
Acenaphthylene		mg/L	60.0	59.2	99	80 - 120	2008-09-29
Acenaphthene		mg/L	60.0	58.6	98	80 - 120	2008-09-29
Dibenzofuran		mg/L	60.0	62.5	104	80 - 120	2008-09-29
Fluorene		mg/L	60.0	69.8	116	80 - 120	2008-09-29
Anthracene		mg/L	60.0	59.0	98	80 - 120	2008-09-29
Phenanthrene		mg/L	60.0	57.2	95	80 - 120	2008-09-29
Fluoranthene		mg/L	60.0	56.6	94	80 - 120	2008-09-29
Pyrene		mg/L	60.0	59.7	100	80 - 120	2008-09-29

*continued ...*

*standard continued ...*

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(a)anthracene		mg/L	60.0	55.4	92	80 - 120	2008-09-29
Chrysene		mg/L	60.0	58.0	97	80 - 120	2008-09-29
Benzo(b)fluoranthene		mg/L	60.0	60.3	100	80 - 120	2008-09-29
Benzo(k)fluoranthene		mg/L	60.0	60.4	101	80 - 120	2008-09-29
Benzo(a)pyrene		mg/L	60.0	63.9	106	80 - 120	2008-09-29
Indeno(1,2,3-cd)pyrene		mg/L	60.0	69.6	116	80 - 120	2008-09-29
Dibenzo(a,h)anthracene		mg/L	60.0	69.2	115	80 - 120	2008-09-29
Benzo(g,h,i)perylene		mg/L	60.0	68.5	114	80 - 120	2008-09-29

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5		61.8	mg/L	1	60.0	103	80 - 120
2-Fluorobiphenyl		54.3	mg/L	1	60.0	90	80 - 120
Terphenyl-d14		59.1	mg/L	1	60.0	98	80 - 120

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Project #: *PLAINS*

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*2901 Rankin Hwy*

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Address:

*2901 Rankin Hwy*

# TraceAnalysis, Inc.

Address: 2901 Rankin Hwy  
email: lab@traceanalysis.com

Company Name:

Talen Inc  
(Street, City, Zip)

Contact Person:  
Shanna Smith

Invoice to:

(If different from above) Camille Bryant  
Project #: PLAINS 885# 2002-10312

Project #: PLAINS 8846SPL

Project Location (including state):  
Lubbock, N.M.

Phone #: (432) 522-2133  
Fax #:

LAB ID # 8092210

6701 Aberdeen Avenue, Suite 9	5002 Basin Street, Suite A1	200 East Sunset Rd, Suite E	8808 Camp Bowie Blvd, West, Suite 180
Lubbock, Texas 79424	Midland, Texas 79703	El Paso, Texas 79922	Ft. Worth, Texas 76116
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1 (800) 378-1296	Fax (432) 689-6313	Fax (915) 585-3444	Fax (817) 580-4333

## ANALYSIS REQUEST (Circle or Specify Method No.)

RCI	TCLP Pesticides	TCLP Semi Volatiles	TCLP Volatiles	Total Metals Ag As Ba Cd Cr Pb Se Hg	PAH 8270C / 625
PCBs 8082 / 608	PCMs Seml. Vol. 8260B / 624	GC/MS Vol. 8260B / 624	GC/MS Seml. Vol. 8270C / 625	Pesticides 8081A / 608	BOD, TSS, PH
PCBs 8082 / 608	PCMs Seml. Vol. 8260B / 624	GC/MS Vol. 8260B / 624	GC/MS Seml. Vol. 8270C / 625	Pesticides 8081A / 608	Moisture Content
RCI	TCLP Pesticides	TCLP Semi Volatiles	TCLP Volatiles	Total Metals Ag As Ba Cd Cr Pb Se Hg	PAH 8270C / 625
TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8013GRO / DRO / TVHC	BTEX 8021B / 602 / 8260B / 624	MTEB 8021B / 602 / 8260B / 624	Total Metals Ag As Ba Cd Cr Pb Se Hg	PAH 8270C / 625

FIELD CODE	# CONTAINERS	Volume / Amount	WATER	SOIL	AIR	SLUDGE	MATRIX	PRESERVATIVE METHOD	SAMPLING	DATE	TIME	PROJECT	REMARKS:		
													1	2	3
MW-12	4	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	9/20/08	12:30	X	X	X	X
MW-13	4	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	9/20/08	1:52:55	X	X	X	X
MW-14	4	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	9/20/08	1:54:55	X	X	X	X
MW-15	4	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	9/20/08	1:28:4	X	X	X	X
MW-16	4	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	9/20/08	1:25:3	X	X	X	X
MW-17	4	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	1/2 gal	9/20/08	1:31:0	X	X	X	X

Relinquished by: *[Signature]* Company: Date: Time: Received by: Company: Date: Time: Temp°C: LAB USE ONLY  
Relinquished by: *[Signature]* Company: Date: Time: Received by: Company: Date: Time: Temp°C: LAB USE ONLY  
Relinquished by: *[Signature]* Company: Date: Time: Received by: Company: Date: Time: Temp°C: LAB USE ONLY

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

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

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Carrier # *Cherry Inn / Yone d'tar*

# TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 806•378•1296 806•794•1296 FAX 806•794•1298  
200 East Sunset Road, Suite E El Paso, Texas 79922 888•598•3443 915•585•3443 FAX 915•595•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

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

Report Date: December 31, 2008

Work Order: 8122403



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

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
183537	MW-6	water	2008-12-23	13:11	2008-12-24
183538	MW-1	water	2008-12-23	13:22	2008-12-24
183539	MW-7	water	2008-12-23	13:16	2008-12-24
183540	MW-8	water	2008-12-23	13:13	2008-12-24
183541	MW-5	water	2008-12-23	13:24	2008-12-24
183542	MW-9	water	2008-12-23	13:30	2008-12-24
183543	MW-12	water	2008-12-23	13:37	2008-12-24
183544	MW-10	water	2008-12-23	13:39	2008-12-24
183545	MW-11	water	2008-12-23	13:34	2008-12-24

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
183546	MW-4	water	2008-12-23	13:28	2008-12-24
183547	MW-3	water	2008-12-23	13:19	2008-12-24

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 12 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

#### Standard Flags

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

## Case Narrative

Samples for project Lovington Deep 6 inch were received by TraceAnalysis, Inc. on 2008-12-24 and assigned to work order 8122403. Samples for work order 8122403 were received intact without headspace and at a temperature of 3.5 deg. C.

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

Test	Method
BTEX	S 8021B

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 8122403 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: December 31, 2008  
Plains046SPL

Work Order: 8122403  
Lovington Deep 6 inch

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Lovington, NM

## Analytical Report

Sample: 183537 - MW-6

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 55589  
Prep Batch: 47506

Analytical Method: S 8021B  
Date Analyzed: 2008-12-29  
Sample Preparation: 2008-12-29

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)		0.101	mg/L	1	0.100	101	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.106	mg/L	1	0.100	106	52 - 124.1

Sample: 183538 - MW-1

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 55589  
Prep Batch: 47506

Analytical Method: S 8021B  
Date Analyzed: 2008-12-29  
Sample Preparation: 2008-12-29

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.00140	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	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.105	mg/L	1	0.100	105	52 - 124.1

Sample: 183539 - MW-7

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 55589  
Prep Batch: 47506

Analytical Method: S 8021B  
Date Analyzed: 2008-12-29  
Sample Preparation: 2008-12-29

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

Report Date: December 31, 2008  
Plains046SPL

Work Order: 8122403  
Lovington Deep 6 inch

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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	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.106	mg/L	1	0.100	106	52 - 124.1

**Sample: 183540 - MW-8**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 55589  
Prep Batch: 47506

Analytical Method: S 8021B  
Date Analyzed: 2008-12-29  
Sample Preparation: 2008-12-29

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)		0.103	mg/L	1	0.100	103	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.108	mg/L	1	0.100	108	52 - 124.1

**Sample: 183541 - MW-5**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 55589  
Prep Batch: 47506

Analytical Method: S 8021B  
Date Analyzed: 2008-12-29  
Sample Preparation: 2008-12-29

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.00360	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		0.0117	mg/L	1	0.00100

Report Date: December 31, 2008  
Plains046SPL

Work Order: 8122403  
Lovington Deep 6 inch

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.104	mg/L	1	0.100	104	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.110	mg/L	1	0.100	110	52 - 124.1

**Sample: 183542 - MW-9**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 55589  
Prep Batch: 47506

Analytical Method: S 8021B  
Date Analyzed: 2008-12-29  
Sample Preparation: 2008-12-29

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)		0.101	mg/L	1	0.100	101	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.107	mg/L	1	0.100	107	52 - 124.1

**Sample: 183543 - MW-12**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 55638  
Prep Batch: 47550

Analytical Method: S 8021B  
Date Analyzed: 2008-12-30  
Sample Preparation: 2008-12-30

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.840	mg/L	10	0.00100
Toluene		<0.0100	mg/L	10	0.00100
Ethylbenzene		0.0372	mg/L	10	0.00100
Xylene		0.0452	mg/L	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.988	mg/L	10	1.00	99	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.966	mg/L	10	1.00	97	52 - 124.1

Report Date: December 31, 2008  
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**Sample: 183544 - MW-10**

Laboratory: Midland	Analytical Method: S 8021B	Prep Method: S 5030B
Analysis: BTEX	Date Analyzed: 2008-12-30	Analyzed By: ME
QC Batch: 55638	Sample Preparation: 2008-12-30	Prepared By: ME
Prep Batch: 47550		

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<b>10.2</b>	mg/L	50	0.00100
Toluene		<0.0500	mg/L	50	0.00100
Ethylbenzene		<b>0.0955</b>	mg/L	50	0.00100
Xylene		<b>0.0973</b>	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.93	mg/L	50	5.00	99	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		4.83	mg/L	50	5.00	97	52 - 124.1

**Sample: 183545 - MW-11**

Laboratory: Midland	Analytical Method: S 8021B	Prep Method: S 5030B
Analysis: BTEX	Date Analyzed: 2008-12-29	Analyzed By: ME
QC Batch: 55589	Sample Preparation: 2008-12-29	Prepared By: ME
Prep Batch: 47506		

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<b>0.106</b>	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<b>0.00210</b>	mg/L	1	0.00100
Xylene		<b>0.00160</b>	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.105	mg/L	1	0.100	105	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.110	mg/L	1	0.100	110	52 - 124.1

**Sample: 183546 - MW-4**

Laboratory: Midland	Analytical Method: S 8021B	Prep Method: S 5030B
Analysis: BTEX	Date Analyzed: 2008-12-29	Analyzed By: ME
QC Batch: 55589	Sample Preparation: 2008-12-29	Prepared By: ME
Prep Batch: 47506		

Report Date: December 31, 2008  
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Lovington Deep 6 inch

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Parameter	Flag	Result	Units	Dilution	RL
Benzene		<b>0.00610</b>	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)		0.0997	mg/L	1	0.100	100	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.105	mg/L	1	0.100	105	52 - 124.1

**Sample: 183547 - MW-3**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 55638  
Prep Batch: 47550

Analytical Method: S 8021B  
Date Analyzed: 2008-12-30  
Sample Preparation: 2008-12-30

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<b>7.97</b>	mg/L	50	0.00100
Toluene		<b>0.437</b>	mg/L	50	0.00100
Ethylbenzene		<b>0.412</b>	mg/L	50	0.00100
Xylene		<b>0.294</b>	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.94	mg/L	50	5.00	99	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		4.80	mg/L	50	5.00	96	52 - 124.1

**Method Blank (1) QC Batch: 55589**

QC Batch: 55589  
Prep Batch: 47506

Date Analyzed: 2008-12-29  
QC Preparation: 2008-12-29

Analyzed By: ME  
Prepared By: AG

Parameter	Flag	Result	MDL	Units	RL
Benzene		<0.000800		mg/L	0.001
Toluene		<0.000800		mg/L	0.001
Ethylbenzene		<0.000500		mg/L	0.001
Xylene		<0.000900		mg/L	0.001

Report Date: December 31, 2008  
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Lovington Deep 6 inch

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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	44.6 - 137.4
4-Bromofluorobenzene (4-BFB)		0.106	mg/L	1	0.100	106	37.1 - 130.9

Method Blank (1) QC Batch: 55638

QC Batch: 55638 Date Analyzed: 2008-12-30 Analyzed By: ME  
Prep Batch: 47550 QC Preparation: 2008-12-30 Prepared By: ME

Parameter	Flag	MDL	Result	Units	RL
Benzene		<0.000800		mg/L	0.001
Toluene		<0.000800		mg/L	0.001
Ethylbenzene		<0.000500		mg/L	0.001
Xylene		<0.000900		mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0934	mg/L	1	0.100	93	44.6 - 137.4
4-Bromofluorobenzene (4-BFB)		0.0945	mg/L	1	0.100	94	37.1 - 130.9

#### Laboratory Control Spike (LCS-1)

QC Batch: 55589 Date Analyzed: 2008-12-29 Analyzed By: ME  
Prep Batch: 47506 QC Preparation: 2008-12-29 Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.109	mg/L	1	0.100	<0.000800	109	71.7 - 120.5
Toluene	0.106	mg/L	1	0.100	<0.000800	106	75.4 - 118.8
Ethylbenzene	0.105	mg/L	1	0.100	<0.000500	105	73.5 - 118
Xylene	0.315	mg/L	1	0.300	<0.000900	105	72.9 - 118.2

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.100	mg/L	1	0.100	<0.000800	100	71.7 - 120.5	9	20
Toluene	0.0980	mg/L	1	0.100	<0.000800	98	75.4 - 118.8	8	20
Ethylbenzene	0.0995	mg/L	1	0.100	<0.000500	100	73.5 - 118	5	20
Xylene	0.300	mg/L	1	0.300	<0.000900	100	72.9 - 118.2	5	20

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

Report Date: December 31, 2008  
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Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.109	0.101	mg/L	1	0.100	109	101	38.2 - 131.6
4-Bromofluorobenzene (4-BFB)	0.115	0.107	mg/L	1	0.100	115	107	43.9 - 132.4

## Laboratory Control Spike (LCS-1)

QC Batch: 55638  
Prep Batch: 47550

Date Analyzed: 2008-12-30  
QC Preparation: 2008-12-30

Analyzed By: ME  
Prepared By: ME

Param	LCS	Units	Dil.	Spike	Matrix	Rec.	Rec. Limit
	Result			Amount	Result		
Benzene	0.0886	mg/L	1	0.100	<0.000800	89	71.7 - 120.5
Toluene	0.0867	mg/L	1	0.100	<0.000800	87	75.4 - 118.8
Ethylbenzene	0.0840	mg/L	1	0.100	<0.000500	84	73.5 - 118
Xylene	0.252	mg/L	1	0.300	<0.000900	84	72.9 - 118.2

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD RPD	RPD Limit
Benzene	0.0914	mg/L	1	0.100	<0.000800	91	71.7 - 120.5	3	20
Toluene	0.0893	mg/L	1	0.100	<0.000800	89	75.4 - 118.8	3	20
Ethylbenzene	0.0889	mg/L	1	0.100	<0.000500	89	73.5 - 118	6	20
Xylene	0.268	mg/L	1	0.300	<0.000900	89	72.9 - 118.2	6	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)	0.0941	0.0984	mg/L	1	0.100	94	98	38.2 - 131.6
4-Bromofluorobenzene (4-BFB)	0.0957	0.0987	mg/L	1	0.100	96	99	43.9 - 132.4

**Matrix Spike (MS-1)** Spiked Sample: 183657

QC Batch: 55589  
Prep Batch: 47506

Date Analyzed: 2008-12-29  
QC Preparation: 2008-12-29

Analyzed By: ME  
Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.109	mg/L	1	0.100	0.0046	104	10 - 160.8
Toluene	0.102	mg/L	1	0.100	<0.000800	102	10 - 160.7
Ethylbenzene	0.101	mg/L	1	0.100	<0.000500	101	10 - 158.3
Xylene	0.304	mg/L	1	0.300	<0.000900	101	10 - 158

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

Report Date: December 31, 2008  
Plains046SPL

Work Order: 8122403  
Lovington Deep 6 inch

Page Number: 11 of 12  
Lovington, NM

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	RPD	RPD Limit	
Benzene	0.108	mg/L	1	0.100	0.0046	103	10 - 160.8	1	20
Toluene	0.101	mg/L	1	0.100	<0.000800	101	10 - 160.7	1	20
Ethylbenzene	0.0995	mg/L	1	0.100	<0.000500	100	10 - 158.3	2	20
Xylene	0.301	mg/L	1	0.300	<0.000900	100	10 - 158	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)	0.0998	0.0996	mg/L	1	0.1	100	100	33.1 - 132.5
4-Bromofluorobenzene (4-BFB)	0.107	0.106	mg/L	1	0.1	107	106	37.5 - 136

#### Matrix Spike (MS-1) Spiked Sample: 183547

QC Batch: 55638 Date Analyzed: 2008-12-30 Analyzed By: ME  
Prep Batch: 47550 QC Preparation: 2008-12-30 Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	14.2	mg/L	50	5.00	7.9675	125	10 - 160.8
Toluene	5.02	mg/L	50	5.00	0.4368	92	10 - 160.7
Ethylbenzene	4.87	mg/L	50	5.00	0.412	89	10 - 158.3
Xylene	13.5	mg/L	50	15.0	0.2936	88	10 - 158

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	13.8	mg/L	50	5.00	7.9675	117	10 - 160.8	3	20
Toluene	5.07	mg/L	50	5.00	0.4368	93	10 - 160.7	1	20
Ethylbenzene	4.95	mg/L	50	5.00	0.412	91	10 - 158.3	2	20
Xylene	13.8	mg/L	50	15.0	0.2936	90	10 - 158	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	4.91	4.92	mg/L	50	5	98	98	33.1 - 132.5
4-Bromofluorobenzene (4-BFB)	4.95	4.91	mg/L	50	5	99	98	37.5 - 136

#### Standard (ICV-1)

QC Batch: 55589 Date Analyzed: 2008-12-29 Analyzed By: ME

Report Date: December 31, 2008  
Plains046SPL

Work Order: 8122403  
Lovington Deep 6 inch

Page Number: 12 of 12  
Lovington, NM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.113	113	85 - 115	2008-12-29
Toluene		mg/L	0.100	0.111	111	85 - 115	2008-12-29
Ethylbenzene		mg/L	0.100	0.108	108	85 - 115	2008-12-29
Xylene		mg/L	0.300	0.325	108	85 - 115	2008-12-29

### Standard (CCV-1)

QC Batch: 55589                          Date Analyzed: 2008-12-29                          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	0.0992	99	85 - 115	2008-12-29
Toluene		mg/L	0.100	0.0977	98	85 - 115	2008-12-29
Ethylbenzene		mg/L	0.100	0.0984	98	85 - 115	2008-12-29
Xylene		mg/L	0.300	0.295	98	85 - 115	2008-12-29

### Standard (ICV-1)

QC Batch: 55638                          Date Analyzed: 2008-12-30                          Analyzed By: ME

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0964	96	85 - 115	2008-12-30
Toluene		mg/L	0.100	0.0946	95	85 - 115	2008-12-30
Ethylbenzene		mg/L	0.100	0.0915	92	85 - 115	2008-12-30
Xylene		mg/L	0.300	0.275	92	85 - 115	2008-12-30

### Standard (CCV-1)

QC Batch: 55638                          Date Analyzed: 2008-12-30                          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	0.0947	95	85 - 115	2008-12-30
Toluene		mg/L	0.100	0.0922	92	85 - 115	2008-12-30
Ethylbenzene		mg/L	0.100	0.0903	90	85 - 115	2008-12-30
Xylene		mg/L	0.300	0.275	92	85 - 115	2008-12-30



**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  
**RP-1274**

Name of Company: Plains All American Pipeline, L.P. (formerly Link Energy and EOTT)	Contact: Camille Reynolds
Address: 3112 W. US Hwy 82, Lovington, NM 88260	Telephone No.: 505.441.0965
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.* The crude oil release was excavated: impacted soil was placed adjacent to the excavation, confirmation soil samples were collected from the floor & walls of the excavation. Once confirmation samples were below NMOCD regulatory standards, a 20 mil synthetic liner was installed on the floor of the excavation area, 10,500 cubic yards of stockpiled soil previously processed through a shredder was placed in the excavation area once the impacted soil was deemed acceptable under the NMMOCD-approved VOC readings of <100.0 ppm, the site was restored to natural grade.		

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: Camille Reynolds

Approved by District Supervisor:

Title: Remediation Coordinator

Approval Date:

Expiration Date:

Date: July 30, 2007 Phone: 505.441.0965

Conditions of Approval:

Attached

\* Attach Additional Sheets If Necessary

**EOTT Energy Pipeline  
Site Information and Metrics**
**Incident Date and NMOCD Notified?:  
Discovered 12-12-02      NMOCD verbally notified on 12-12-02**

<b>SITE:</b> Lovington Deep 6"	<b>Assigned Site Reference #:</b> 2002-10312																	
<b>Company:</b> EOTT Energy Pipeline																		
<b>Street Address:</b> 5805 East Highway 80																		
<b>Mailing Address:</b> P.O. Box 1660																		
<b>City, State, Zip:</b> Midland, Texas 79703																		
<b>Representative:</b> Frank Hernandez, District Environmental Supervisor																		
<b>Representative Telephone:</b> 915.638.3799																		
<b>Telephone:</b>																		
<b>Fluid volume released (bbls):</b> 25 bbls	<b>Recovered (bbls):</b> 10	Hand-drawn diagram showing a rectangular spill area with dimensions 140' X 75'. A circle indicates the recovered portion of the spill.																
>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)																		
<b>Leak, Spill, or Pit (LSP) Name:</b> Lovington Deep 6"																		
<b>Source of contamination:</b> 6" Steel Crude Oil Pipeline																		
<b>Land Owner, i.e., BLM, ST, Fee, Other:</b> Darr Angell																		
<b>LSP Dimensions:</b> 140' X 75'																		
<b>LSP Area:</b> Spill Area ~6,000 ft <sup>2</sup>																		
<b>Location of Reference Point (RP):</b>																		
<b>Location distance and direction from RP:</b>																		
<b>Latitude:</b> 32° 52' 1.132"N																		
<b>Longitude:</b> 103° 23' 16.570"W																		
<b>Elevation above mean sea level:</b> ~3,918 'amsl																		
<b>Feet from South Section Line:</b>																		
<b>Feet from West Section Line:</b>																		
<b>Location- Unit or 1/4:4</b> : UL-H SE 1/4 of the NE 1/4																		
<b>Location- Section:</b> 6																		
<b>Location- Township:</b> 17S																		
<b>Location- Range:</b> 36E																		
<b>Surface water body within 1000' radius of site:</b> None																		
<b>Domestic water wells within 1000' radius of site:</b> None																		
<b>Agricultural water wells within 1000' radius of site:</b> None																		
<b>Public water supply wells within 1000' radius of site:</b> None																		
<b>Depth from land surface to ground water (DG):</b> ~50.0 feet																		
<b>Depth of contamination (DC):</b> ?																		
<b>Depth to ground water (DG - DC = DtGW):</b> <50 feet																		
<table border="1"> <thead> <tr> <th>1. Ground Water</th> <th>2. Wellhead Protection Area</th> <th>3. Distance to Surface Water Body</th> </tr> </thead> <tbody> <tr> <td>If Depth to GW &lt;50 feet: 20 points</td> <td>If &lt;1000' from water source, or; &lt;200' from private domestic water source: 20 points</td> <td>&lt;200 horizontal feet: 20 points</td> </tr> <tr> <td>If Depth to GW 50 to 99 feet: 10 points</td> <td></td> <td>200-100 horizontal feet: 10 points</td> </tr> <tr> <td>If Depth to GW &gt;100 feet: 0 points</td> <td>If &gt;1000' from water source, or; &gt;200' from private domestic water source: 0 points</td> <td>&gt;1000 horizontal feet: 0 points</td> </tr> <tr> <td><b>Ground water Score = 20</b></td> <td><b>Wellhead Protection Area Score= 0</b></td> <td><b>Surface Water Score= 0</b></td> </tr> </tbody> </table>				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	<b>Ground water Score = 20</b>	<b>Wellhead Protection Area Score= 0</b>	<b>Surface Water Score= 0</b>
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<b>Ground water Score = 20</b>	<b>Wellhead Protection Area Score= 0</b>	<b>Surface Water Score= 0</b>																
<b>Site Rank (1+2+3) = 20</b>																		
<b>Total Site Ranking Score and Acceptable Concentrations</b>																		
<b>Parameter</b>	<b>&gt;19 (Surface to 50.0'bgs)</b>	<b>10-19</b>	<b>0-9</b>															
Benzene <sup>1</sup>	<b>10 ppm</b>	10 ppm	10 ppm															
BTEX <sup>1</sup>	<b>50 ppm</b>	50 ppm	50 ppm															
TPH	<b>100 ppm</b>	1000 ppm	5000 ppm															

<sup>1</sup>100 ppm field VOC headspace measurement may be substituted for lab analysis