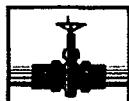


AP - 91

# **ANNUAL MONITORING REPORT**

**YEAR(S):  
2008**



**PLAINS  
ALL AMERICAN**

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2009 MAR 31 PM 1 46

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**  
**8" MOORE TO JAL #1**  
**SE ¼ OF THE NW ¼ OF SECTION 16, TOWNSHIP 17 SOUTH,**  
**RANGE 37 EAST**  
**LEA COUNTY, NEW MEXICO**  
**PLAINS SRS #2002-10270**  
**NMOCD REF. # AP-91**

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**COPY 6 - TALON/LPE**

**MARCH 27, 2009**

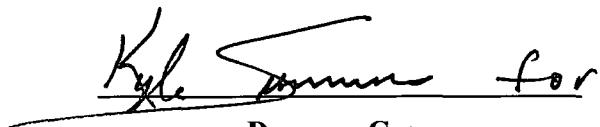
ENVIRONMENTAL CONSULTING  
ENGINEERING  
DRILLING  
CONSTRUCTION  
EMERGENCY RESPONSE

# **2008 ANNUAL GROUNDWATER MONITORING REPORT**

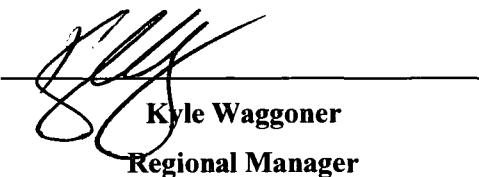
**8" MOORE TO JAL #1  
LEA, COUNTY, NEW MEXICO  
SRS #2002 - 10270  
NMOCD REF. # AP-91**

**TALON/LPE PROJECT NO. PLAINS007SPL**

**Prepared by:**

  
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Project Manager**

  
Kyle Waggoner  
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**March 2009**

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NMOCD - New Mexico Oil Conservation Division

NMSLO - New Mexico State Land Office

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## **1.0 INTRODUCTION AND OBJECTIVES**

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

The 8" Moore to Jal #1 release site (site) is located approximately 9.2 miles southeast of Lovington, in Lea County, New Mexico. The site is located within the West Lovington Oil Field on land owned by the State of New Mexico. No residences or surface water bodies are located within a 1,000-foot radius of the facility.

In October 2002, a release of approximately 200 barrels (bbls) occurred from a Plains Marketing, L.P. (Plains) pipeline at the site. Approximately 8,000 square feet of surface area were impacted by the release. Soil excavation and over-excavation activities were initiated in October 2002 and were documented in the "Soil Over-Excavation Report and Backfill Workplan", dated May 23, 2006.

Talon/LPE (Talon) has been retained by Plains to conduct quarterly groundwater monitoring activities, operation and maintenance of the site skimmer system, and the recovery of phase separated hydrocarbon (PSH).

### **1.2 Previous Environmental Investigations**

A total of twenty (20) monitor wells have been installed in the vicinity of the release (see Figure 1). The first monitor well (MW-1), installed July 2004, was completed with a screened interval below the potentiometric surface. The second monitor well (MW-1A) was installed in September 2004, and immediately exhibited PSH. Three (3) additional monitor wells (MW-2, MW-3, and MW-4) were installed in October of 2004, and also exhibited PSH.

In November 2007, sixteen (16) additional groundwater monitor wells were installed as proposed in the "Monitor Well Installation Workplan Moore to Jal #1", dated January 26, 2007. In addition to the sixteen (16) monitor wells, MW-4 was also replaced with a new groundwater monitor well, which is identified as MW-4A. Monitor wells MW-1 and MW-4 were plugged on March 14, 2007. Talon installed the additional groundwater monitor wells (MW-5 through MW-20) at the site to further evaluate both the PSH plume as and the dissolved phase plume. Of the sixteen new monitor wells installed, ten of the wells (MW-4A, MW-5 through MW-12, and MW-15) exhibited PSH.

During the fourth quarter of 2008, Talon installed a skimmer system at the site. A total of eleven (11) skimmer pumps were installed in monitor wells MW-2, MW-3, MW-5, MW-7 through MW-13, and MW-15. In addition to the installation of the skimmer pumps, a total of three (3) total fluid pumps were installed in monitor wells MW-1A, MW-4A, and MW-6 to further increase PSH recovery and inhibit migration of the PSH plume.

PSH recovery operations have been performed at the site since 2004. Approximately 5,242 gallons (125 bbls) of PSH have been recovered to date.

### **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 (4) 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 groundwater monitoring and PSH recovery 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. Six (6) monitor wells, MW-14 and MW-16 through MW-20, were purged and sampled. Fourteen (14) monitor wells, MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13 and MW-15, 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. Six (6) monitor wells, MW-14 and MW-16 through MW-20, were purged and sampled. Fourteen (14) monitor wells, MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13 and MW-15, 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. Twenty (20) monitor wells, MW-1A, MW-2, MW-3, MW-4A, and MW-5 through MW-20, were purged and sampled. Fourteen (14) monitor wells, MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13 and MW-15, exhibited PSH thicknesses ranging from 1.01' to 9.14'; however, groundwater samples were collected from these wells pursuant the NMOCD established protocol. 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. Six (6) monitor wells, MW-14 and MW-16 through MW-20, were purged and sampled. Fourteen (14) monitor wells, MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13 and MW-15, 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-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13 and MW-15) were purged utilizing a pump and vinyl tubing. Purge volumes for the monitor wells exhibiting PSH varied due to the maximum extent practical of purging 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 at each well. 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 seven hundred and thirty-nine (739) 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 Method SW-846 8270C.

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

PSH recovery methods have been conducted at the site since 2004 via hand bailing and the utilization of pumps (skimmer pumps and total fluid pumps). During October of 2008, Talon installed a pneumatic skimmer system at the site. A total of eleven (11) skimmer pumps were installed in monitor wells MW-2, MW-3, MW-5, MW-7 through MW-13, and MW-15. In addition to the installation of the skimmer pumps; a total of three (3) total fluid pumps were installed in monitor wells MW-1A, MW-4A, and MW-6 to further increase PSH recovery and inhibit migration of the PSH plume. Talon conducts weekly operation and maintenance to the skimmer system and total fluid pumps.

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 - 368 gallons (9 bbls)
- 2<sup>nd</sup> Quarter - 159 gallons (4 bbls)
- 3<sup>rd</sup> Quarter - 545 gallons (13 bbls)
- 4<sup>th</sup> Quarter - 4,914 gallons (117 bbls)

Approximately 10,045 gallons (239 bbls) of PSH have been recovered to date from the site.

## **3.0 GROUNDWATER MONITORING RESULTS**

---

The results of the laboratory analyses are summarized in Table 2 – Summary of Groundwater Analytical Data in Appendix B. Laboratory analytical data reports and chain of custody documentation are provided in Appendix C.

### **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 64 to 72 feet below ground surface (bgs) and the gradient direction is to the southeast.

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

Water level measurements were collected on March 26, 2008, June 24, 2008, September 16, 2008 and December 16, 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 26, 2008
- June 24, 2008
- September 16, 2008
- December 16, 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 southeast with an approximate gradient of 0.004 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 southeast with an approximate gradient of 0.004 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 southeast with an approximate gradient of 0.004 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 southeast with an approximate gradient of 0.004 feet/foot.

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

### 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-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, and MW-15. PSH thickness ranged from 1.49 feet to 9.18 feet.
- In June 2008, PSH was observed in monitor wells MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, and MW-15. PSH thickness ranged from 1.15 feet to 9.18 feet.
- In September 2008, PSH was observed in monitor wells MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, and MW-15. PSH thickness ranged from 1.01 feet to 9.14 feet.
- In December 2008, PSH was observed in monitor wells MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, and MW-15. PSH thickness ranged from 0.22 feet to 8.69 feet.

PSH plume maps are presented on Figure 3a through 3d. Based on these measurements, the PSH plume is not delineated by the current monitor well array to the general direction east of the site.

### 3.1.4 Groundwater Sampling Results

During the March 2008 sampling event, monitor wells MW-14 and MW-16 through MW-20 were sampled. Groundwater samples collected from these wells exhibited the following analytical results:

- Benzene concentrations ranged from 0.0431 mg/L to 26.8 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-14, and MW-16 through MW-20.
- Toluene concentrations ranged from <0.00500 mg/L to 11.1 mg/L. Toluene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater sample collected from monitor well MW-16.
- Ethylbenzene concentrations ranged from <0.00500 mg/L to 0.891 mg/L. Ethylbenzene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater sample collected from monitor well MW-16.
- Xylene concentrations ranged from 0.00590 mg/L to 2.18 mg/L. Xylene concentrations exceeded the NMWQCC groundwater standard of 0.620 mg/L in the groundwater sample collected from monitor well MW-16.
- Monitor wells MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, and MW-15 were not sampled due to the presence of PSH.

During the June 2008 sampling event, monitor wells MW-14 and MW-16 through MW-20 were sampled. Groundwater samples collected from these wells exhibited the following:

- Benzene concentrations ranged from <0.00100 mg/L to 25.6 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-14, MW-16, MW-17, and MW-18.
- Toluene concentrations ranged from <0.00100 mg/L to 8.52 mg/L. Toluene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater sampled collected from monitor well MW-16.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.850 mg/L. Ethylbenzene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater sampled collected from monitor well MW-16.
- Xylene concentrations ranged from <0.00100 mg/L to 2.07 mg/L. Xylene concentrations exceeded the NMWQCC groundwater standard of 0.620 mg/L in the groundwater sampled collected from monitor well MW-16.
- Monitor wells MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, and MW-15 were not sampled due to the presence of PSH.

During the September 2008 sampling event, monitor wells MW-2, MW-3, MW-4A, and MW-6 through MW-20 were sampled. Groundwater samples collected from these wells exhibited the following:

- Benzene concentrations ranged from 0.0299 mg/L to 39.7 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-4A, and MW-6 through MW-20.
- Toluene concentrations ranged from 0.0141 mg/L to 10.3 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, MW-4A, MW-6 through MW-13, MW-15, and MW-16.
- Ethylbenzene concentrations ranged from 0.00200 mg/L to 1.80 mg/L. Ethylbenzene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in groundwater samples collected from monitor wells MW-3, MW-6 through MW-10 MW-15, and MW-16.
- Xylene concentrations ranged from 0.00380 mg/L to 3.70 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, MW-4A, MW-6 through MW-10, and MW-12 through MW-16.
- PAH concentrations are summarized in Tables 3 and 4 in Appendix B.
- Groundwater samples were not collected from monitor wells MW-1A and MW-5 due to an insufficient amount of water.

During the December 2008 sampling event, monitor wells MW-14 and MW-16 through MW-20 were sampled. Groundwater samples collected from these wells exhibited the following:

- Benzene concentrations ranged from 0.0315 mg/L to 30.4 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-14 and MW-16 through MW-20.

- Toluene concentrations ranged from 0.00500 mg/L to 5.28 mg/L. Toluene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater sample collected from monitor well MW-16.
- Ethylbenzene concentrations ranged from <0.0500 mg/L to 1.12 mg/L. Ethylbenzene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater sample collected from monitor well MW-16.
- Xylene concentrations ranged from 0.00370 mg/L to 2.58 mg/L. Xylene concentrations exceeded the NMWQCC groundwater standard of 0.620 mg/L in the groundwater sample collected from monitor well MW-16.
- Monitor wells MW-1A, MW-2, MW-3, MW-4A, MW-5 though MW-13, and MW-15 were not sampled due to the presence of PSH.

The groundwater plume impacted at concentrations above the NMWQCC groundwater standards has not been delineated. 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**

---

The following section presents a summary of the groundwater monitoring events conducted at the 8" Moore to Jal #1 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 southeast 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 beyond the current monitoring network. Monitor wells MW-14 and MW-16 through MW-18 exhibited benzene concentrations above NMWQCC groundwater standards throughout the 2008 quarterly groundwater monitoring events. Monitor wells MW-19 and MW-20 exhibited benzene concentrations above NMWQCC groundwater standards during the March 2008, September 2008, and December 2008 groundwater sampling events. Additionally, monitor well MW-16 exhibited BTEX concentrations above NMWQCC groundwater standards throughout the four (4) groundwater sampling events of 2008.

PSH has been encountered in monitor wells MW-1A, MW-2, MW-3 MW-4A, MW-5 through MW-12, and MW-15. Of these monitor wells, MW-2, MW-3, MW-5, MW-7 through MW-13, and MW-15 have skimmer pumps installed in them. Additionally, monitor wells MW-1A, MW-4A, and MW-6 have total fluid pumps installed in them. The PSH plume underlying this site has been delineated by the current monitoring system in all directions except the general direction east of the site along the property boundary. Based upon the fluid level measurements to date, the PSH plume appears to be stable to the west and south of the site. It is unclear if the PSH plume is stable to the general direction east of the site due to the lack of monitor wells in this area of the site. Since 2004 a total of approximately 10,045 gallons (239 bbls) of PSH have been recovered to date from the site

During the fourth quarter of 2008, eleven (11) skimmer pumps were installed in monitor wells MW-2, MW-3, MW-5, MW-7 through MW-13, and MW-15. In addition to the installation of the skimmer pumps, a total of three (3) total fluid pumps were installed in monitor wells MW-1A, MW-4A, and MW-6 to further increase PSH recovery.

## **4.2 Recommendations**

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

- Continue weekly operation and maintenance of the skimmers system and total fluid recovery pumps. Monitor the system on a weekly basis to achieve maximum PSH recovery.
- Monitor wells MW-14 and MW-16 through MW-20 will be sampled and analyzed for BTEX quarterly and PAH annually.
- Monitor wells MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, and MW-15 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 a yearly basis to evaluate BTEX, TPH, and PAH concentrations in the groundwater.
- Install a total of sixteen (16) monitor wells beyond the perimeter of the current monitor well network for the delineation of the dissolved-phase and PSH plumes (see Figure1).

## **APPENDIX A**

### **Drawings**

Figure 1 - Site Plan with Proposed Monitor Well Locations

Figure 2a - Groundwater Gradient Map - 03/26/2008

Figure 2b - Groundwater Gradient Map - 06/24/2008

Figure 2c - Groundwater Gradient Map - 09/16/2008

Figure 2d - Groundwater Gradient Map - 12/16/2008

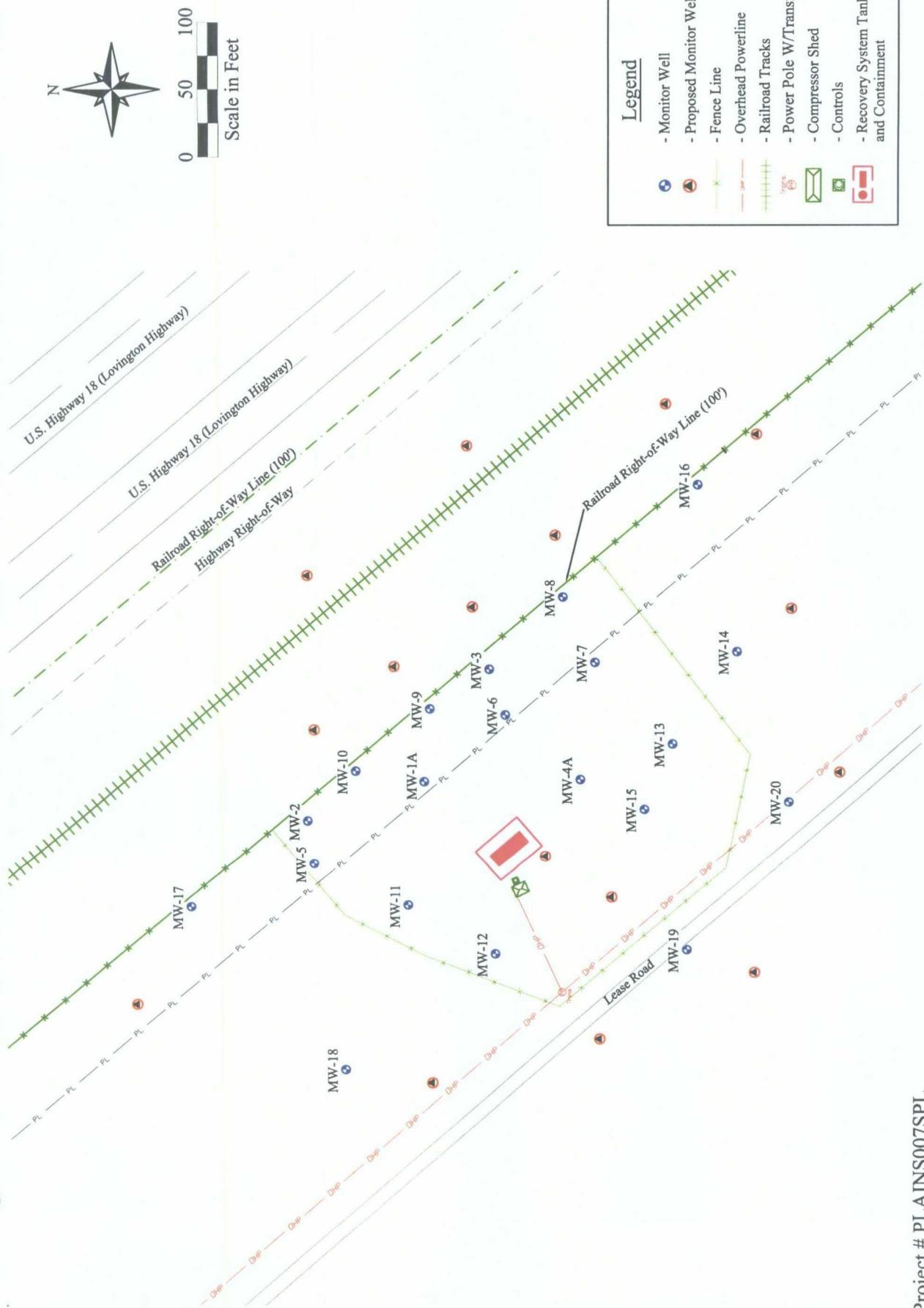
Figure 3a - PSH Thickness & Groundwater Concentration Map - 03/26/2008

Figure 3b - PSH Thickness & Groundwater Concentration Map - 06/25/2008

Figure 3c - PSH Thickness & Groundwater Concentration Map - 09/17-20/2008

Figure 3d - PSH Thickness & Groundwater Concentration Map - 12/16/2008

Figure 4 - Groundwater Concentration in Wells with PSH Map - 09/17-20/2008



Project # PLAINS007/SPL

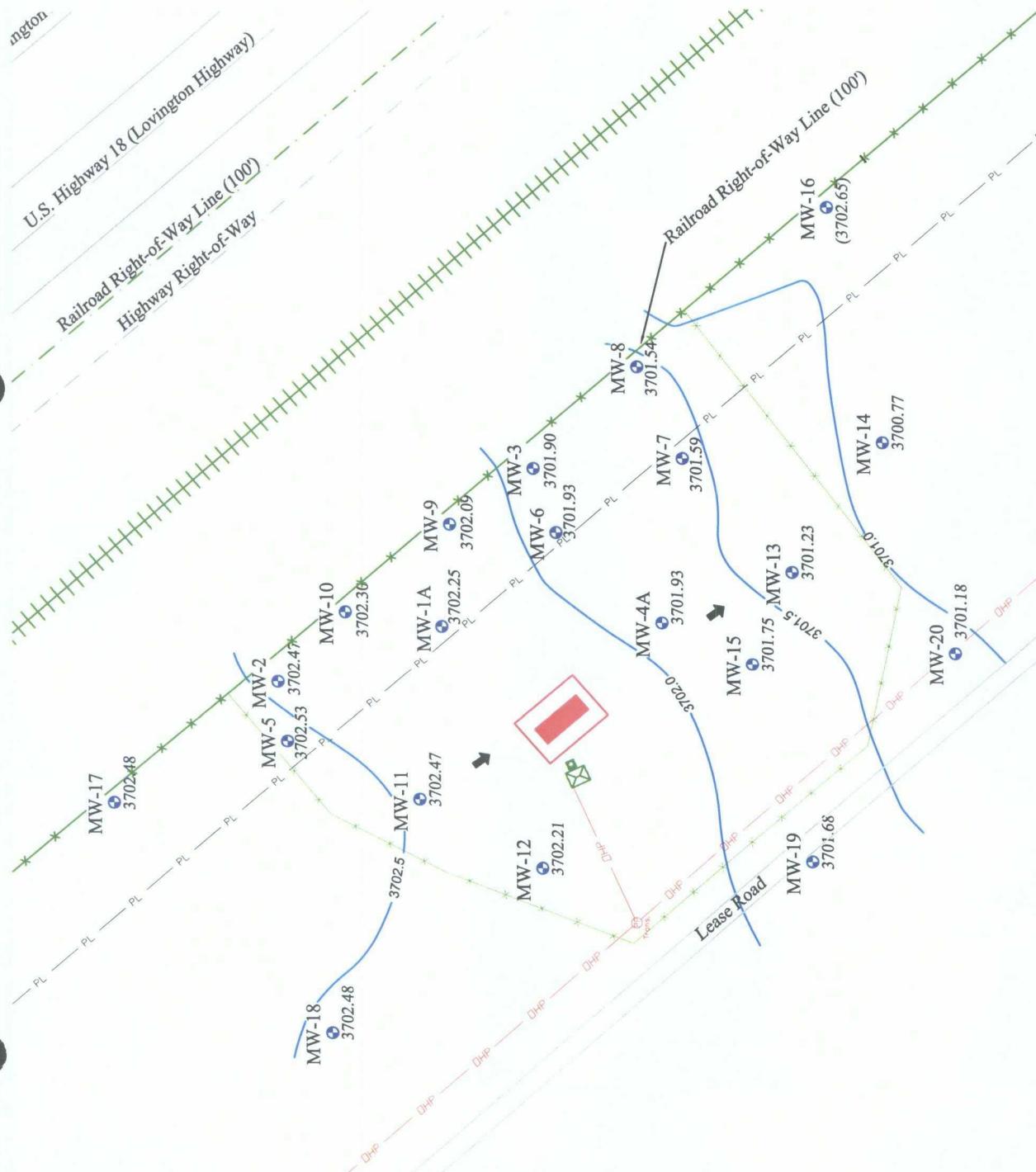


Date: 03/27/2009
Scale: 1" = 100'
Drawn By: SJA

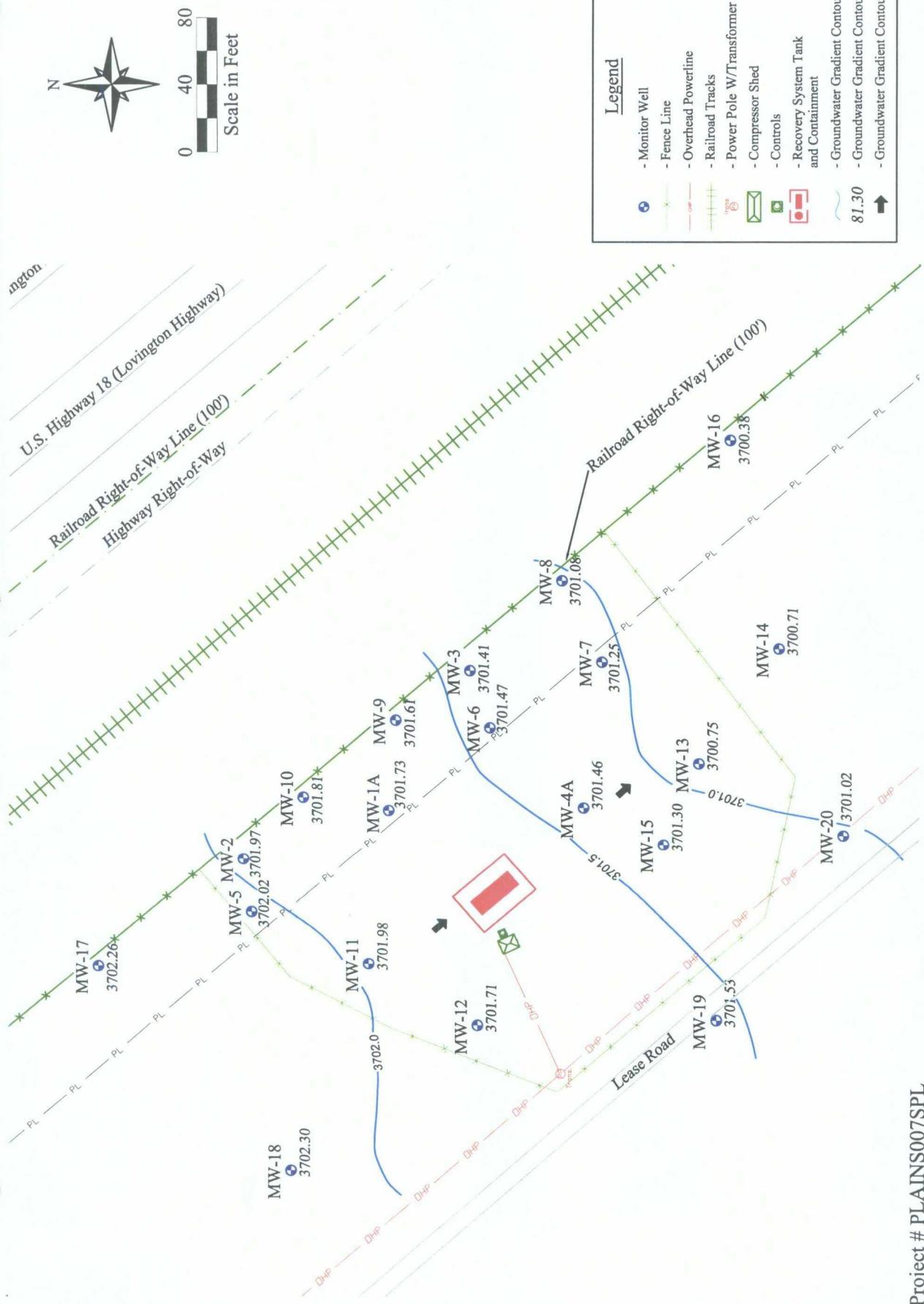
8" Moore to Jal #1  
SRS # 2002-10270, NMOCD REF. # AP-91  
9.2 Miles SE of Lovington, NM, Lea County, New Mexico  
Figure 1 - Site Plan with Proposed Monitor Well Locations Map



Scale in Feet  
0 40 80



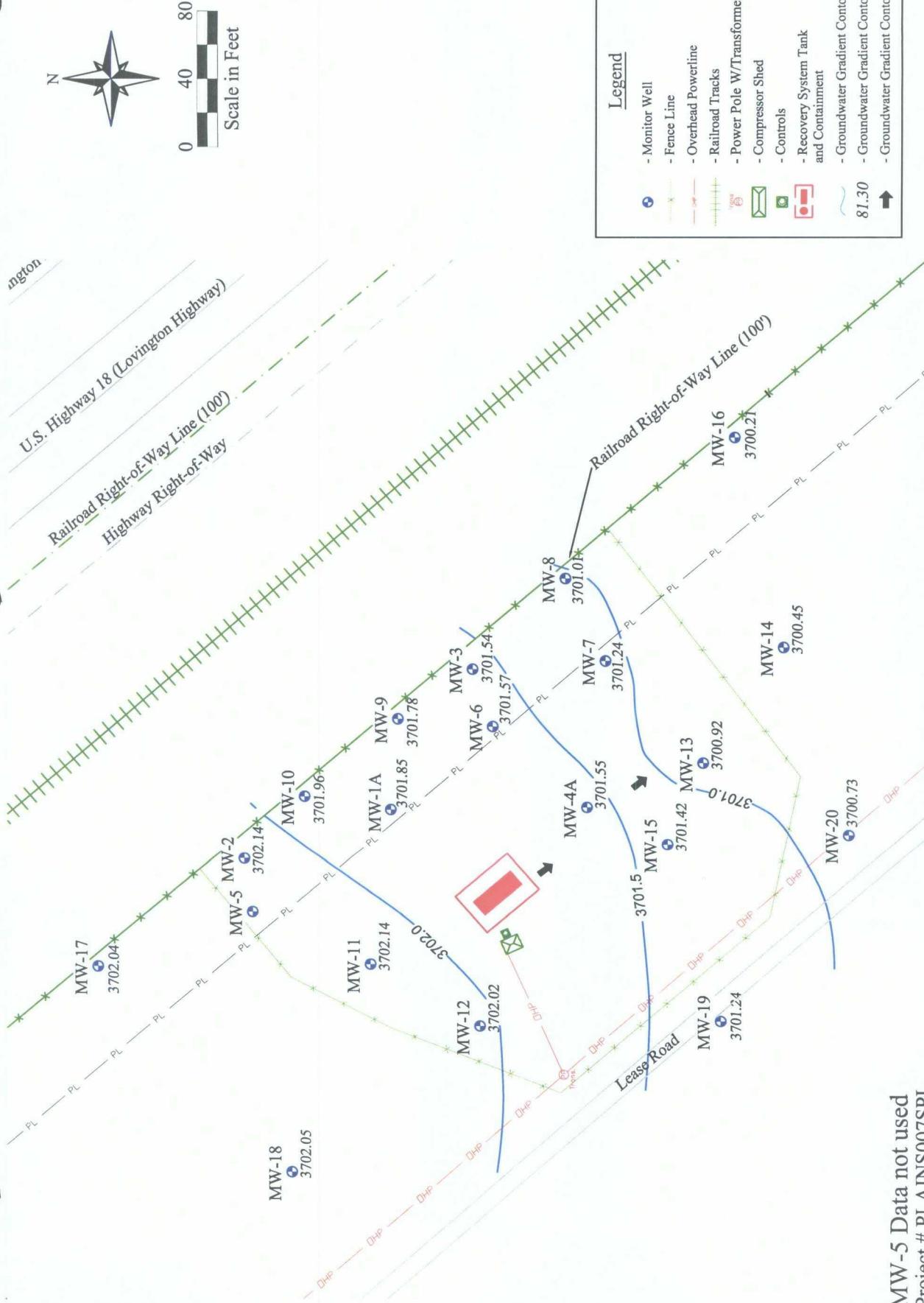
**8" Moore to Jal #1**  
SRS # 2002-10270, NMOCRD REF. # 1R-0380  
9.2 Miles SE of Lovington, NM, Lea County, New Mexico  
Figure 2a - Groundwater Gradient Map - 03/26/2008



Date: 03/27/2009
Scale: 1" = 80'
Drawn By: SJA



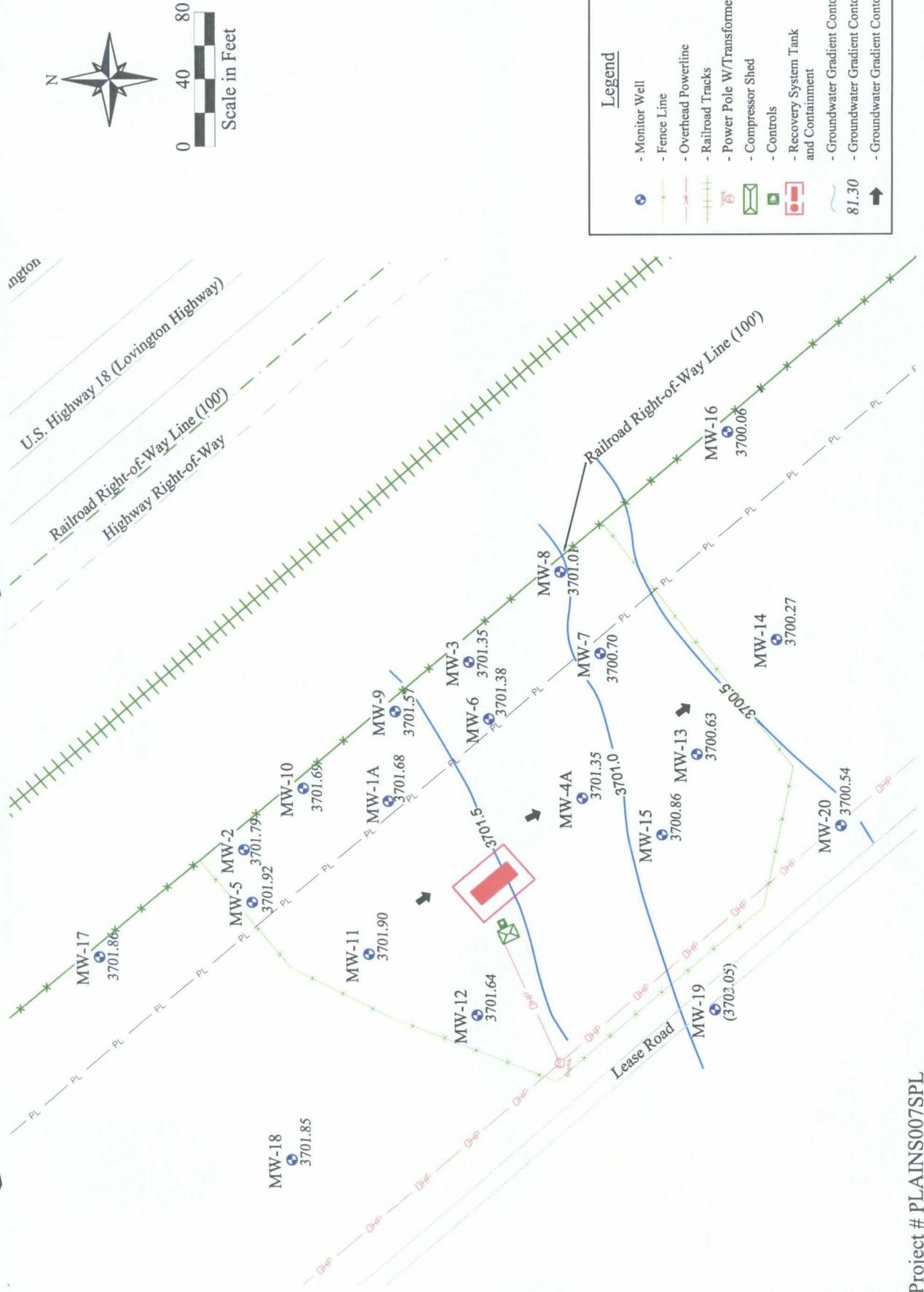
8" Moore to Jal #1  
SRS # 2002-10270, NMOCD REF. # AP-91  
9.2 Miles SE of Lovington, NM, Lea County, New Mexico  
Figure 2b - Groundwater Gradient Map - 06/24/2008



8" Moore to Jal #1  
SRS # 2002-10270, NMOCD REF. # AP-91  
9.2 Miles SE of Lovington, NM, Lea County, New Mexico  
Figure 2c - Groundwater Gradient Map - 09/16/2008

Date: 03/27/2009
Scale: 1" = 80'
Drawn By: SJA

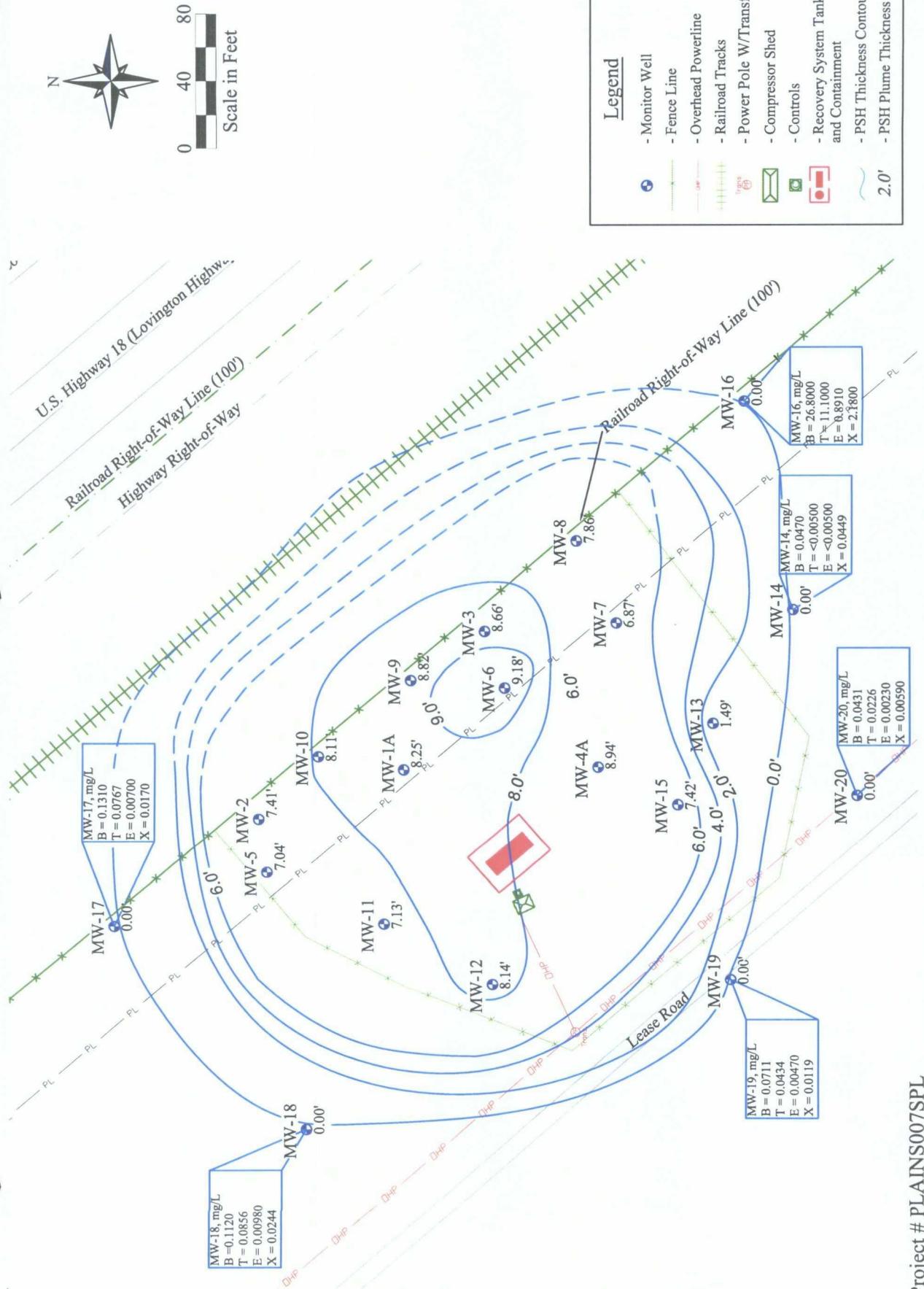




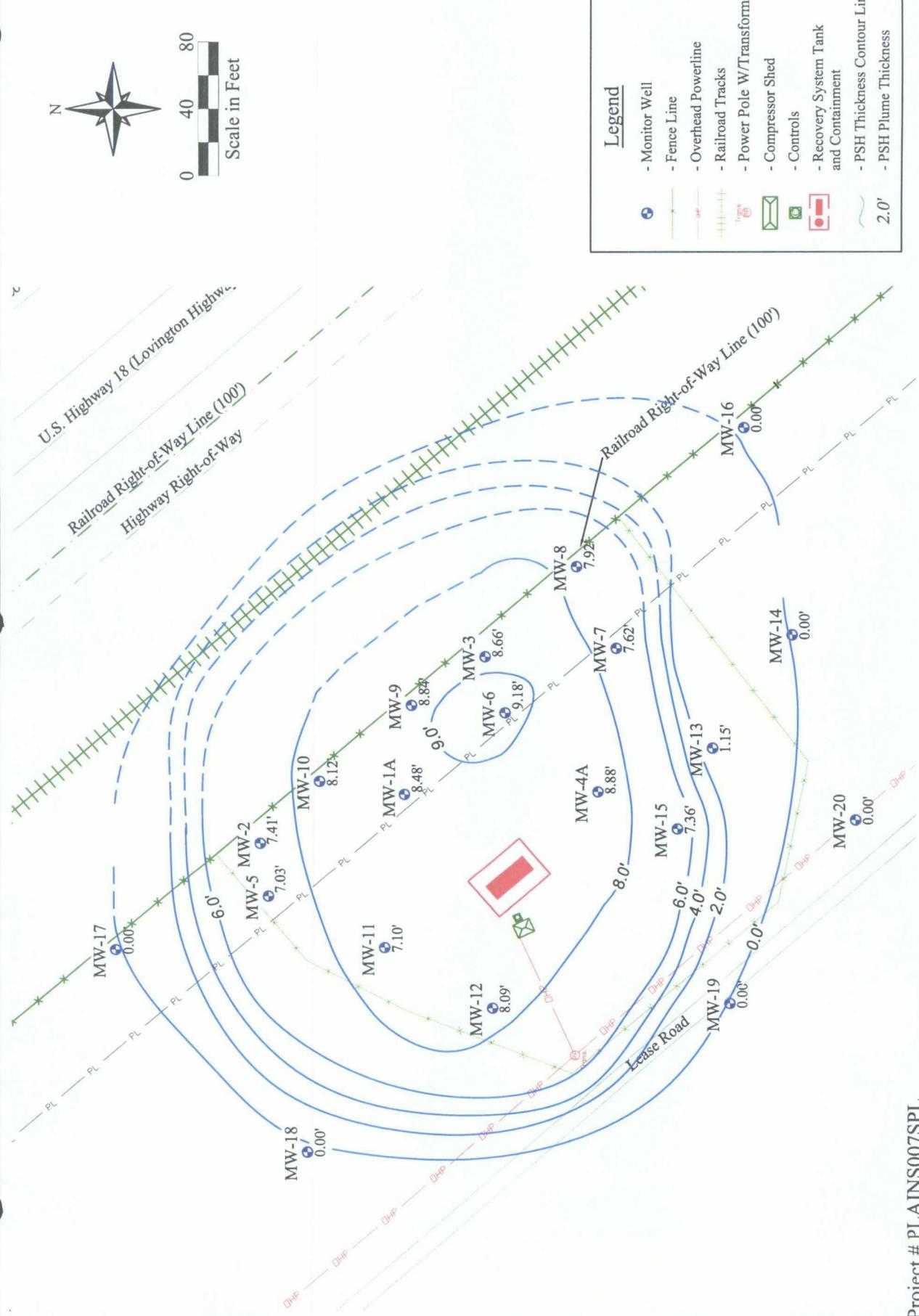
Date: 03/27/2009
Scale: 1" = 80'
Drawn By: SJA

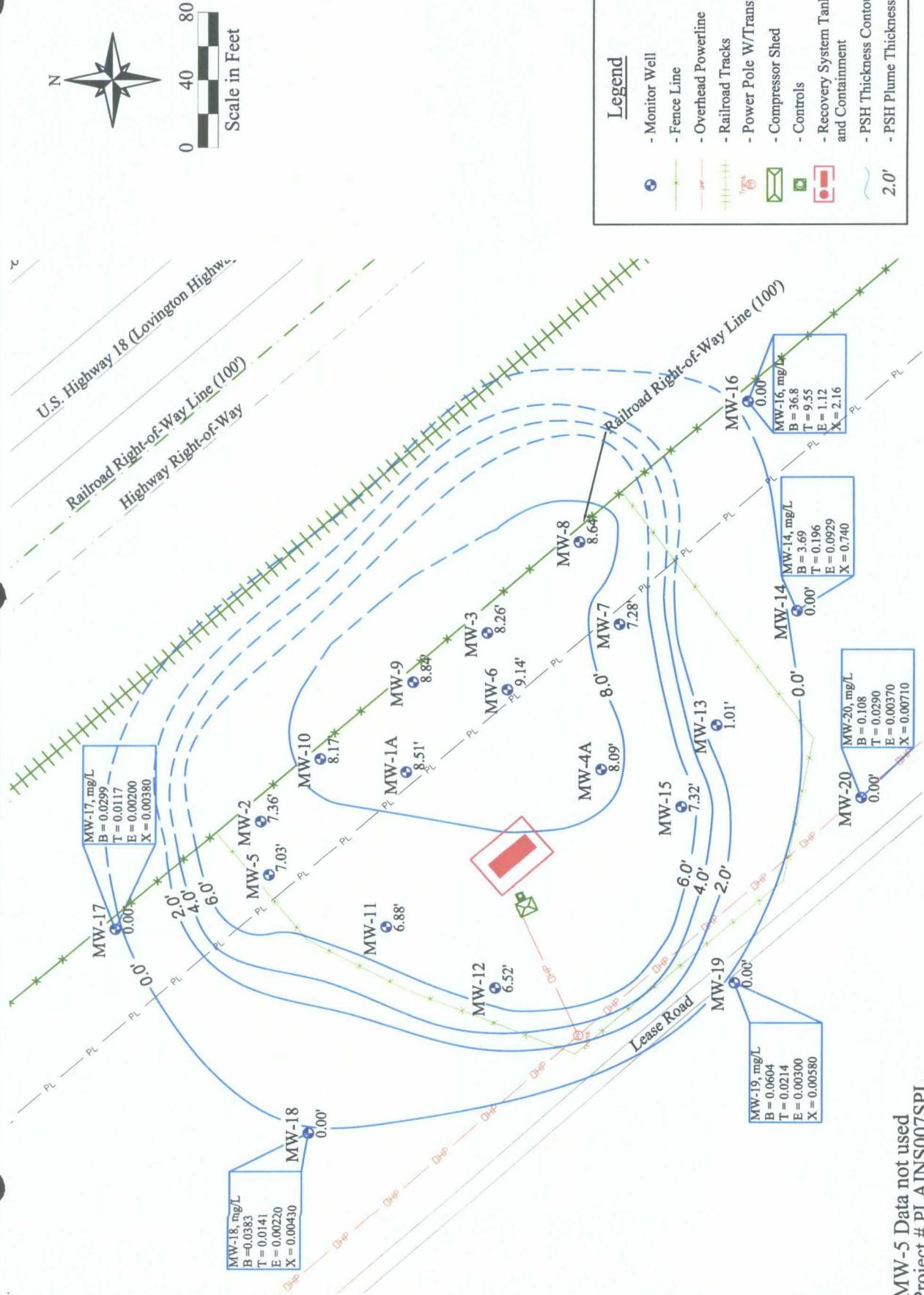


8" Moore to Jal #1  
 SRS # 2002-10270, NMOCD REF. # AP-91  
 9.2 Miles SE of Lovington, NM, Lea County, New Mexico  
 Figure 2d - Groundwater Gradient Map - 12/16/2008



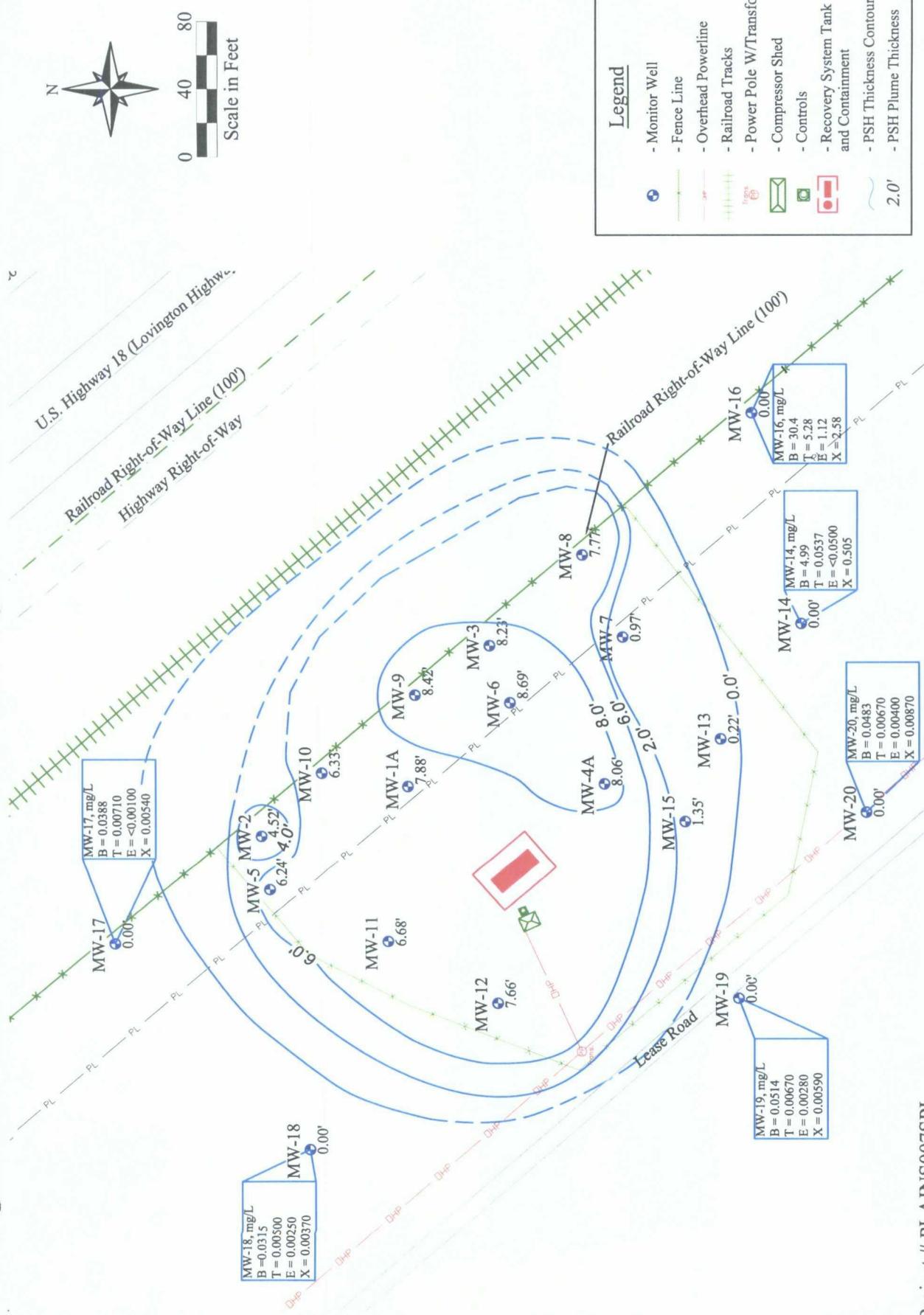
**TAI-ON**  
**LPE**





Date: 03/27/2009  
Scale: 1" = 80'  
Drawn By: SJA

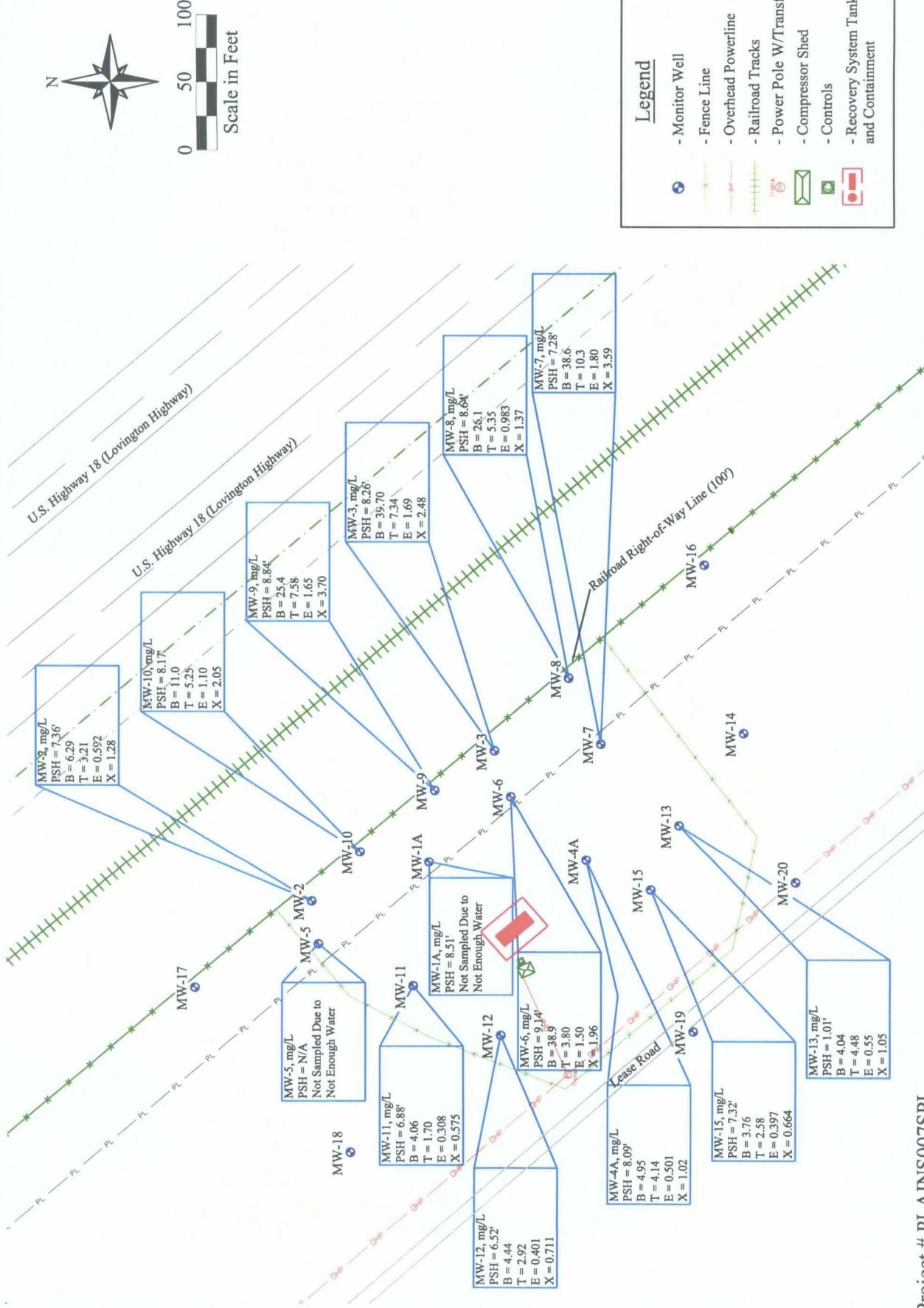




8" Moore to Jal #1  
 SRS # 2002-10270, NMOCD REF. # AP-91  
 9.2 Miles SE of Lovington, NM, Lea County, New Mexico  
 Figure 3d - PSH Thickness & Groundwater Concentration Map - 12/16/2008

Date: 03/27/2009
Scale: 1" = 80'
Drawn By: SJA





**Figure 4 - Groundwater Concentration in Wells With PSH Map - 09/17/20/2008**

**8" Moore to Jal #1**  
**SRS # 2002-10270, NMOCRD REF. # AP-91**  
**9.2 Miles SE of Lovington, NM, Lea County, New Mexico**

Date: 03/27/2009  
Scale: 1" = 100'  
Drawn By: SJA



## **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 # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOCD REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALONPIPE PROJECT NUMBER: PLAINS007SPL**

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-1A	10/08/04	3765.34	53.48	56.38	3711.51	2.90	5.00	5.00
	10/14/04	3765.34	53.25	68.36	3710.28	15.11	16.00	21.00
	10/20/04	3765.34	54.11	65.92	3709.81	11.81	12.50	33.50
	10/29/04	3765.34	55.09	3710.25		9.00	42.50	
	11/04/04	3765.34	55.51	63.71	3708.85	8.20	19.50	62.00
	11/10/04	3765.34	55.72	63.49	3708.69	7.77	8.00	70.00
	11/17/04	3765.34	55.93	63.49	3708.50	7.56	7.00	77.00
	11/24/04	3765.34	55.23	66.10	3708.81	10.87	8.00	85.00
	12/02/04	3765.34	55.26	65.63	3708.84	10.37	9.00	94.00
	12/08/04	3765.34	55.22	65.60	3708.87	10.38	8.00	102.00
	12/15/04	3765.34	56.06	63.65	3708.37	7.59	7.00	109.00
	12/27/04	3765.34	56.35	63.59	3708.12	7.24	7.00	116.00
	12/29/04	3765.34	56.34	63.58	3708.13	7.24	6.00	122.00
	01/06/05	3765.34	56.41	63.64	3708.06	7.23	6.00	128.00
	01/13/05	3765.34	56.56	63.76	3707.92	7.20	8.00	136.00
	01/19/05	3765.34	56.57	63.78	3707.90	7.21	8.00	144.00
	01/26/05	3765.34	56.61	63.78	3707.87	7.17	7.50	151.50
	02/02/05	3765.34	56.63	64.00	3707.83	7.37	8.00	159.50
	02/09/05	3765.34	56.65	64.11	3707.79	7.46	7.50	167.00
	02/16/05	3765.34	56.68	64.21	3707.76	7.53	7.50	174.50
	02/24/05	3765.34	56.69	64.25	3707.74	7.56	8.00	182.50
	03/03/05	3765.34	56.71	64.41	3707.71	7.70	9.00	191.50
	03/11/05	3765.34	56.86	63.54	3707.68	6.68	10.00	201.50
	03/18/05	3765.34	56.72	64.51	3707.69	7.79	9.00	210.50
	04/01/05	3765.34	56.74	64.65	3707.65	7.91	8.00	218.50
	04/07/05	3765.34	56.75	64.68	3707.64	7.93	8.00	226.50
	05/18/05	3765.34	56.80	64.99	3707.56	8.19	10.00	236.50
	05/23/05	3765.34	56.81	65.00	3707.55	8.19	9.00	245.50
	05/26/05	3765.34	56.83	65.02	3707.53	8.19	9.00	254.50
	06/01/05	3765.34	56.82	65.03	3707.53	8.21	9.00	263.50



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALONPIPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-1A	06/03/05	3765.34	56.84	65.01	3707.52	8.17	6.00	289.50
	06/07/05	3765.34	56.85	65.03	3707.51	8.18	8.00	277.50
	06/10/05	3765.34	56.85	65.07	3707.50	8.22	7.00	284.50
	06/13/05	3765.34	56.87	65.10	3707.48	8.23	9.00	293.50
	06/16/05	3765.34	56.86	65.06	3707.50	8.20	8.00	301.50
	06/20/05	3765.34	56.88	65.12	3707.47	8.24	8.00	309.50
	06/22/05	3765.34	56.90	65.10	3707.46	8.20	8.00	317.50
	06/29/05	3765.34	56.89	65.17	3707.46	8.28	8.50	326.00
	07/01/05	3765.34	56.91	65.15	3707.44	8.24	8.00	334.00
	07/06/05	3765.34	56.91	65.17	3707.44	8.26	7.75	341.75
	07/08/05	3765.34	56.91	65.04	3707.45	8.13	9.00	350.75
	07/12/05	3765.34	56.95	65.25	3707.39	8.30	7.00	357.75
	07/14/05	3765.34	56.92	65.21	3707.43	8.29	8.75	366.50
	07/19/05	3765.34	56.93	65.26	3707.41	8.33	6.00	372.50
	07/21/05	3765.34	56.96	65.29	3707.38	8.33	8.00	380.50
	07/26/05	3765.34	56.95	65.31	3707.39	8.36	6.00	386.50
	07/28/05	3765.34	56.58	65.30	3707.71	8.72	6.00	392.50
	08/02/05	3765.34	56.98	65.27	3707.37	8.29	8.00	400.50
	08/04/05	3765.34	57.00	65.33	3707.34	8.33	6.00	406.50
	08/09/05	3765.34	57.00	65.38	3707.33	8.38	6.00	412.50
	08/11/05	3765.34	56.99	65.37	3707.34	8.38	6.00	418.50
	08/16/05	3765.34	57.02	65.42	3707.31	8.40	7.00	425.50
	08/18/05	3765.34	57.01	65.40	3707.32	8.39	6.00	431.50
	08/24/05	3765.34	57.03	65.44	3707.30	8.41	6.00	437.50
	08/26/05	3765.34	57.04	65.44	3707.29	8.40	6.00	443.50
	08/30/05	3765.34	56.45	66.48	3707.69	10.03	9.00	452.50
	09/01/05	3765.34	56.52	66.74	3707.59	10.22	9.00	461.50
	09/05/05	3765.34	56.65	66.28	3707.53	9.63	9.00	470.50
	09/08/05	3765.34	56.73	65.88	3707.51	9.15	6.00	476.50
	09/13/05	3765.34	56.86	65.84	3707.43	8.78	9.00	485.50



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOC REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS007SPL**

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*		PSH Thickness (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
					PSH Surface(Feet)	PSH Thickness (ft)			
MW-1A	09/16/05	3765.34	56.94	65.46	3707.38	8.52	7.00	492.50	
	09/20/05	3765.34	57.01	65.31	3707.33	8.30	7.00	499.50	
	09/23/05	3765.34	57.04	65.23	3707.32	8.19	6.00	505.50	
	09/27/05	3765.34	57.07	65.17	3707.30	8.10	15.00	520.50	
	09/29/05	3765.34	57.09	65.10	3707.29	8.01	15.00	535.50	
	10/04/05	3765.34	57.08	65.18	3707.29	8.10	9.00	544.50	
	10/06/05	3765.34	57.09	65.21	3707.28	8.12	8.00	552.50	
	10/11/05	3765.34	57.09	65.31	3707.26	8.22	8.00	560.50	
	10/13/05	3765.34	57.10	65.28	3707.26	8.18	7.00	567.50	
	10/18/05	3765.34	57.12	65.31	3707.24	8.19	10.00	577.50	
	10/21/05	3765.34	57.13	65.29	3707.23	8.16	6.00	583.50	
	10/26/05	3765.34	57.15	65.34	3707.21	8.19	7.00	590.50	
	10/28/05	3765.34	57.14	65.28	3707.22	8.14	8.00	598.50	
	11/01/05	3765.34	57.16	65.34	3707.20	8.18	8.00	606.50	
	11/04/05	3765.34	57.17	65.33	3707.19	8.16	9.00	615.50	
	11/09/05	3765.34	57.21	65.38	3707.15	8.17	8.00	623.50	
	11/11/05	3765.34	57.24	65.36	3707.13	8.12	8.00	631.50	
	11/16/05	3765.34	57.21	65.42	3707.14	8.21	7.00	638.50	
	11/18/05	3765.34	57.25	65.36	3707.12	8.11	8.00	646.50	
	11/22/05	3765.34	57.24	65.42	3707.12	8.18	7.00	653.50	
	11/30/05	3765.34	57.25	65.49	3707.10	8.24	7.00	660.50	
	12/02/05	3765.34	57.28	65.45	3707.08	8.17	7.00	667.50	
	12/06/05	3765.34	57.27	65.52	3707.08	8.25	7.00	674.50	
	12/14/05	3765.34	57.30	65.57	3707.05	8.27	7.00	681.50	
	12/16/05	3765.34	57.31	65.51	3707.05	8.20	7.00	688.50	
	12/21/05	3765.34	57.31	65.61	3707.03	8.30	7.00	695.50	
	12/23/05	3765.34	57.33	65.53	3707.03	8.20	7.00	702.50	
	12/27/05	3765.34	57.33	65.63	3707.01	8.30	7.00	709.50	
	12/30/05	3765.34	57.34	65.63	3707.01	8.29	7.00	716.50	
	01/03/06	3765.34	57.35	65.69	3706.99	8.34	8.00	724.50	



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/LPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-1A	01/05/06	3765.34	57.36	65.66	3706.98	8.30	6.00	730.50
	01/11/06	3765.34	57.37	65.75	3706.96	8.38	8.00	738.50
	01/13/06	3765.34	57.40	65.68	3706.95	8.28	7.00	745.50
	01/18/06	3765.34	57.38	65.77	3706.95	8.39	6.00	751.50
	01/20/06	3765.34	57.39	65.69	3706.95	8.30	8.00	759.50
	01/24/06	3765.34	57.41	65.83	3706.92	8.42	9.00	768.50
	01/26/06	3765.34	57.40	65.80	3706.93	8.40	9.00	777.50
	02/02/06	3765.34	57.40	65.87	3706.92	8.47	0.00	777.50
	02/08/06	3765.34	57.41	65.91	3706.91	8.50	8.00	785.50
	02/10/06	3765.34	57.40	65.87	3706.92	8.47	8.00	793.50
	02/14/06	3765.34	57.43	65.91	3706.89	8.48	10.00	803.50
	02/16/06	3765.34	57.46	65.83	3706.88	8.37	10.00	813.50
	02/21/06	3765.34	57.45	66.00	3706.86	8.55	10.00	823.50
	02/24/06	3765.34	57.47	65.91	3706.86	8.44	8.00	831.50
	02/28/06	3765.34	57.21	71.50	3706.42	14.29	0.00	831.50
	03/03/06	3765.34	57.43	66.00	3706.88	8.57	0.00	831.50
	03/06/06	3765.34	57.45	66.00	3706.86	8.55	7.00	838.50
	03/08/06	3765.34	57.50	65.87	3706.84	8.37	8.50	847.00
	03/15/06	3765.34	57.51	66.03	3706.81	8.52	8.00	855.00
	03/17/06	3765.34	57.53	65.93	3706.80	8.40	7.00	862.00
	03/21/06	3765.34	57.51	66.04	3706.81	8.53	7.00	869.00
	03/23/06	3765.34	57.42	65.83	3706.91	8.41	8.50	877.50
	03/28/06	3765.34	57.52	66.03	3706.80	8.51	7.00	884.50
	03/30/06	3765.34	57.54	65.95	3706.79	8.41	7.00	891.50
	04/04/06	3765.34	57.55	66.07	3706.77	8.52	7.00	898.50
	04/07/06	3765.34	57.57	66.05	3706.75	8.48	7.50	906.00
	04/12/06	3765.34	57.59	66.10	3706.73	8.51	7.00	913.00
	04/14/06	3765.34	57.58	66.01	3706.75	8.43	6.50	919.50
	04/18/06	3765.34	57.55	66.10	3706.76	8.55	6.00	925.50
	04/21/06	3765.34	57.61	61.18	3707.30	3.57	7.00	932.50



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOC REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LP PROJECT NUMBER: PLAINS007SPL**

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-1A	04/26/06	3765.34	57.56	66.10	3706.76	8.54	7.00	939.50
	04/28/06	3765.34	57.60	65.98	3706.73	8.38	6.00	945.50
	05/04/06	3765.34	57.61	66.13	3706.71	8.52	6.00	951.50
	05/05/06	3765.34	57.62	66.11	3706.70	8.49	7.00	958.50
	05/10/06	3765.34	57.66	66.20	3706.66	8.54	7.50	966.00
	05/12/06	3765.34	57.65	66.05	3706.68	8.40	7.00	973.00
	05/16/06	3765.34	57.66	66.20	3706.66	8.54	7.00	980.00
	05/18/06	3765.34	57.66	66.08	3706.67	8.42	7.25	987.25
	05/23/06	3765.34	57.67	66.22	3706.64	8.55	8.00	995.25
	05/26/06	3765.34	57.87	66.16	3706.48	8.29	6.50	1001.75
	05/30/06	3765.34	57.68	66.23	3706.63	8.55	7.25	1009.00
	06/01/06	3765.34	57.70	66.11	3706.63	8.41	6.75	1015.75
	06/06/06	3765.34	57.70	66.25	3706.61	8.55	0.00	1015.75
	06/09/06	3765.34	57.70	66.26	3706.61	8.56	7.25	1023.00
	06/13/06	3765.34	57.71	66.27	3706.60	8.56	7.00	1030.00
	06/16/06	3765.34	57.72	66.25	3706.60	8.53	4.00	1034.00
	06/20/06	3765.34	57.72	66.27	3706.59	8.55	10.00	1044.00
	06/23/06	3765.34	57.72	66.26	3706.60	8.54	6.75	1050.75
	06/27/06	3765.34	57.74	66.28	3706.58	8.54	5.00	1055.75
	06/30/06	3765.34	57.75	66.25	3706.57	8.50	6.50	1062.25
	07/05/06	3765.34	57.75	66.27	3706.57	8.52	0.00	1062.25
	07/07/06	3765.34	57.77	66.31	3706.55	8.54	6.00	1068.25
	07/11/06	3765.34	57.78	66.30	3706.54	8.52	7.00	1075.25
	07/13/06	3765.34	57.79	66.20	3706.54	8.41	7.00	1082.25
	07/18/06	3765.34	57.80	66.36	3706.51	8.56	7.50	1089.75
	07/21/06	3765.34	57.80	66.30	3706.52	8.50	6.00	1095.75
	07/25/06	3765.34	57.81	66.38	3706.50	8.57	7.00	1102.75
	07/27/06	3765.34	57.81	66.28	3706.51	8.47	7.00	1109.75
	08/01/06	3765.34	57.83	66.41	3706.48	8.58	7.50	1117.25
	08/03/06	3765.34	57.85	66.36	3706.47	8.51	7.00	1124.25



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOCD REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS007SPL**

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MM-1A	08/09/06	3765.34	57.87	66.44	3706.44	8.57	7.00	1131.25
	08/11/06	3765.34	57.87	66.35	3706.45	8.48	7.50	1138.75
	08/15/06	3765.34	57.89	66.46	3706.42	8.57	5.00	1143.75
	08/15/06	3765.34	57.89	66.46	3706.42	8.57	5.00	1148.75
	08/18/06	3765.34	57.89	66.46	3706.42	8.57	7.00	1155.75
	08/25/06	3765.34	57.92	66.51	3706.39	8.59	7.25	1163.00
	08/30/06	3765.34	57.94	66.43	3706.38	8.49	6.50	1169.50
	09/12/06	3765.34	NM	NM	NM	NM	0.00	1169.50
	09/15/06	3765.34	57.27	67.55	3706.84	10.28	9.00	1178.50
	09/20/06	3765.34	57.74	66.64	3706.53	8.90	7.00	1185.50
	09/25/06	3765.34	57.92	66.16	3706.43	8.24	7.50	1193.00
	09/29/06	3765.34	57.98	66.03	3706.39	8.05	0.00	1193.00
	10/04/06	3765.34	58.01	66.03	3706.37	8.02	7.00	1200.00
	10/06/06	3765.34	58.03	65.94	3706.36	7.91	6.00	1206.00
	10/12/06	3765.34	58.06	63.14	3706.67	5.08	6.00	1212.00
	10/17/06	3765.34	58.90	66.30	3705.55	7.40	7.00	1219.00
	10/20/06	3765.34	58.08	66.04	3706.30	7.96	0.00	1219.00
	10/24/06	3765.34	58.10	66.02	3706.29	7.92	0.00	1219.00
	10/26/06	3765.34	58.90	66.02	3705.59	7.12	0.00	1219.00
	11/22/06	3765.34	58.16	66.34	3706.20	8.18	7.00	1226.00
	11/28/06	3765.34	58.19	66.41	3706.16	8.22	0.00	1226.00
	12/06/06	3765.34	58.25	66.49	3706.10	8.24	7.50	1233.50
	12/08/06	3765.34	58.44	68.14	3705.74	9.70	8.00	1241.50
	12/12/06	3765.34	58.25	66.49	3706.10	8.24	7.00	1248.50
	12/15/06	3765.34	58.92	66.01	3705.57	7.09	6.50	1255.00
	12/20/06	3765.34	NM	NM	NM	NM	0.00	1255.00
	12/22/06	3765.34	58.34	66.41	3706.03	8.07	0.00	1255.00
	12/27/06	3765.34	58.30	66.65	3706.04	8.35	0.00	1255.00
	01/03/07	3765.34	58.34	66.69	3706.00	8.35	0.00	1255.00
	01/05/07	3765.34	58.32	66.72	3706.01	8.40	0.00	1255.00



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/LP/E PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-1A	01/12/07	3765.34	58.35	66.76	3705.98	8.41	7.00	1262.00
	01/15/07	3765.34	58.40	66.72	3705.94	8.32	0.00	1262.00
	01/18/07	3765.34	58.38	66.78	3705.95	8.40	7.00	1269.00
	01/31/07	3765.34	58.41	66.87	3705.91	8.46	0.00	1269.00
	02/07/07	3765.34	58.31	67.78	3705.89	9.47	7.00	1276.00
	02/09/07	3765.34	58.43	66.69	3705.92	8.26	7.50	1283.50
	02/13/07	3765.34	58.44	66.85	3705.89	8.41	7.75	1291.25
	02/16/07	3765.34	58.42	66.79	3705.92	8.37	7.50	1298.75
	02/19/07	3765.34	58.48	66.42	3705.91	7.94	0.00	1298.75
	03/09/07	3765.34	65.02	73.50	3699.30	8.48	0.00	1298.75
	03/13/07	3765.34	65.67	74.02	3698.67	8.35	9.50	1308.25
	03/23/07	3765.34	65.10	73.47	3699.24	8.37	0.00	1308.25
	03/27/07	3768.36	65.09	73.55	3702.25	8.46	0.00	1308.25
	04/06/07		65.13	73.52	3702.22	8.39	0.00	1308.25
	04/11/07		66.17	72.20	3701.47	6.03	0.00	1308.25
	04/17/07		65.15	73.65	3702.19	8.50	6.00	1314.25
	04/19/07		65.15	73.42	3702.22	8.27	7.00	1321.25
	04/24/07		65.15	73.76	3702.18	8.61	6.00	1327.25
	05/01/07		65.20	72.21	3702.32	7.01	0.00	1327.25
	05/21/07		65.23	73.54	3702.13	8.31	0.00	1327.25
	05/24/07		65.45	73.84	3701.90	8.39	7.00	1334.25
	06/28/07		65.38	73.90	3701.96	8.52	0.00	1334.25
	08/07/07		65.31	73.92	3702.02	8.61	8.00	1342.25
	08/17/07		64.25	71.76	3703.21	7.51	7.00	1349.25
	08/23/07		65.34	73.86	3702.00	8.52	7.00	1356.25
	08/31/07		65.37	73.89	3701.97	8.52	8.50	1364.75
	09/21/07		65.43	73.60	3701.95	8.17	8.00	1372.75
	09/28/07		65.45	73.96	3701.89	8.51	8.50	1381.25
	10/11/07		65.48	72.48	3702.04	7.00	9.00	1390.25
	10/18/07		65.51	73.98	3701.83	8.47	8.00	1398.25



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOC REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON PIPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-1A	11/13/07	64.68	73.17	3702.66	8.49	0.00	0.00	1398.25
	11/27/07	64.72	73.21	3702.62	8.49	0.00	0.00	1398.25
	12/13/07	64.76	73.29	3702.58	8.53	8.50	1406.75	1406.75
	12/17/07	64.83	73.28	3702.52	8.45	0.00	0.00	1406.75
	12/31/07	64.84	73.36	3702.50	8.52	8.00	0.00	1414.75
	01/06/08	64.91	73.29	3702.44	8.38	8.00	0.00	1422.75
	03/05/08	65.06	73.57	3702.28	8.51	0.00	0.00	1422.75
	03/26/08	65.12	73.37	3702.25	8.25	0.00	0.00	1422.75
	04/02/08	65.17	73.46	3702.20	8.29	0.00	0.00	1422.75
	04/04/08	65.28	73.49	3702.09	8.21	8.00	0.00	1430.75
	04/24/08	65.23	73.63	3702.12	8.40	0.00	0.00	1430.75
	05/06/08	65.31	73.77	3702.03	8.46	0.00	0.00	1430.75
	05/27/08	65.42	73.88	3701.92	8.46	0.00	0.00	1430.75
	06/04/08	65.47	73.92	3701.88	8.45	5.50	0.00	1436.25
	06/24/08	65.61	74.09	3701.73	8.48	0.00	0.00	1436.25
	07/02/08	65.68	74.17	3701.66	8.49	0.00	0.00	1436.25
	07/15/08	65.78	74.21	3701.57	8.43	0.00	0.00	1436.25
	07/22/08	65.83	74.21	3701.52	8.38	0.00	0.00	1436.25
	07/31/08	65.94	74.35	3701.41	8.41	0.00	0.00	1436.25
	08/07/08	66.03	74.36	3701.33	8.33	0.00	0.00	1436.25
	08/29/08	65.42	73.88	3701.92	8.46	0.00	0.00	1436.25
	09/16/08	65.49	74.00	3701.85	8.51	0.00	0.00	1436.25
	12/16/08	65.73	73.61	3701.68	7.88	0.00	0.00	1436.25



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOC REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS007SPL**

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-2	10/29/04	3770.91	61.85	65.44	3708.76	3.74	10.00	3.00
	11/04/04	3770.91	61.70	67.15	3708.75	5.67	7.00	13.00
	11/10/04	3770.91	61.48	66.74	3708.59	5.02	5.00	20.00
	11/17/04	3770.91	61.72	67.10	3708.47	5.29	5.00	25.00
	11/24/04	3770.91	61.81	68.41	3708.63	6.97	6.00	30.00
	12/02/04	3770.91	61.44	68.39	3708.69	7.01	5.00	36.00
	12/08/04	3770.91	61.38	68.86	3708.51	7.34	7.00	41.00
	12/15/04	3770.91	61.52	69.09	3708.37	7.44	6.00	48.00
	12/22/04	3770.91	61.65	69.08	3708.36	7.42	6.00	54.00
	12/29/04	3770.91	61.66	69.18	3708.29	7.46	7.00	60.00
	01/06/05	3770.91	61.72	69.21	3708.21	7.40	7.00	67.00
	01/13/05	3770.91	61.81	69.25	3708.17	7.40	7.00	74.00
	01/19/05	3770.91	61.85	69.41	3708.12	7.52	19.00	81.00
	01/26/05	3770.91	61.89	69.45	3708.08	7.52	7.00	100.00
	02/02/05	3770.91	61.93	69.48	3708.08	7.56	8.00	115.00
	02/09/05	3770.91	61.92	69.57	3708.04	7.61	7.00	122.00
	02/16/05	3770.91	61.96	69.59	3707.99	7.58	8.00	130.00
	02/24/05	3770.91	62.01	69.65	3707.99	7.65	9.00	139.00
	03/03/05	3770.91	62.00	67.69	3708.07	5.51	8.00	147.00
	03/11/05	3770.91	62.18	69.69	3707.95	7.65	8.00	155.00
	03/18/05	3770.91	62.04	69.79	3707.90	7.71	8.00	163.00
	04/01/05	3770.91	62.08	69.74	3707.91	7.66	8.00	171.00
	04/07/05	3770.91	62.16	69.89	3707.82	7.73	7.50	178.50
	05/18/05	3770.91	62.19	69.90	3707.79	7.71	12.00	190.50
	05/23/05	3770.91	62.24	69.80	3707.76	7.56	10.50	201.00
	05/26/05	3770.91	62.21	69.91	3707.78	7.70	7.50	208.50
	06/01/05	3770.91	62.30	69.50	3707.75	7.20	7.00	215.50
	06/03/05	3770.91	62.24	69.91	3707.75	7.67	8.00	223.50
	06/07/05	3770.91	62.26	69.81	3707.74	7.55	9.00	232.50
	06/05/05	3770.91	62.26	69.90	3707.73	7.64	8.00	240.50



TABLE 1  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOCD REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS007SPL**

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-2	06/16/05	3770.91	62.28	69.80	3707.73	7.52	7.00	247.50
	06/20/05	3770.91	62.29	69.95	3707.70	7.66	6.00	253.50
	06/22/05	3770.91	62.36	69.57	3707.68	7.21	6.50	260.00
	06/29/05	3770.91	62.28	69.96	3707.71	7.68	7.00	267.00
	07/01/05	3770.91	62.35	69.61	3707.69	7.26	6.00	273.00
	07/06/05	3770.91	62.31	69.99	3707.68	7.68	8.00	281.00
	07/08/05	3770.91	62.41	69.54	3707.64	7.13	6.00	287.00
	07/12/05	3770.91	62.33	70.29	3707.62	7.96	6.00	293.00
	07/14/05	3770.91	62.40	69.68	3707.64	7.28	5.00	298.00
	07/19/05	3770.91	62.35	70.04	3707.64	7.69	6.00	304.00
	07/21/05	3770.91	62.44	69.69	3707.60	7.25	4.00	308.00
	07/26/05	3770.91	62.38	70.02	3707.61	7.64	5.00	313.00
	07/28/05	3770.91	62.49	69.74	3707.55	7.25	5.00	318.00
	08/02/05	3770.91	62.40	70.03	3707.59	7.63	4.00	322.00
	08/04/05	3770.91	62.47	69.76	3707.57	7.29	6.00	328.00
	08/09/05	3770.91	62.41	70.05	3707.58	7.64	5.00	333.00
	08/11/05	3770.91	62.48	69.82	3707.55	7.34	6.00	339.00
	08/16/05	3770.91	62.45	70.09	3707.54	7.64	4.00	343.00
	08/18/05	3770.91	62.50	69.85	3707.53	7.35	5.00	348.00
	08/24/05	3770.91	62.41	70.11	3707.58	7.70	6.00	354.00
	08/26/05	3770.91	62.51	69.89	3707.51	7.38	6.00	360.00
	08/30/05	3770.91	62.46	70.08	3707.54	7.62	6.00	366.00
	09/01/05	3770.91	62.52	69.83	3707.51	7.31	5.00	371.00
	09/06/05	3770.91	62.47	70.08	3707.53	7.61	5.00	376.00
	09/08/05	3770.91	62.51	69.81	3707.52	7.30	6.00	382.00
	09/13/05	3770.91	62.48	70.07	3707.52	7.59	6.00	388.00
	09/16/05	3770.91	62.51	70.04	3707.50	7.53	6.00	394.00
	09/20/05	3770.91	62.50	70.09	3707.50	7.59	7.00	401.00
	09/23/05	3770.91	62.53	70.03	3707.48	7.50	6.00	407.00
	09/27/05	3770.91	62.50	70.15	3707.49	7.65	7.00	414.00
	09/29/05	3770.91	62.56	69.94	3707.46	7.38	7.00	421.00



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOC REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS007SPL**

WELL ID	DATE GAUGED	Relative Top of Casing Elevation [Feet]*	Depth to PSH Below Top of Casing [Feet]	Depth to Water Below Top of Casing [Feet]	Adjusted Potentiometric Surface[Feet]*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-2	10/04/05	3770.91	62.52	70.12	3707.48	7.60	7.00	428.00
	10/06/05	3770.91	62.61	69.98	3707.42	7.37	7.00	435.00
	10/11/05	3770.91	62.53	70.14	3707.47	7.61	6.00	441.00
	10/13/05	3770.91	62.55	70.08	3707.46	7.53	6.00	447.00
	10/18/05	3770.91	62.56	70.18	3707.44	7.62	6.00	453.00
	10/21/05	3770.91	62.58	70.17	3707.42	7.59	7.00	460.00
	10/26/05	3770.91	62.57	70.20	3707.42	7.63	8.00	468.00
	10/28/05	3770.91	62.61	70.07	3707.40	7.46	6.00	474.00
	11/01/05	3770.91	62.59	70.21	3707.41	7.62	5.00	479.00
	11/04/05	3770.91	62.60	70.20	3707.40	7.60	9.00	488.00
	11/09/05	3770.91	62.64	70.28	3707.35	7.64	6.00	494.00
	11/11/05	3770.91	62.64	70.29	3707.35	7.65	6.00	500.00
	11/16/05	3770.91	62.63	70.27	3707.36	7.64	7.00	507.00
	11/18/05	3770.91	62.68	70.17	3707.33	7.49	7.00	514.00
	11/22/05	3770.91	62.65	70.29	3707.34	7.64	6.00	520.00
	11/30/05	3770.91	62.66	70.33	3707.33	7.67	7.00	527.00
	12/02/05	3770.91	62.71	70.22	3707.30	7.51	7.00	534.00
	12/06/05	3770.91	62.70	70.36	3707.29	7.66	8.00	542.00
	12/14/05	3770.91	62.72	70.39	3707.27	7.67	7.00	549.00
	12/16/05	3770.91	62.73	70.38	3707.26	7.65	6.00	555.00
	12/21/05	3770.91	62.75	70.25	3707.26	7.50	6.00	561.00
	12/23/05	3770.91	62.78	70.23	3707.24	7.45	6.00	567.00
	12/27/05	3770.91	62.75	70.39	3707.24	7.64	6.00	573.00
	12/30/05	3770.91	62.78	70.39	3707.22	7.61	6.00	579.00
	01/03/06	3770.91	62.76	70.39	3707.23	7.63	6.00	585.00
	01/05/06	3770.91	62.80	70.34	3707.21	7.54	5.00	590.00
	01/11/06	3770.91	62.81	70.44	3707.18	7.63	6.00	596.00
	01/13/06	3770.91	62.83	70.37	3707.18	7.54	6.00	602.00
	01/18/06	3770.91	62.80	70.43	3707.19	7.63	5.00	607.00
	01/20/06	3770.91	62.85	70.36	3707.16	7.51	7.00	614.00
	01/24/06	3770.91	62.85	72.50	3706.90	9.65	6.00	620.00



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCID REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/LPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
WV-2	01/26/06	3770.91	62.80	72.43	3706.95	9.63	6.00	626.00
	02/02/06	3770.91	62.82	70.51	3707.17	7.69	0.00	626.00
	02/08/06	3770.91	62.85	70.50	3707.14	7.65	6.00	632.00
	02/10/06	3770.91	62.81	70.48	3707.18	7.67	6.00	638.00
	02/14/06	3770.91	62.87	70.55	3707.12	7.68	8.00	646.00
	02/16/06	3770.91	62.91	70.46	3707.09	7.55	9.00	655.00
	02/21/06	3770.91	62.95	70.51	3707.05	7.56	9.00	664.00
	02/24/06	3770.91	62.92	70.54	3707.08	7.62	8.50	672.50
	02/28/06	3770.91	62.90	72.50	3706.86	9.60	0.00	672.50
	03/03/06	3770.91	62.92	69.60	3707.19	6.68	0.00	672.50
	03/06/06	3770.91	62.93	70.57	3707.06	7.64	6.00	678.50
	03/08/06	3770.91	62.95	69.52	3707.17	6.57	5.00	683.50
	03/15/06	3770.91	62.97	70.63	3707.02	7.66	5.00	688.50
	03/17/06	3770.91	63.00	70.54	3707.01	7.54	5.00	693.50
	03/21/06	3770.91	62.90	70.60	3707.09	7.70	6.50	700.00
	03/23/06	3770.91	62.90	70.40	3707.11	7.50	4.50	704.50
	03/28/06	3770.91	63.30	70.60	3706.73	7.30	4.00	708.50
	03/30/06	3770.91	63.03	70.60	3706.97	7.57	4.50	713.00
	04/04/06	3770.91	63.01	70.65	3706.98	7.64	5.00	718.00
	04/07/06	3770.91	63.05	70.65	3706.95	7.60	5.00	723.00
	04/12/06	3770.91	63.02	70.29	3707.02	7.27	5.50	728.50
	04/14/06	3770.91	63.06	70.60	3706.95	7.54	5.00	733.50
	04/18/06	3770.91	63.01	70.61	3706.99	7.60	5.50	739.00
	04/21/06	3770.91	63.08	70.66	3706.92	7.58	5.50	744.50
	04/26/06	3770.91	63.03	70.62	3706.97	7.59	7.00	751.50
	04/28/06	3770.91	63.07	70.60	3706.94	7.53	7.00	758.50
	05/04/06	3770.91	63.08	70.68	3706.92	7.60	6.25	764.75
	05/05/06	3770.91	63.10	70.69	3706.90	7.59	6.50	771.25
	05/10/06	3770.91	63.13	70.74	3706.87	7.61	6.50	777.75
	05/12/06	3770.91	63.13	70.67	3706.88	7.54	7.50	785.25
	05/16/06	3770.91	63.46	70.71	3706.58	7.25	6.00	791.25



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON PIPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-2	05/18/06	3770.91	63.14	70.69	3706.86	7.55	6.50	797.75
	05/23/06	3770.91	63.14	70.73	3706.86	7.59	5.75	803.50
	05/26/06	3770.91	63.15	70.73	3706.85	7.58	5.50	809.00
	05/30/06	3770.91	63.16	70.37	3706.88	7.21	6.50	815.50
	06/01/06	3770.91	63.18	70.74	3706.82	7.56	6.25	821.75
	06/06/06	3770.91	63.17	70.28	3706.89	7.11	0.00	821.75
	06/09/06	3770.91	63.16	70.77	3706.84	7.61	6.75	828.50
	06/13/06	3770.91	63.19	70.80	3706.81	7.61	7.20	835.70
	06/16/06	3770.91	63.20	70.77	3706.80	7.57	6.25	841.95
	06/20/06	3770.91	63.20	70.77	3706.80	7.57	8.00	849.95
	06/23/06	3770.91	63.19	70.79	3706.81	7.60	5.00	854.95
	06/27/06	3770.91	63.22	70.81	3706.78	7.59	6.00	860.95
	06/30/06	3770.91	63.21	70.78	3706.79	7.57	6.00	866.95
	07/05/06	3770.91	63.22	70.80	3706.78	7.58	6.00	872.95
	07/07/06	3770.91	63.26	70.77	3706.75	7.51	7.50	880.45
	07/11/06	3770.91	63.25	70.81	3706.75	7.56	6.50	886.95
	07/13/06	3770.91	63.27	70.75	3706.74	7.48	6.00	892.95
	07/18/06	3770.91	63.28	70.84	3706.72	7.56	5.00	897.95
	07/21/06	3770.91	63.28	70.80	3706.73	7.52	6.00	903.95
	07/25/06	3770.91	63.30	70.84	3706.71	7.54	6.50	910.45
	07/27/06	3770.91	63.30	70.84	3706.71	7.54	6.50	916.95
	08/01/06	3770.91	63.33	70.87	3706.68	7.54	6.25	923.20
	08/03/06	3770.91	63.34	70.84	3706.67	7.50	4.00	927.20
	08/09/06	3770.91	63.35	70.89	3706.66	7.54	5.00	932.20
	08/11/06	3770.91	63.35	70.83	3706.66	7.48	6.50	938.70
	08/15/06	3770.91	63.38	70.91	3706.63	7.53	6.00	944.70
	08/18/06	3770.91	63.38	70.90	3706.63	7.52	5.00	949.70
	08/25/06	3770.91	63.40	70.95	3706.60	7.55	6.50	956.20
	08/30/06	3770.91	62.44	71.40	3707.39	8.96	3.50	959.70
	09/12/06	3770.91	NM	NM	NM	NM	0.00	959.70
	09/15/06	3770.91	63.40	70.98	3706.60	7.58	2.00	961.70



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/LP PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	Cumulative Recovery (gallons)
MW-2	09/20/06	3770.91	63.43	71.01	3706.57	7.58	6.00	967.70
	09/29/06	3770.91	63.45	71.00	3706.55	7.55	0.00	967.70
	10/04/06	3770.91	63.46	71.02	3706.54	7.56	6.50	974.20
	10/06/06	3770.91	63.49	71.97	3706.40	8.48	7.00	981.20
	10/12/06	3770.91	63.49	71.05	3706.51	7.56	5.50	986.70
	10/17/06	3770.91	63.52	71.07	3706.48	7.55	5.50	982.20
	10/20/06	3770.91	63.51	71.07	3706.49	7.56	0.00	982.20
	10/24/06	3770.91	63.48	71.07	3706.52	7.59	0.00	982.20
	10/26/06	3770.91	63.59	71.07	3706.42	7.48	0.00	982.20
	11/22/06	3770.91	63.60	71.19	3706.40	7.59	6.00	988.20
	11/28/06	3770.91	63.62	71.20	3706.38	7.58	0.00	988.20
	12/06/06	3770.91	63.71	71.28	3706.29	7.57	6.00	1004.20
	12/08/06	3770.91	63.48	71.05	3706.52	7.57	6.50	1010.70
	12/12/06	3770.91	63.68	71.26	3706.32	7.58	6.00	1016.70
	12/15/06	3770.91	63.62	71.07	3706.40	7.45	6.50	1023.20
	12/22/06	3770.91	63.72	71.25	3706.29	7.53	0.00	1023.20
	12/27/06	3770.91	63.78	71.29	3706.23	7.51	0.00	1023.20
	01/03/07	3770.91	63.78	71.38	3706.22	7.60	0.00	1023.20
	01/05/07	3770.91	63.82	71.36	3706.19	7.54	0.00	1023.20
	01/12/07	3770.91	63.82	71.42	3706.18	7.60	7.00	1030.20
	01/15/07	3770.91	63.88	71.40	3706.13	7.52	0.00	1030.20
	01/18/07	3770.91	63.86	71.43	3706.14	7.57	7.00	1037.20
	01/31/07	3770.91	63.88	71.46	3706.12	7.58	0.00	1037.20
	02/07/07	3770.91	63.75	71.50	3706.23	7.75	5.50	1042.70
	02/09/07	3770.91	63.90	71.48	3706.10	7.58	0.00	1042.70
	02/13/07	3770.91	63.89	76.48	3705.51	12.59	0.00	1042.70
	02/16/07	3770.91	63.89	74.46	3705.75	10.57	0.00	1042.70
	02/19/07	3770.91	63.87	71.48	3706.13	7.61	0.00	1042.70
	02/21/07	3770.91	63.90	71.49	3706.10	7.59	0.00	1042.70
	02/26/07	3770.91	63.95	71.53	3706.05	7.58	0.00	1042.70
	03/01/07	3770.91	63.96	71.55	3706.04	7.59	0.00	1042.70



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/LPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface (Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
NMV-2	03/06/07	3770.91	63.90	71.49	3706.10	7.59	0.00	1042.70
	03/09/07	3770.91	63.91	71.65	3706.07	7.74	0.00	1042.70
	03/13/07	3770.91	63.95	71.53	3706.05	7.58	7.00	1049.70
	03/23/07	3770.91	63.97	71.53	3706.03	7.56	0.00	1049.70
	03/27/07	3768.35	63.86	71.54	3703.57	7.68	0.00	1049.70
	04/06/07		64.03	71.59	3703.41	7.56	0.00	1049.70
	04/11/07		64.03	71.57	3703.42	7.54	0.00	1049.70
	04/17/07		64.03	71.50	3703.42	7.47	4.00	1053.70
	04/19/07		64.04	71.50	3703.41	7.46	6.00	1059.70
	04/24/07		64.05	71.61	3703.39	7.56	5.00	1064.70
	05/01/07		64.05	71.67	3703.39	7.62	0.00	1064.70
	05/21/07		64.11	71.67	3703.33	7.56	0.00	1064.70
	05/24/07		64.15	73.84	3703.04	9.69	8.00	1072.70
	06/28/07		64.28	71.82	3703.17	7.54	0.00	1072.70
	08/07/07		64.21	71.26	3703.29	7.05	7.00	1079.70
	08/17/07		65.34	73.88	3701.99	8.54	8.00	1087.70
	08/23/07		64.27	71.75	3703.18	7.48	5.00	1092.70
	08/31/07		64.28	71.76	3703.17	7.48	7.00	1099.70
	09/21/07		64.37	71.84	3703.08	7.47	7.50	1107.20
	09/28/07		64.36	71.84	3703.09	7.48	8.50	1115.70
	10/11/07		64.42	71.87	3703.04	7.45	7.00	1122.70
	10/18/07		64.44	71.89	3703.02	7.45	7.00	1129.70
	11/13/07		65.40	71.98	3702.16	6.58	0.00	1129.70
	11/27/07		64.57	72.05	3702.88	7.48	0.00	1129.70
	12/13/07		64.65	72.12	3702.80	7.47	7.00	1136.70
	12/17/07		64.67	72.12	3702.79	7.45	0.00	1136.70
	12/31/07		64.42	72.18	3703.00	7.76	7.00	1143.70
	01/16/08		64.47	72.21	3702.95	7.74	7.50	1151.20
	03/05/08		64.92	72.36	3702.54	7.44	0.00	1151.20
	03/26/08		64.99	72.40	3702.47	7.41	0.00	1151.20
	04/02/08		65.04	72.47	3702.42	7.43	0.00	1151.20



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALONPIPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-2	04/04/08	65.03	72.48	3702.43	7.45	7.00	1158.20	1158.20
	04/24/08	65.08	72.53	3702.38	7.45	0.00		1158.20
	05/06/08	65.16	72.59	3702.30	7.43	0.00		1158.20
	05/27/08	65.32	72.32	3702.19	7.00	0.00		1158.20
	06/04/08	65.32	72.73	3702.14	7.41	6.00		1164.20
	06/24/08	65.49	72.90	3701.97	7.41	0.00		1164.20
	07/02/08	65.56	72.95	3701.90	7.39	0.00		1164.20
	07/15/08	65.65	73.04	3701.81	7.39	0.00		1164.20
	07/22/08	65.71	73.06	3701.76	7.35	0.00		1164.20
	07/31/08	66.82	73.17	3700.77	6.35	0.00		1164.20
	08/07/08	65.91	73.25	3701.56	7.34	0.00		1164.20
	08/29/08	65.30	72.63	3702.17	7.33	0.00		1164.20
	09/16/08	65.33	72.69	3702.14	7.36	0.00		1164.20
	12/16/08	66.02	70.54	3701.79	4.52	0.00		1164.20
MW-3	10/29/04	3769.96	62.90	72.15	3705.95	9.25	7.00	7.00
	11/04/04	3769.96	60.05	70.21	3708.69	10.16	21.00	28.00
	11/10/04	3769.96	60.19	70.25	3708.56	10.06	9.00	37.00
	11/17/04	3769.96	60.34	70.26	3708.43	9.92	8.00	45.00
	11/24/04	3769.96	60.50	70.26	3708.29	9.76	8.00	53.00
	12/02/04	3769.96	60.52	70.10	3708.29	9.58	8.00	61.00
	12/08/04	3769.96	60.48	70.02	3708.34	9.54	7.00	68.00
	12/15/04	3769.96	60.68	70.22	3708.14	9.54	8.00	76.00
	12/27/04	3769.96	60.81	70.39	3708.00	9.58	8.00	84.00
	12/29/04	3769.96	60.78	70.39	3708.03	9.61	8.00	92.00
	01/06/05	3769.96	60.91	70.40	3707.91	9.49	9.00	101.00
	01/13/05	3769.96	61.04	70.46	3707.79	9.42	9.00	110.00
	01/19/05	3769.96	61.04	70.46	3707.79	9.42	9.00	119.00
	01/26/05	3769.96	61.11	70.56	3707.72	9.45	9.00	128.00
	02/02/05	3769.96	61.17	70.58	3707.66	9.41	7.00	135.00
	02/09/05	3769.96	61.28	70.55	3707.57	9.27	8.00	143.00



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALONPIPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MMW-3	02/16/05	3769.96	61.19	70.54	3707.65	9.35	8.00	151.00
	02/24/05	3769.96	61.21	70.55	3707.63	9.34	8.00	159.00
	03/03/05	3769.96	61.21	70.57	3707.63	9.36	8.00	167.00
	03/11/05	3769.96	61.19	70.45	3707.66	9.26	10.00	177.00
	03/18/05	3769.96	61.31	70.55	3707.54	9.24	8.00	185.00
	04/01/05	3769.96	61.38	70.58	3707.48	9.20	8.00	193.00
	04/07/05	3769.96	61.35	70.54	3707.51	9.19	8.00	201.00
	05/18/05	3769.96	61.45	70.60	3707.41	9.15	8.50	209.50
	05/23/05	3769.96	61.49	70.60	3707.38	9.11	9.00	218.50
	05/26/05	3769.96	61.53	70.64	3707.34	9.11	8.00	226.50
	06/01/05	3769.96	61.51	70.90	3707.32	9.39	9.00	235.50
	06/03/05	3769.96	61.51	70.59	3707.36	9.08	8.00	243.50
	06/07/05	3769.96	61.55	70.65	3707.32	9.10	8.00	251.50
	06/10/05	3769.96	61.54	70.61	3707.33	9.07	8.00	259.50
	06/13/05	3769.96	61.55	70.63	3707.32	9.08	9.50	269.00
	06/16/05	3769.96	61.56	70.60	3707.32	9.04	8.50	277.50
	06/20/05	3769.96	61.58	70.66	3707.29	9.08	9.00	286.50
	06/22/05	3769.96	61.60	70.75	3707.26	9.15	8.00	294.50
	06/29/05	3769.96	61.59	70.69	3707.28	9.10	10.00	304.50
	07/01/05	3769.96	61.62	70.74	3707.25	9.12	10.00	314.50
	07/06/05	3769.96	61.65	70.66	3707.23	9.01	10.00	324.50
	07/08/05	3769.96	61.63	70.64	3707.25	9.01	8.00	332.50
	07/12/05	3769.96	61.65	70.85	3707.21	9.20	9.00	341.50



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/LPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
WNV-3	07/14/05	3769.96	61.64	70.67	3707.24	9.03	9.00	350.50
	07/19/05	3769.96	61.65	70.71	3707.22	9.06	9.00	359.50
	07/21/05	3769.96	61.68	70.74	3707.19	9.06	9.00	368.50
	07/26/05	3769.96	61.69	70.73	3707.19	9.04	9.00	377.50
	07/28/05	3769.96	61.70	70.71	3707.18	9.01	10.00	387.50
	08/02/05	3769.96	60.70	70.75	3708.05	10.05	9.00	396.50
	08/04/05	3769.96	61.72	70.73	3707.16	9.01	9.00	405.50
	08/09/05	3769.96	61.72	70.77	3707.15	9.05	9.00	414.50
	08/11/05	3769.96	61.73	70.75	3707.15	9.02	9.00	423.50
	08/16/05	3769.96	61.75	70.79	3707.13	9.04	9.00	432.50
	08/18/05	3769.96	61.74	70.76	3707.14	9.02	9.00	441.50
	08/24/05	3769.96	61.76	70.86	3707.11	9.10	9.00	450.50
	08/26/05	3769.96	61.68	70.79	3707.19	9.11	10.00	460.50
	08/30/05	3769.96	61.74	70.77	3707.14	9.03	8.00	468.50
	09/01/05	3769.96	61.66	70.76	3707.21	9.10	9.00	477.50
	09/06/05	3769.96	61.75	70.81	3707.12	9.06	9.00	486.50
	09/08/05	3769.96	61.76	70.79	3707.12	9.03	9.00	495.50
	09/13/05	3769.96	61.76	70.83	3707.11	9.07	9.00	504.50
	09/16/05	3769.96	61.79	70.85	3707.08	9.06	9.00	513.50
	09/20/05	3769.96	61.81	70.80	3707.07	8.99	9.00	522.50
	09/23/05	3769.96	61.82	70.88	3707.05	9.06	9.00	531.50
	09/27/05	3769.96	61.80	70.88	3707.07	9.08	9.00	540.50
	09/29/05	3769.96	61.81	70.86	3707.06	9.05	9.00	549.50
	10/04/05	3769.96	61.81	70.83	3707.07	9.02	9.00	558.50
	10/06/05	3769.96	61.87	70.91	3707.01	9.04	9.00	567.50
	10/11/05	3769.96	61.84	70.91	3707.03	9.07	9.00	576.50
	10/13/05	3769.96	61.84	70.90	3707.03	9.06	9.00	585.50
	10/18/05	3769.96	61.84	70.92	3707.03	9.08	9.00	594.50
	10/21/05	3769.96	61.88	70.95	3706.99	9.07	9.00	603.50
	10/26/05	3769.96	61.86	70.97	3707.01	9.11	9.00	612.50



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOCD REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LP PROJECT NUMBER: PLAINS007SPL**

WELL ID	DATE GAUGED	Relative Top of Casing Elevation [Feet]*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-3	10/28/05	3769.96	61.86	70.95	3707.01	9.09	9.00	621.50
	11/01/05	3769.96	61.89	70.98	3706.98	9.09	9.00	630.50
	11/04/05	3769.96	61.90	70.97	3706.97	9.07	10.00	640.50
	11/09/05	3769.96	61.93	71.02	3706.94	9.09	9.00	649.50
	11/11/05	3769.96	61.90	71.03	3706.96	9.13	9.00	658.50
	11/16/05	3769.96	61.96	71.04	3706.91	9.08	9.00	667.50
	11/18/05	3769.96	61.66	71.01	3707.18	9.35	9.00	676.50
	11/22/05	3769.96	61.96	71.04	3706.91	9.08	9.00	685.50
	11/30/05	3769.96	62.00	71.06	3706.87	9.06	10.00	695.50
	12/02/05	3769.96	62.00	71.05	3706.87	9.05	9.00	704.50
	12/06/05	3769.96	61.97	71.06	3706.90	9.09	9.00	713.50
	12/14/05	3769.96	62.02	71.08	3706.85	9.06	9.00	722.50
	12/16/05	3769.96	62.03	71.05	3706.85	9.02	9.00	731.50
	12/21/05	3769.96	62.03	71.07	3706.85	9.04	11.00	742.50
	12/23/05	3769.96	62.06	71.06	3706.82	9.00	9.00	751.50
	12/27/05	3769.96	62.07	71.11	3706.81	9.04	10.00	761.50
	12/30/05	3769.96	62.09	71.06	3706.79	8.97	10.00	771.50
	01/03/06	3769.96	62.10	71.11	3706.78	9.01	10.00	781.50
	01/05/06	3769.96	62.09	71.10	3706.79	9.01	10.00	791.50
	01/11/06	3769.96	62.10	71.14	3706.78	9.04	10.00	801.50
	01/13/06	3769.96	62.17	71.15	3706.71	8.98	10.00	811.50
	01/16/06	3769.96	62.11	71.13	3706.77	9.02	10.00	821.50
	01/20/06	3769.96	62.18	71.14	3706.70	8.96	10.00	831.50
	01/24/06	3769.96	62.20	71.20	3706.68	9.00	10.00	841.50
	01/26/06	3769.96	62.19	71.21	3706.69	9.02	9.00	850.50
	02/02/06	3769.96	62.15	71.15	3706.73	9.00	3.00	853.50
	02/08/06	3769.96	62.17	71.15	3706.71	8.98	10.00	863.50
	02/10/06	3769.96	62.16	71.13	3706.72	8.97	10.00	873.50
	02/14/06	3769.96	62.20	71.20	3706.68	9.00	10.00	883.50
	02/16/06	3769.96	62.23	71.20	3706.65	8.97	8.00	891.50



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON PIPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-3	02/21/06	3769.96	62.23	71.21	3706.65	8.98	8.00	898.50
	02/24/06	3769.96	62.26	71.21	3706.63	8.95	7.50	907.00
	02/28/06	3769.96	62.21	71.50	3706.64	9.29	0.00	907.00
	03/03/06	3769.96	62.25	71.25	3706.63	9.00	8.50	915.50
	03/06/06	3769.96	62.22	71.20	3706.66	8.98	7.00	922.50
	03/08/06	3769.96	62.24	71.20	3706.64	8.96	8.50	931.00
	03/15/06	3769.96	62.28	71.23	3706.61	8.95	8.00	939.00
	03/17/06	3769.96	62.33	71.25	3706.56	8.92	10.00	949.00
	03/21/06	3769.96	62.30	71.27	3706.58	8.97	7.00	956.00
	03/23/06	3769.96	62.18	71.00	3706.72	8.82	7.00	963.00
	03/28/06	3769.96	62.30	71.25	3706.59	8.95	7.50	970.50
	03/30/06	3769.96	62.32	71.21	3706.57	8.89	7.00	977.50
	04/04/06	3769.96	62.34	71.27	3706.55	8.93	7.50	985.00
	04/07/06	3769.96	62.35	71.28	3706.54	8.93	0.00	985.00
	04/12/06	3769.96	62.35	71.29	3706.54	8.94	7.00	992.00
	04/14/06	3769.96	62.38	71.28	3706.51	8.90	7.00	998.00
	04/18/06	3769.96	62.23	71.27	3706.65	9.04	7.50	1006.50
	04/21/06	3769.96	62.40	71.31	3706.49	8.91	7.50	1014.00
	04/26/06	3769.96	62.34	71.28	3706.55	8.94	8.50	1022.50
	04/28/06	3769.96	62.38	71.26	3706.51	8.88	7.50	1030.00
	05/04/06	3769.96	62.38	71.30	3706.51	8.92	7.50	1037.50
	05/05/06	3769.96	62.42	71.31	3706.47	8.89	7.50	1045.00
	05/10/06	3769.96	62.45	71.35	3706.44	8.90	7.00	1052.00
	05/12/06	3769.96	62.44	71.31	3706.46	8.87	8.25	1060.25
	05/16/06	3769.96	62.46	71.35	3706.43	8.89	7.00	1067.25
	05/18/06	3769.96	62.45	71.33	3706.44	8.88	7.50	1074.75
	05/23/06	3769.96	62.45	71.38	3706.44	8.93	6.25	1081.00
	05/26/06	3769.96	62.49	71.36	3706.41	8.87	7.25	1088.25
	05/30/06	3769.96	62.46	71.37	3706.41	8.89	7.50	1095.75
	06/01/06	3769.96	62.49	71.35	3706.41	8.86	4.50	1100.25



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #**  
**NMOCD REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALONPIPE PROJECT NUMBER: PLAINS007SPL**

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-3	06/06/06	3769.96	62.50	71.37	3706.40	8.87	0.00	1100.25
	06/09/06	3769.96	62.48	71.38	3706.41	8.90	5.00	1105.25
	06/13/06	3769.96	62.50	71.40	3706.39	8.90	7.25	1112.50
	06/16/06	3769.96	62.57	71.43	3706.33	8.86	7.00	1119.50
	06/20/06	3769.96	62.51	71.39	3706.38	8.88	10.00	1129.50
	06/23/06	3769.96	62.19	70.78	3706.74	8.59	7.00	1136.50
	06/27/06	3769.96	62.54	71.40	3706.36	8.86	7.50	1144.00
	06/30/06	3769.96	62.54	71.40	3706.36	8.86	7.50	1151.50
	07/05/06	3769.96	62.53	71.41	3706.36	8.88	7.00	1158.50
	07/07/06	3769.96	62.58	71.43	3706.32	8.85	6.00	1164.50
	07/11/06	3769.96	62.57	71.42	3706.33	8.85	6.50	1171.00
	07/13/06	3769.96	62.59	71.43	3706.31	8.84	8.00	1179.00
	07/18/06	3769.96	62.60	71.45	3706.30	8.85	7.00	1186.00
	07/21/06	3769.96	62.60	71.43	3706.30	8.83	7.00	1193.00
	07/25/06	3769.96	62.60	71.45	3706.30	8.85	6.00	1199.00
	07/27/06	3769.96	62.61	71.44	3706.29	8.83	7.50	1206.50
	08/01/06	3769.96	62.74	71.48	3706.17	8.74	6.00	1212.50
	08/03/06	3769.96	62.66	71.47	3706.24	8.81	5.50	1218.00
	08/09/06	3769.96	62.67	71.50	3706.23	8.83	7.00	1225.00
	08/11/06	3769.96	62.66	71.47	3706.24	8.81	6.50	1231.50
	08/15/06	3769.96	62.70	71.55	3706.20	8.85	6.50	1238.00
	08/18/06	3769.96	62.70	71.52	3706.20	8.82	5.00	1243.00
	08/25/06	3769.96	62.73	71.58	3706.17	8.85	7.00	1250.00
	08/30/06	3769.96	62.44	71.60	3706.42	9.16	7.50	1257.50
	09/12/06	3769.96	NM	NM			0.00	1257.50
	09/15/06	3769.96	62.70	71.65	3706.19	8.95	5.00	1262.50
	09/20/06	3769.96	62.72	71.63	3706.17	8.91	7.00	1269.50
	09/26/06	3769.96	62.75	71.65	3706.14	8.90	7.50	1277.00
	09/29/06	3769.96	62.77	71.68	3706.12	8.91	0.00	1277.00
	10/04/06	3769.96	62.71	71.72	3706.17	9.01	8.00	1285.00



TABLE 1  
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PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALONPIPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation [Feet]*	Depth to PSH Below Top of Casing [Feet]	Depth to Water Below Top of Casing [Feet]	Adjusted Potentiometric Surface[Feet]*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-3	10/06/06	3769.96	62.81	71.68	3706.09	8.87	6.50	1291.50
	10/12/06	3769.96	62.82	71.71	3706.07	8.89	7.00	1298.50
	10/17/06	3769.96	62.82	71.73	3706.07	8.91	0.00	1298.50
	10/20/06	3769.96	62.82	71.73	3706.07	8.91	0.00	1298.50
	10/24/06	3769.96	62.80	71.71	3706.09	8.91	0.00	1298.50
	10/26/06	3769.96	62.80	71.74	3706.09	8.94	0.00	1298.50
	11/22/06	3769.96	62.95	71.83	3705.94	8.88	7.00	1305.50
	11/28/06	3769.96	62.95	71.80	3705.95	8.85	7.00	1312.50
	12/05/06	3769.96	63.05	71.90	3705.85	8.85	8.00	1320.50
	12/08/06	3769.96	62.82	71.00	3706.16	8.18	8.00	1328.50
	12/12/06	3769.96	63.02	71.80	3705.89	8.78	7.50	1336.00
	12/15/06	3769.96	62.80	71.74	3706.09	8.94	7.00	1343.00
	12/20/06	3769.96	NM	NM			0.00	1343.00
	12/22/06	3769.96	63.06	71.90	3705.84	8.84	0.00	1343.00
	12/27/06	3769.96	63.02	71.92	3705.87	8.90	0.00	1343.00
	01/03/07	3769.96	63.12	71.98	3705.78	8.86	0.00	1343.00
	01/05/07	3769.96	63.09	71.04	3705.92	7.95	0.00	1343.00
	01/12/07	3769.96	63.16	72.02	3705.74	8.86	7.00	1350.00
	01/15/07	3769.96	63.18	71.80	3705.75	8.62	0.00	1350.00
	01/18/07	3769.96	63.18	72.04	3705.72	8.86	6.00	1356.00
	01/31/07	3769.96	63.19	72.04	3705.71	8.85	0.00	1356.00
	02/07/07	3769.96	63.10	71.45	3705.86	8.35	6.50	1362.50
	02/09/07	3769.96	63.21	72.07	3705.69	8.86	0.00	1362.50
	02/13/07	3769.96	63.22	72.07	3705.68	8.85	0.00	1362.50
	02/16/07	3769.96	62.23	72.07	3706.55	9.84	0.00	1362.50
	02/19/07	3769.96	63.22	72.08	3705.58	8.86	0.00	1362.50
	02/21/07	3769.96	63.22	72.11	3705.67	8.89	0.00	1362.50
	02/26/07	3769.96	65.23	72.11	3703.90	6.88	0.00	1362.50
	03/01/07	3769.96	63.27	72.08	3705.63	8.81	0.00	1362.50
	03/06/07	3769.96	63.23	72.24	3705.65	9.01	0.00	1362.50
	03/09/07	3769.96	63.25	72.09	3705.65	8.84	0.00	1362.50



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PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/LPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MNW-3	03/23/07	3769.96	63.30	72.12	3705.60	8.82	0.00	1362.50
	03/27/07	3767.24	63.31	72.31	3702.85	9.00	0.00	1362.50
	04/06/07	63.35	72.18	3702.83	8.83	0.00	0.00	1362.50
	04/11/07	66.13	73.17	3700.27	7.04	0.00	0.00	1362.50
	04/17/07	63.35	72.18	3702.83	8.83	6.00	6.00	1368.50
	04/19/07	63.38	72.18	3702.80	8.80	7.00	7.00	1375.50
	04/24/07	63.36	72.19	3702.82	8.83	6.00	6.00	1381.50
	05/01/07	63.41	72.21	3702.77	8.80	0.00	0.00	1381.50
	05/21/07	63.43	72.25	3702.75	8.82	0.00	0.00	1381.50
	05/24/07	63.48	72.26	3702.71	8.78	7.00	7.00	1388.50
	06/28/07	63.58	72.40	3702.60	8.82	0.00	0.00	1388.50
	08/07/07	63.52	72.36	3702.66	8.84	8.00	8.00	1396.50
	08/17/07	63.61	72.38	3702.58	8.77	8.00	8.00	1404.50
	08/23/07	63.58	72.34	3702.61	8.76	10.50	10.50	1415.00
	08/31/07	63.92	72.36	3702.31	8.44	3.00	3.00	1418.00
	09/21/07	63.71	72.44	3702.48	8.73	8.50	8.50	1426.50
	09/28/07	63.69	72.43	3702.50	8.74	8.50	8.50	1435.00
	10/11/07	63.43	72.48	3702.72	9.05	9.00	9.00	1444.00
	10/18/07	63.77	72.48	3702.42	8.71	8.50	8.50	1452.50
	11/13/07	63.83	72.56	3702.36	8.73	0.00	0.00	1452.50
	11/27/07	63.87	72.61	3702.32	8.74	0.00	0.00	1452.50
	12/13/07	63.98	72.70	3702.21	8.72	8.50	8.50	1461.00
	12/17/07	64.00	72.72	3702.19	8.72	0.00	0.00	1461.00
	12/31/07	64.05	72.73	3702.15	8.68	8.00	8.00	1469.00
	01/16/08	64.08	72.77	3702.12	8.69	8.00	8.00	1477.00
	03/05/08	64.25	72.93	3701.95	8.68	0.00	0.00	1477.00
	03/26/08	64.30	72.96	3701.90	8.66	0.00	0.00	1477.00
	04/02/08	64.34	73.03	3701.86	8.69	0.00	0.00	1477.00
	04/04/08	64.36	73.05	3701.84	8.69	0.00	0.00	1477.00
	04/24/08	64.40	73.01	3701.81	8.61	0.00	0.00	1477.00
	05/06/08	64.45	73.04	3701.76	8.59	0.00	0.00	1477.00



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/LPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-3	05/27/08	64.63	73.29	3701.57	8.66	0.00	1477.00	
	06/04/08	64.75	73.32	3701.46	8.57	8.50	1485.50	
	06/24/08	64.79	73.45	3701.41	8.66	0.00	1485.50	
	07/02/08	64.87	73.52	3701.33	8.65	0.00	1485.50	
	07/15/08	64.47	73.61	3701.67	9.14	0.00	1485.50	
	07/22/08	65.04	73.66	3701.17	8.62	0.00	1485.50	
	07/31/08	65.12	73.75	3701.08	8.63	0.00	1485.50	
	08/07/08	65.23	73.83	3700.98	8.60	0.00	1485.50	
	08/29/08	64.61	73.22	3701.60	8.61	0.00	1485.50	
	09/16/08	64.71	72.97	3701.54	8.26	0.00	1485.50	
	12/16/08	64.90	73.13	3701.35	8.23	0.00	1485.50	
<hr/>								
MW-4A	11/08/07	Installed Well						
	11/13/07	3770.64	68.70	68.94	3701.91	0.24		
	11/27/07		68.61	69.88	3701.88	1.27		
	12/13/07		68.38	80.2	3700.84	11.82	11.50	11.50
	12/17/07		68.62	70.38	3701.81	1.76	0.00	11.50
	12/31/07		68.16	72.71	3701.93	4.55	4.00	15.50
	01/16/08		68.23	72.63	3701.88	4.40	4.00	19.50
	03/05/08		67.58	76.52	3701.99	8.94	0.00	19.50
	03/26/08		67.64	76.58	3701.93	8.94	0.00	19.50
	04/02/08		67.72	76.63	3701.85	8.91	0.00	19.50
	04/04/08		67.70	76.64	3701.87	8.94	8.50	28.00
	04/24/08		67.76	76.66	3701.81	8.90	0.00	28.00
	05/06/08		67.84	76.72	3701.73	8.88	0.00	28.00
	05/27/08		67.94	76.84	3701.63	8.90	0.00	28.00
	06/24/08		68.11	76.99	3701.46	8.88	0.00	28.00
	07/02/08		68.19	77.08	3701.38	8.89	0.00	28.00
	07/15/08		68.67	75.45	3701.16	6.78	0.00	28.00
	07/22/08		69.28	72.85	3700.93	3.57	0.00	28.00
	07/31/08		69.45	72.68	3700.80	3.23	0.00	28.00



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SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALONPIPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	Cumulative Recovery (gallons)
MW-4A	08/07/08	69.54	72.42	3700.75	2.88	0.00	28.00	
	08/29/08	64.78	74.41	3704.70	9.63	0.00	28.00	
	09/16/08	68.12	76.21	3701.55	8.09	0.00	28.00	
	12/16/08	68.32	76.38	3701.35	8.06	0.00	28.00	
MW-5								
	11/06/07	Installed Well						
	11/13/07	3768.85	66.26	67.62	3702.43	1.36		
	11/27/07		65.36	70.91	3702.82	5.55		
	12/13/07		65.26	72.21	3702.76	6.95		
	12/17/07		65.20	72.17	3702.81	6.97	0.00	6.50
	12/31/07		65.21	72.29	3702.79	7.08	6.50	13.00
	01/16/08		65.28	72.37	3702.72	7.09	7.00	20.00
	03/05/08		65.41	72.50	3702.59	7.09	0.00	20.00
	03/26/08		65.48	72.52	3702.53	7.04	0.00	20.00
	04/02/08		65.55	72.61	3702.45	7.06	0.00	20.00
	04/04/08		65.56	72.63	3702.44	7.07	7.00	27.00
	04/24/08		65.61	72.64	3702.40	7.03	0.00	27.00
	05/06/08		65.67	72.69	3702.34	7.02	0.00	27.00
	05/27/08		65.81	72.86	3702.19	7.05	0.00	27.00
	06/04/08		65.82	72.88	3702.18	7.06	5.50	32.50
	06/24/08		65.99	73.02	3702.02	7.03	0.00	32.50
	07/02/08		66.04	73.08	3701.97	7.04	0.00	32.50
	07/15/08		66.14	73.18	3701.87	7.04	0.00	32.50
	07/22/08		66.21	73.18	3701.80	6.97	0.00	32.50
	07/31/08		66.30	73.27	3701.71	6.97	0.00	32.50
	08/07/08		66.39	73.34	3701.63	6.95	0.00	32.50
	08/29/08		65.79	72.74	3702.23	6.95	0.00	32.50
	10/07/08		66.26	70.89	3702.03	4.63	0.00	32.50
	12/16/08		66.18	72.42	3701.92	6.24	0.00	32.50



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCID REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/LPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-6	11/06/07	Installed Well						
	11/13/07	3769.50	66.27	75.46	3702.13	9.19		
	11/27/07		66.08	75.29	3702.31	9.21		
	12/13/07		66.10	75.36	3702.29	9.26	9.00	9.00
	12/17/07		66.16	75.39	3702.23	9.23	0.00	9.00
	12/31/07		66.19	75.42	3702.20	9.23	9.00	18.00
	01/16/08		66.26	75.48	3702.13	9.22	9.00	27.00
	03/05/08		66.40	75.61	3701.99	9.21	0.00	27.00
	03/26/08		66.47	75.65	3701.93	9.18	0.00	27.00
	04/02/08		66.52	75.71	3701.88	9.19	0.00	27.00
	04/04/08		66.51	75.72	3701.88	9.21	9.00	36.00
	04/24/08		66.59	75.75	3701.81	9.16	0.00	36.00
	05/06/08		66.65	75.83	3701.75	9.18	0.00	36.00
	05/27/08		66.76	75.95	3701.64	9.19	0.00	36.00
	06/04/08		66.85	76.03	3701.55	9.18	0.00	36.00
	06/24/08		66.93	76.11	3701.47	9.18	0.00	36.00
	07/02/08		67.02	76.09	3701.39	9.07	0.00	36.00
	07/15/08		67.11	76.26	3701.29	9.15	0.00	36.00
	07/22/08		67.16	76.30	3701.24	9.14	0.00	36.00
	07/31/08		67.28	76.41	3701.12	9.13	0.00	36.00
	08/07/08		67.35	76.48	3701.05	9.13	0.00	36.00
	08/29/08		66.77	75.88	3701.64	9.11	0.00	36.00
	09/16/08		66.83	75.97	3701.57	9.14	0.00	36.00
	12/16/08		67.08	75.77	3701.38	8.69	0.00	36.00



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOCD REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LP PROJECT NUMBER: PLAINS007SPL**

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-7	11/06/07	Installed Well						
	11/13/07	3770.20	68.16	70.54	3701.75	2.38		
	11/27/07	67.51	73.93	3701.92	6.42			
	12/13/07	67.30	75.02	3701.97	7.72	7.50	7.50	
	12/17/07	67.68	73.56	3701.81	5.88	0.00	7.50	
	12/31/07	67.37	75.08	3701.90	7.71	7.00	14.50	
	01/16/08	67.74	75.61	3701.52	7.87	5.50	20.00	
	03/05/08	67.56	75.39	3701.70	7.83	0.00	20.00	
	03/26/08	67.79	74.66	3701.59	6.87	0.00	20.00	
	04/02/08	67.69	75.30	3701.60	7.61	0.00	20.00	
	04/04/08	67.70	75.31	3701.59	7.61	7.00	27.00	
	04/24/08	67.77	75.36	3701.52	7.59	0.00	27.00	
	05/06/08	67.84	75.43	3701.45	7.59	0.00	27.00	
	05/27/08	67.94	75.69	3701.33	7.75	0.00	27.00	
	06/04/08	68.00	75.78	3701.27	7.78	7.50	34.50	
	06/24/08	68.04	75.66	3701.25	7.62	0.00	34.50	
	07/02/08	68.19	75.88	3701.09	7.69	0.00	34.50	
	07/15/08	68.47	75.11	3700.93	6.64	0.00	34.50	
	07/22/08	69.13	72.37	3700.68	3.24	0.00	34.50	
	07/31/08	68.88	74.13	3700.69	5.25	0.00	34.50	
	08/07/08	69.25	72.76	3700.53	3.51	0.00	34.50	
	08/29/08	68.04	75.22	3701.30	7.18	0.00	34.50	
	09/16/08	68.09	75.37	3701.24	7.28	0.00	34.50	
	12/16/08	69.38	70.35	3700.70	0.97	0.00	34.50	



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALONPIPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
	11/06/07	3768.09	65.52	73.36	3701.63	7.84		
	11/13/07		67.01	72.16	3700.46	5.15		
	11/27/07		63.26	73.17	3703.64	9.91	9.50	9.50
	12/13/07		65.29	73.18	3701.85	7.89	0.00	9.50
	12/17/07		65.36	73.24	3701.78	7.88	7.00	16.50
	12/31/07		65.38	73.27	3701.76	7.89	7.50	24.00
	01/16/08		65.53	73.45	3701.61	7.92	0.00	24.00
	03/05/08		65.61	73.47	3701.54	7.86	0.00	24.00
	03/26/08		65.65	73.54	3701.49	7.89	0.00	24.00
	04/02/08		65.67	73.54	3701.48	7.87	7.50	31.50
	04/04/08		65.71	73.62	3701.43	7.91	0.00	31.50
	04/24/08		65.79	73.7	3701.35	7.91	0.00	31.50
	05/06/08		65.90	73.83	3701.24	7.93	0.00	31.50
	05/27/08		65.94	73.87	3701.20	7.93	7.50	39.00
	06/04/08		66.06	73.98	3701.08	7.92	0.00	39.00
	06/24/08		66.15	74.09	3700.99	7.94	0.00	39.00
	07/02/08		66.24	74.16	3700.90	7.92	0.00	39.00
	07/15/08		66.29	74.19	3700.86	7.90	0.00	39.00
	07/22/08		66.41	74.31	3700.73	7.90	0.00	39.00
	07/31/08		66.48	74.37	3700.66	7.89	0.00	39.00
	08/07/08		65.90	73.80	3701.24	7.90	0.00	39.00
	08/29/08		66.04	74.68	3701.01	8.64	0.00	39.00
	09/16/08		66.15	73.92	3701.01	7.77	0.00	39.00
	12/16/08							



TABLE 1  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOC REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS007SPL**

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-9	11/07/07	Installed Well						
	11/13/07	3767.64	64.07	72.74	3702.53	8.67		
	11/27/07		65.72	72.38	3701.12	6.66		
	12/13/07		64.17	73.11	3702.40	8.94	8.50	8.50
	12/17/07		64.21	73.06	3702.37	8.85	0.00	8.50
	12/31/07		64.23	73.06	3702.35	8.83	8.00	16.50
	01/16/08		64.28	73.16	3702.29	8.88	8.50	25.00
	03/05/08		64.44	73.30	3702.14	8.86	0.00	25.00
	03/26/08		64.49	73.31	3702.09	8.82	0.00	25.00
	04/02/08		64.54	73.39	3702.04	8.85	0.00	25.00
	04/04/08		64.56	73.40	3702.02	8.84	0.00	25.00
	04/24/08		64.59	73.44	3701.99	8.85	0.00	25.00
	05/06/08		64.66	73.51	3701.92	8.85	0.00	25.00
	05/27/08		64.80	73.63	3701.78	8.83	0.00	25.00
	06/04/08		64.82	73.68	3701.76	8.86	8.00	33.00
	06/24/08		64.97	73.81	3701.61	8.84	0.00	33.00
	07/02/08		65.05	73.89	3701.53	8.84	0.00	33.00
	07/15/08		65.14	73.98	3701.44	8.84	0.00	33.00
	07/22/08		65.21	74.03	3701.37	8.82	0.00	33.00
	07/31/08		65.32	74.12	3701.26	8.80	0.00	33.00
	08/07/08		65.41	74.21	3701.17	8.80	0.00	33.00
	08/29/08		64.78	73.59	3701.80	8.81	0.00	33.00
	09/16/08		64.80	73.64	3701.78	8.84	0.00	33.00
	12/16/08		65.06	73.48	3701.57	8.42	0.00	33.00



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/ILP PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)* Installed Well	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-10	11/13/07	3767.51	64.94	66.57	3702.37	1.63		
	11/27/07		64.05	71.04	3702.62	6.99		
	12/13/07		63.92	72.03	3702.62	8.11	8.00	8.00
	12/17/07		63.96	72.02	3702.58	8.06	0.00	8.00
	12/31/07		63.94	72.09	3702.59	8.15	8.00	16.00
	01/16/08		64.03	72.17	3702.50	8.14	8.00	24.00
	03/05/08		64.19	72.32	3702.34	8.13	0.00	24.00
	03/26/08		64.24	72.35	3702.30	8.11	0.00	24.00
	04/02/08		64.29	72.42	3702.24	8.13	0.00	24.00
	04/04/08		64.30	72.41	3702.24	8.11	8.00	32.00
	04/24/08		64.33	72.47	3702.20	8.14	0.00	32.00
	05/06/08		64.41	72.55	3702.12	8.14	0.00	32.00
	05/27/08		64.57	72.69	3701.97	8.12	0.00	32.00
	06/04/08		64.58	72.73	3701.95	8.15	6.00	38.00
	06/24/08		64.73	72.85	3701.81	8.12	0.00	38.00
	07/02/08		64.81	72.92	3701.73	8.11	0.00	38.00
	07/15/08		64.90	73.02	3701.64	8.12	0.00	38.00
	07/22/08		64.97	73.08	3701.57	8.11	0.00	38.00
	07/31/08		65.07	73.15	3701.47	8.08	0.00	38.00
	08/07/08		65.17	73.22	3701.37	8.05	0.00	38.00
	08/29/08		64.53	72.67	3702.00	8.14	0.00	38.00
	09/16/08		64.57	72.74	3701.96	8.17	0.00	38.00
	12/16/08		65.06	71.39	3701.69	6.33	0.00	38.00



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALONPIPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-11	11/07/07	Installed Well						
	11/13/07	3769.37	66.58	68.13	3702.60	1.55		
	11/27/07		65.36	72.38	3703.17	7.02		
	12/13/07		65.39	72.82	3703.09	7.43	7.00	7.00
	12/17/07		64.46	72.84	3703.90	8.38	0.00	7.00
	12/31/07		65.77	72.90	3702.74	7.13	7.00	14.00
	01/16/08		65.86	72.99	3702.65	7.13	7.00	21.00
	03/05/08		65.98	73.10	3702.54	7.12	0.00	21.00
	03/26/08		66.04	73.17	3702.47	7.13	0.00	21.00
	04/02/08		66.10	73.24	3702.41	7.14	0.00	21.00
	04/04/08		66.10	73.25	3702.41	7.15	7.00	28.00
	04/24/08		66.14	73.26	3702.38	7.12	0.00	28.00
	05/06/08		66.22	73.33	3702.30	7.11	0.00	28.00
	05/27/08		66.37	73.37	3702.16	7.00	0.00	28.00
	06/24/08		66.54	73.64	3701.98	7.10	0.00	28.00
	07/02/08		66.61	73.69	3701.91	7.08	0.00	28.00
	07/15/08		66.72	73.77	3701.80	7.05	0.00	28.00
	07/22/08		66.77	73.80	3701.76	7.03	0.00	28.00
	07/31/08		66.86	73.89	3701.67	7.03	0.00	28.00
	08/07/08		66.97	73.98	3701.56	7.01	0.00	28.00
	08/29/08		66.35	73.29	3702.19	6.94	0.00	28.00
	09/16/08		66.40	73.28	3702.14	6.98	0.00	28.00
	12/16/08		66.67	73.35	3701.90	6.88	0.00	28.00



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCID REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/LPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-42	11/07/07	3769.68	67.36	68.13	3702.23	0.77		
	11/13/07		66.41	72.84	3702.50	6.43		
	11/27/07		66.16	73.31	3702.66	7.15	7.00	7.00
	12/13/08		66.22	74.29	3702.49	8.07	0.00	7.00
	12/17/07		66.23	74.36	3702.47	8.13	8.00	15.00
	12/31/07		66.41	74.53	3702.30	8.12	8.00	23.00
	01/16/08		66.44	74.58	3702.26	8.14	0.00	23.00
	03/05/08		66.49	74.63	3702.21	8.14	0.00	23.00
	03/26/08		66.57	74.71	3702.13	8.14	0.00	23.00
	04/02/08		66.59	74.7	3702.12	8.11	0.00	23.00
	04/04/08		66.61	74.73	3702.10	8.12	0.00	23.00
	05/06/08		66.68	74.8	3702.03	8.12	0.00	23.00
	05/27/08		66.82	74.92	3701.89	8.10	0.00	23.00
	06/24/08		67.00	75.09	3701.71	8.09	0.00	23.00
	07/02/08		67.07	75.17	3701.64	8.10	0.00	23.00
	07/15/08		67.17	75.23	3701.54	8.06	0.00	23.00
	07/22/08		67.22	75.24	3701.50	8.02	0.00	23.00
	07/31/08		67.33	75.33	3701.39	8.00	0.00	23.00
	08/07/08		67.42	75.4	3701.30	7.98	0.00	23.00
	08/29/08		66.82	74.78	3701.90	7.96	0.00	23.00
	09/16/08		66.88	73.40	3702.02	6.52	0.00	23.00
	12/16/08		67.12	74.78	3701.64	7.66	0.00	23.00



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/LPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-13	11/08/07	3771.14		69.50	3701.64			
	11/13/07			69.61	3701.53			
	11/27/07			69.66	3701.48			
	12/17/07			69.65	3701.49			
	12/19/07			69.74	3701.26	1.14	0.00	0.00
	03/05/08			69.73	3701.23	1.49	0.00	0.00
	03/26/08			69.45	3701.46	1.92	0.00	0.00
	04/02/08			69.46	3701.45	1.90	0.00	0.00
	04/04/08			69.74	3701.15	2.07	0.00	0.00
	04/12/08			69.79	3701.10	2.09	0.00	0.00
	05/06/08			69.82	3700.99	2.71	0.00	0.00
	05/27/08			69.85	3700.82	3.88	3.50	3.50
	06/04/08			70.25	3700.75	1.15	0.00	3.50
	06/24/08			70.29	3700.57	2.37	0.00	3.50
	07/02/08			70.53	3700.54	0.58	0.00	3.50
	07/15/08			70.60	3700.49	0.39	0.00	3.50
	07/22/08			70.69	3700.40	0.44	0.00	3.50
	07/31/08			70.75	3700.32	0.56	0.00	3.50
	08/07/08			70.13	3700.90	0.91	0.00	3.50
	08/29/08			70.10	3700.92	1.01	0.00	3.50
	09/16/08			70.48	3700.63	0.22	0.00	3.50
	12/16/08							



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/LPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-14	11/08/07	Installed Well					
	11/13/07	3771.62		70.34	3701.28		
	11/27/07			70.44	3701.18		
	12/17/07			70.48	3701.14		
	12/19/07			70.48	3701.14		
	03/05/08			70.78	3700.84		
	03/26/08			70.85	3700.77		
	04/02/08			70.74	3700.88		
	04/24/08			70.81	3700.81		
	05/27/08			70.87	3700.75		
	06/24/08			70.91	3700.71		
	08/29/08			71.12	3700.50		
	09/16/08			71.17	3700.45		
	12/16/08			71.35	3700.27		
MW-15	11/08/07	Installed Well					
	11/13/07	3771.49		69.94	3701.55		
	11/27/07			70.07	3701.75	0.37	
	12/13/07			69.74	3703.21	1.66	
	12/17/07			69.67	3701.71	0.92	
	12/31/08			69.68	3701.64	1.39	
	01/16/08			69.82	3701.48	1.60	
	03/05/08			68.97	3701.73	6.55	
	03/26/08			68.85	3701.75	7.42	
	04/02/08			68.88	3701.71	7.49	
	04/04/08			68.89	3701.70	7.47	
	04/24/08			68.92	3701.65	7.64	
	05/06/08			68.98	3701.59	7.65	
	05/27/08			69.09	3701.47	7.73	
	06/04/08			69.05	3701.50	7.87	7.00
	06/24/08			69.31	3701.30	7.36	7.00



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOCID REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS007SPL**

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface (Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-15	07/02/08	69.35	77.00	3701.22	7.65	0.00	7.00	
	07/15/08	69.50	76.85	3701.11	7.35	0.00	7.00	
	07/22/08	70.00	74.73	3700.92	4.73	0.00	7.00	
	07/31/08	70.02	75.22	3700.85	5.20	0.00	7.00	
	08/07/08	70.24	74.63	3700.72	4.39	0.00	7.00	
	08/29/08	69.15	76.49	3701.46	7.34	0.00	7.00	
	09/16/08	69.19	76.51	3701.42	7.32	0.00	7.00	
	12/16/08	70.47	71.82	3700.86	1.35	0.00	7.00	
<b>MW-16</b>								
	11/09/07	Installed Well						
	11/13/07	3769.23	68.22	3701.01				
	11/27/07		68.23	3701.00				
	12/11/07		68.32	3700.91				
	12/19/07		68.31	3700.92				
	03/05/08		68.63	3700.60				
	03/26/08		66.58	3702.65				
	04/02/08		68.59	3700.64				
	04/24/08		68.64	3700.59				
	05/27/08		68.71	3700.52				
	06/24/08		68.85	3700.38				
	08/29/08		68.96	3700.27				
	09/16/08		69.02	3700.21				
	12/16/08		69.17	3700.06				
<b>MW-17</b>								
	11/13/07	Installed Well						
	11/14/07	3767.45	64.61	3702.84				
	11/27/07		64.67	3702.78				
	12/11/07		64.41	3703.04				
	12/20/07		64.40	3703.05				
	03/05/08		65.02	3702.43				
	03/26/08		64.97	3702.48				



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOC REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS007SPL**

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH Thickness (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-17	04/02/08			64.99	3702.46			
	04/24/08			65.04	3702.41			
	05/27/08			70.87	3698.58			
	06/10/08			65.18	3702.27			
	06/24/08			65.19	3702.26			
	08/29/08			65.46	3701.99			
	09/16/08			65.41	3702.04			
	12/16/08			65.59	3701.86			
MW-18	11/13/07	Installed Well						
	11/14/07	3769.79		71.39	3698.49			
	11/27/07			67.03	3702.76			
	12/17/07			67.05	3702.74			
	12/20/07			67.03	3702.76			
	03/05/08			67.36	3702.43			
	03/26/08			67.31	3702.48			
	04/02/08			67.33	3702.46			
	04/24/08			67.38	3702.41			
	05/27/08			67.44	3702.35			
	06/24/08			67.49	3702.30			
	08/29/08			67.69	3702.10			
	09/16/08			67.74	3702.05			
	12/16/08			67.94	3701.85			
MW-19	11/13/07	Installed Well						
	11/14/07	3773.35		71.49	3701.86			
	11/27/07			71.32	3702.03			
	12/17/07			71.39	3701.96			
	12/20/07			71.38	3701.97			
	03/05/08			71.74	3701.61			
	03/26/08			71.67	3701.68			



TABLE 1  
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS  
PLAINS MARKETING, L.P. - SRS # 2002-10270  
8" MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/LPE PROJECT NUMBER: PLAINS007SPL

WELL ID	DATE GAUGED	Relative Top of Casing Elevation (Feet)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	Adjusted Potentiometric Surface(Feet)*	PSH THICKNESS (ft)	PSH Volume Recovered (gallons)	PSH Cumulative Recovery (gallons)
MW-19	04/02/08			71.65	3701.70			
	04/24/08			71.69	3701.66			
	05/27/08			71.81	3701.54			
	06/24/08			71.82	3701.53			
	08/29/08			72.03	3701.32			
	09/16/08			72.11	3701.24			
	12/16/08			70.30	3703.05			
	12/22/08			72.26	3701.09			
MW-20	11/13/07	Installed Well						
	11/14/07	3773.11		67.03	3706.08			
	11/27/07			71.64	3701.47			
	12/17/07			71.67	3701.44			
	12/20/07			71.66	3701.45			
	03/05/08			72.01	3701.10			
	03/26/08			71.93	3701.18			
	04/02/08			74.93	3698.18			
	04/24/08			71.99	3701.12			
	05/27/08			72.08	3701.03			
	06/24/08			72.09	3701.02			
	08/29/08			72.30	3700.81			
	09/16/08			72.38	3700.73			
	12/16/08			72.57	3700.54			

Existing wells now utilize new survey data back to 3/27/08



**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**PLAINS MARKETING, L.P. SRS# 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOCD REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS007SPL**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethyl-benzene	Xylene
NMWQCC Remedial Limits		0.010	0.750	0.750	0.620
MW-1A	03/26/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	06/25/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	09/16/08				Not sampled Due to Not Enough Water
	12/16/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
MW-2	03/26/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	06/25/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	09/18/08	6.29	3.21	0.592	1.28
	12/16/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
MW-3	03/26/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	06/25/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	09/18/08	39.7	7.34	1.69	2.48
	12/16/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
MW-4A	03/26/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	06/25/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	09/17/08	4.95	4.14	0.501	1.02
	12/16/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
MW-5	03/26/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	06/25/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	09/16/08				Not sampled Due to Not Enough Water
	12/16/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
MW-6	03/26/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	06/25/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	09/18/08	38.9	3.80	1.50	1.96
	12/16/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
MW-7	03/26/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	06/25/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	09/17/08	38.6	10.3	1.80	3.59
	12/16/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
MW-8	03/26/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	06/25/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	09/18/08	26.1	5.35	0.983	1.37
	12/16/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
MW-9	03/26/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	06/25/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	09/20/08	25.4	7.58	1.65	3.70
	12/16/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
MW-10	03/26/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	06/25/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	09/18/08	11.0	5.25	1.10	2.05
	12/16/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
MW-11	03/26/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	06/25/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	09/18/08	4.06	1.70	0.308	0.575
	12/16/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
MW-12	03/26/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	06/25/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	09/17/08	4.44	2.92	0.401	0.711
	12/16/09				Not sampled Due to Presence of Phase Separated Hydrocarbons
MW-13	03/26/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	06/25/08				Not sampled Due to Presence of Phase Separated Hydrocarbons
	09/17/08	4.04	4.48	0.550	1.05
	12/16/08				Not sampled Due to Presence of Phase Separated Hydrocarbons



**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**PLAINS MARKETING, L.P. SRS# 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOCD REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: PLAINS007SPL**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethyl-benzene	Xylene
MW-14	03/26/08	<b>0.470</b>	<0.00500	<0.00500	0.0449
	06/25/08	<b>1.23</b>	0.0493	<0.00500	0.199
	09/17/08	<b>3.69</b>	0.196	0.0929	<b>0.740</b>
	12/16/08	<b>4.99</b>	0.0537	<0.0500	0.505
MW-15	03/26/08	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	06/25/08	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	09/17/08	<b>3.76</b>	<b>2.58</b>	<b>0.397</b>	<b>0.664</b>
	12/16/08	Not sampled Due to Presence of Phase Separated Hydrocarbons			
MW-16	03/26/08	<b>26.8</b>	<b>11.1</b>	<b>0.891</b>	<b>2.18</b>
	06/25/08	<b>25.6</b>	<b>8.52</b>	<b>0.850</b>	<b>2.07</b>
	09/17/08	<b>36.8</b>	<b>9.55</b>	<b>1.12</b>	<b>2.16</b>
	12/16/08	<b>30.4</b>	<b>5.28</b>	<b>1.12</b>	<b>2.58</b>
MW-17	03/26/08	<b>0.131</b>	0.0767	0.00700	0.0170
	06/25/08	<b>0.150</b>	0.0566	0.00480	0.0113
	09/17/08	<b>0.0299</b>	<b>0.0117</b>	<b>0.00200</b>	<b>0.00380</b>
	12/16/08	<b>0.0388</b>	0.00710	<0.00100	0.00540
MW-18	03/26/08	<b>0.112</b>	0.0856	0.00980	0.0244
	06/25/08	<b>0.113</b>	0.0483	0.00420	0.0100
	09/17/08	<b>0.0383</b>	0.0141	0.00220	0.00430
	12/16/08	<b>0.0315</b>	0.00500	0.00250	0.00370
MW-19	03/26/08	<b>0.0711</b>	0.0434	0.00470	0.0119
	06/25/08	<0.00100	<0.00100	<0.00100	<0.00100
	09/17/08	<b>0.0604</b>	0.0214	0.00300	0.00580
	12/16/08	<b>0.0514</b>	0.00670	0.00280	0.00590
MW-20	03/26/08	<b>0.0431</b>	0.0226	0.00230	0.00590
	06/25/08	<0.00100	<0.00100	<0.00100	<0.00100
	09/17/08	<b>0.108</b>	0.0290	0.00370	0.00710
	12/16/08	<b>0.0483</b>	0.00670	0.00400	0.00870

*<sup>1</sup> Bolded values are in excess of the NMWQCC Remediation Limits*

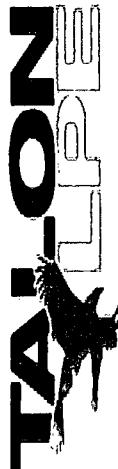


TABLE 3  
 SUMMARY OF GROUNDWATER POLY-AROMATIC  
 HYDROCARBON (PAH) ANALYTICAL RESULTS  
 PLAINS MARKETING, L.P. - SRS # 2002-10270  
 MOORE TO JAIL #1  
 NMOCID REF. # 1R-0380  
 LEA COUNTY, NEW MEXICO  
 TALON/LPE PROJECT NUMBER: PLAINS007SPL

All concentrations are in mg/L

Sample Location	Sample Date	Acenaphthene	Anthracene	Benzol[a]-anthracene	Benzol[a]-pyrene	Benzol[b]-fluoranthene	Benzol[g,h,i]-perylene	Benzol[k]-fluoranthene	Chrysene	Dibenzofuran	Fluoranthene	Indeno[1,2,3-cd]-pyrene	2-Methylimidaphthalene	1-Methylimidaphthalene	Naphthalene	Phenanthrene	Pyrene	
MW-14	09/17/08	<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	<0.000200	0.000203	0.0095	0.00204
MW-16	09/17/08	<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	<0.000200	0.0390	0.0765	0.00144
MW-17	09/17/08	<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	<0.000200	<0.000200	<0.000200	
MW-18	09/17/08	<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	<0.000200	0.000405	<0.000200	
MW-19	09/17/08	<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	<0.000200	0.00103	0.000268	<0.000200
MW-20	09/17/08	<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	<0.000200	0.000256	<0.000200	<0.000200
NMWQCC Remedial Limits																0.030		

<sup>1</sup>Bolded values are in excess of the NMWQCC Remediation Limits

**CON**

TABLE 4  
SUMMARY OF PSH MONITOR WELLS GROUNDWATER ANALYTICAL RESULTS  
PLAINS MARKETING, L.P. SRS # 2002 - 10270  
MOORE TO JAL #1  
NMOCD REF. # 1R-0380  
LEA COUNTY, NEW MEXICO  
TALON/LPF PROJECT NUMBER: PLAINS007SPL

All concentrations are in mg/l.

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Acetophenone	Benzol-a-pyrrene	Benzol-b-fluoranthene	Benzol-g,h,i,-perylene	Chrysene	Dibenzol-a,h-anthracene	Fluoranthene	Indeno[1,2,3-cd]pyrene	1-Methyl-naphthalene	2-Methyl-naphthalene	Naphthalene	Phenanthrene	Pyrone	
MW-2	09/18/08	6.29	3.21	0.592	1.28	<5.00	16.0	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.0507	<b>0.0380</b>	0.00612
MW-3	09/18/08	<b>39.7</b>	<b>7.34</b>	<b>1.69</b>	<b>2.48</b>	61.2	37.1	98.3	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.0600	<0.000200	0.0410
MW-4A	09/17/08	4.95	4.14	0.501	1.02	<5.00	17.7	17.7	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.0171	0.000986	0.0224
MW-6	09/18/08	38.9	3.80	1.50	1.96	<5.00	27.7	27.7	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.00965	<0.000200	0.0117
MW-7	09/17/08	38.6	10.3	1.80	3.59	<5.00	39.3	39.3	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.00955	<0.000200	0.0762
MW-8	09/18/08	26.1	5.35	0.983	1.37	<5.00	26.8	26.8	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.00294	<0.000200	0.0401
MW-9	09/20/08	<b>25.4</b>	<b>7.58</b>	<b>1.65</b>	<b>3.70</b>	<5.00	92.0	92.0	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.00317	<0.000200	0.0726
MW-10	09/18/08	11.0	5.25	1.10	2.05	<5.00	59.3	59.3	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.00317	<0.000200	0.0475
MW-11	09/18/08	4.06	1.70	0.308	0.575	<5.00	8.69	8.69	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.00265	<0.000200	0.0313
MW-12	09/17/08	<b>4.44</b>	<b>2.92</b>	0.401	<b>0.711</b>	<5.00	13.9	13.9	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.00156	<0.000200	0.0185
MW-13	09/17/08	4.04	4.48	0.550	1.05	16.7	19.6	36.3	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.00182	<0.000200	0.0260
MW-15	09/17/08	<b>3.76</b>	<b>2.58</b>	<b>0.397</b>	<b>0.664</b>	<5.00	13.2	13.2	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.00177	<0.000200	0.0208
<b>NMWQCC Remedial Limits</b>		0.01	0.75	0.75	0.62													0.030

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

*RTEx, TPH and TAH analysis per the NMOCD in monitor wells that contain PSH*

## **APPENDIX C**

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

# TRACEANALYSIS, INC.

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

E-Mail: lab@traceanalysis.com

## Analytical and Quality Control Report

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

Report Date: April 3, 2008

Work Order: 8032727



Project Location: Hobbs, N.M.  
Project Name: 8 inches Moore to Jal #1  
Project Number: Plains007SPL  
SRS #: SRS#2002-10270

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
154904	MW-14	water	2008-03-26	14:17	2008-03-27
154905	MW-16	water	2008-03-26	14:25	2008-03-27
154906	MW-17	water	2008-03-26	14:30	2008-03-27
154907	MW-18	water	2008-03-26	14:50	2008-03-27
154908	MW-19	water	2008-03-26	14:55	2008-03-27
154909	MW-20	water	2008-03-26	15:20	2008-03-27

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

This report consists of a total of 7 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: 154904 - MW-14

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5030B
QC Batch: 47018	Date Analyzed: 2008-04-01	Analyzed By: DC
Prep Batch: 40437	Sample Preparation: 2008-04-01	Prepared By: DC

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.470	mg/L	5	0.00100
Toluene		<0.00500	mg/L	5	0.00100
Ethylbenzene		<0.00500	mg/L	5	0.00100
Xylene		0.0449	mg/L	5	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.524	mg/L	5	0.500	105	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.408	mg/L	5	0.500	82	40.1 - 136

Sample: 154905 - MW-16

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5030B
QC Batch: 46944	Date Analyzed: 2008-03-28	Analyzed By: DC
Prep Batch: 40358	Sample Preparation: 2008-03-27	Prepared By: DC

Parameter	Flag	Result	Units	Dilution	RL
Benzene		26.8	mg/L	200	0.00100
Toluene		11.1	mg/L	200	0.00100
Ethylbenzene		0.891	mg/L	200	0.00100
Xylene		2.18	mg/L	200	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		20.5	mg/L	200	20.0	102	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		20.8	mg/L	200	20.0	104	40.1 - 136

Sample: 154906 - MW-17

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5030B
QC Batch: 46944	Date Analyzed: 2008-03-28	Analyzed By: DC
Prep Batch: 40358	Sample Preparation: 2008-03-27	Prepared By: DC

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.131	mg/L	1	0.00100
Toluene		0.0767	mg/L	1	0.00100
Ethylbenzene		0.00700	mg/L	1	0.00100
Xylene		0.0170	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	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.103	mg/L	1	0.100	103	40.1 - 136

**Sample: 154907 - MW-18**

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5030B
QC Batch: 46944	Date Analyzed: 2008-03-28	Analyzed By: DC
Prep Batch: 40358	Sample Preparation: 2008-03-27	Prepared By: DC

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.112	mg/L	1	0.00100
Toluene		0.0856	mg/L	1	0.00100
Ethylbenzene		0.00980	mg/L	1	0.00100
Xylene		0.0244	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.100	mg/L	1	0.100	100	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.120	mg/L	1	0.100	120	40.1 - 136

**Sample: 154908 - MW-19**

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5030B
QC Batch: 47018	Date Analyzed: 2008-04-01	Analyzed By: DC
Prep Batch: 40437	Sample Preparation: 2008-04-01	Prepared By: DC

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.0711	mg/L	1	0.00100
Toluene		0.0434	mg/L	1	0.00100
Ethylbenzene		0.00470	mg/L	1	0.00100
Xylene		0.0119	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)		0.0809	mg/L	1	0.100	81	40.1 - 136

**Sample: 154909 - MW-20**

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5030B
QC Batch: 47018	Date Analyzed: 2008-04-01	Analyzed By: DC
Prep Batch: 40437	Sample Preparation: 2008-04-01	Prepared By: DC

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.0431	mg/L	1	0.00100

*continued ...*

sample 154909 continued ...

Parameter	Flag	Result	Units	Dilution	RL
Toluene		0.0226	mg/L	1	0.00100
Ethylbenzene		0.00230	mg/L	1	0.00100
Xylene		0.00590	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)		0.0813	mg/L	1	0.100	81	40.1 - 136

Method Blank (1) QC Batch: 46944

QC Batch: 46944  
Prep Batch: 40358Date Analyzed: 2008-03-28  
QC Preparation: 2008-03-27Analyzed By: DC  
Prepared By: DC

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0987	mg/L	1	0.100	99	77.2 - 129.1
4-Bromofluorobenzene (4-BFB)		0.105	mg/L	1	0.100	105	69.1 - 122.3

Method Blank (1) QC Batch: 47018

QC Batch: 47018  
Prep Batch: 40437Date Analyzed: 2008-04-01  
QC Preparation: 2008-04-01Analyzed By: DC  
Prepared By: DC

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.107	mg/L	1	0.100	107	77.2 - 129.1
4-Bromofluorobenzene (4-BFB)		0.0812	mg/L	1	0.100	81	69.1 - 122.3

### Laboratory Control Spike (LCS-1)

QC Batch: 46944  
 Prep Batch: 40358

Date Analyzed: 2008-03-28  
 QC Preparation: 2008-03-27

Analyzed By: DC  
 Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0995	mg/L	1	0.100	<0.00110	100	84 - 119.7
Toluene	0.0994	mg/L	1	0.100	<0.00100	99	84.9 - 118.2
Ethylbenzene	0.0989	mg/L	1	0.100	<0.00100	99	84.4 - 118.6
Xylene	0.296	mg/L	1	0.300	<0.00290	99	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	0.0851	mg/L	1	0.100	<0.00110	85	84 - 119.7	16	20
Toluene	0.0860	mg/L	1	0.100	<0.00100	86	84.9 - 118.2	14	20
Ethylbenzene	0.0859	mg/L	1	0.100	<0.00100	86	84.4 - 118.6	14	20
Xylene	0.256	mg/L	1	0.300	<0.00290	85	84.8 - 117.8	14	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0994	0.0999	mg/L	1	0.100	99	100	80 - 128.3
4-Bromofluorobenzene (4-BFB)	0.108	0.108	mg/L	1	0.100	108	108	67.7 - 126.3

### Laboratory Control Spike (LCS-1)

QC Batch: 47018  
 Prep Batch: 40437

Date Analyzed: 2008-04-01  
 QC Preparation: 2008-04-01

Analyzed By: DC  
 Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0999	mg/L	1	0.100	<0.00110	100	84 - 119.7
Toluene	0.0989	mg/L	1	0.100	<0.00100	99	84.9 - 118.2
Ethylbenzene	0.0976	mg/L	1	0.100	<0.00100	98	84.4 - 118.6
Xylene	0.292	mg/L	1	0.300	<0.00290	97	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	0.104	mg/L	1	0.100	<0.00110	104	84 - 119.7	4	20
Toluene	0.102	mg/L	1	0.100	<0.00100	102	84.9 - 118.2	3	20
Ethylbenzene	0.101	mg/L	1	0.100	<0.00100	101	84.4 - 118.6	3	20
Xylene	0.302	mg/L	1	0.300	<0.00290	101	84.8 - 117.8	3	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.106	0.106	mg/L	1	0.100	106	106	80 - 128.3
4-Bromofluorobenzene (4-BFB)	0.0820	0.0818	mg/L	1	0.100	82	82	67.7 - 126.3

**Matrix Spike (MS-1) Spiked Sample: 154680**

QC Batch: 46944  
Prep Batch: 40358

Date Analyzed: 2008-03-28  
QC Preparation: 2008-03-27

Analyzed By: DC  
Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.609	mg/L	5	0.500	0.0727	107	77.5 - 121.1
Toluene	0.530	mg/L	5	0.500	<0.00500	106	78.8 - 119.6
Ethylbenzene	0.551	mg/L	5	0.500	0.0312	104	77.9 - 120.5
Xylene	1.58	mg/L	5	1.50	0.018	104	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	0.601	mg/L	5	0.500	0.0727	106	77.5 - 121.1	1	20
Toluene	0.535	mg/L	5	0.500	<0.00500	107	78.8 - 119.6	1	20
Ethylbenzene	0.556	mg/L	5	0.500	0.0312	105	77.9 - 120.5	1	20
Xylene	1.59	mg/L	5	1.50	0.018	105	78.3 - 119.4	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)	0.505	0.513	mg/L	5	0.5	101	103	86.6 - 118.9
4-Bromofluorobenzene (4-BFB)	0.560	0.556	mg/L	5	0.5	112	111	59.4 - 127.3

**Matrix Spike (MS-1) Spiked Sample: 154971**

QC Batch: 47018  
Prep Batch: 40437

Date Analyzed: 2008-04-01  
QC Preparation: 2008-04-01

Analyzed By: DC  
Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	3.81	mg/L	10	1.00	2.9973	81	77.5 - 121.1
Toluene	1.06	mg/L	10	1.00	0.0817	98	78.8 - 119.6
Ethylbenzene	1.00	mg/L	10	1.00	0.0283	97	77.9 - 120.5
Xylene	3.08	mg/L	10	3.00	0.1866	96	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	3.88	mg/L	10	1.00	2.9973	88	77.5 - 121.1	2	20
Toluene	1.10	mg/L	10	1.00	0.0817	102	78.8 - 119.6	4	20
Ethylbenzene	1.03	mg/L	10	1.00	0.0283	100	77.9 - 120.5	3	20
Xylene	3.18	mg/L	10	3.00	0.1866	100	78.3 - 119.4	3	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.04	1.04	mg/L	10	1	104	104	86.6 - 118.9
4-Bromofluorobenzene (4-BFB)	0.791	0.796	mg/L	10	1	79	80	59.4 - 127.3

**Standard (ICV-1)**

QC Batch: 46944

Date Analyzed: 2008-03-28

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	0.101	101	85 - 115	2008-03-28
Toluene		mg/L	0.100	0.101	101	85 - 115	2008-03-28
Ethylbenzene		mg/L	0.100	0.101	101	85 - 115	2008-03-28
Xylene		mg/L	0.300	0.300	100	85 - 115	2008-03-28

**Standard (CCV-1)**

QC Batch: 46944

Date Analyzed: 2008-03-28

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	0.107	107	85 - 115	2008-03-28
Toluene		mg/L	0.100	0.106	106	85 - 115	2008-03-28
Ethylbenzene		mg/L	0.100	0.104	104	85 - 115	2008-03-28
Xylene		mg/L	0.300	0.317	106	85 - 115	2008-03-28

**Standard (ICV-1)**

QC Batch: 47018

Date Analyzed: 2008-04-01

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	2008-04-01
Toluene		mg/L	0.100	0.0996	100	85 - 115	2008-04-01
Ethylbenzene		mg/L	0.100	0.0982	98	85 - 115	2008-04-01
Xylene		mg/L	0.300	0.294	98	85 - 115	2008-04-01

**Standard (CCV-1)**

QC Batch: 47018

Date Analyzed: 2008-04-01

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	0.102	102	85 - 115	2008-04-01
Toluene		mg/L	0.100	0.101	101	85 - 115	2008-04-01
Ethylbenzene		mg/L	0.100	0.0981	98	85 - 115	2008-04-01
Xylene		mg/L	0.300	0.299	100	85 - 115	2008-04-01

# TraceAnalysis, Inc.

email: lab@traceanalysis.com

Company Name:

Jane L L C

Address: (Street, City, Zip)

2nd Bankin Hwy

Contact Person:

Samantha Smith

Invoice to:

(If different from above)

Plans SRS

Project #:

Project Name:

Smaller to TAC #7

Project Location (including state):

Louisiana

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

6701 Aberdeen Avenue, Suite 8  
Lubbock, Texas 79444  
Tel (806) 794-1286  
Fax (806) 794-1288  
1 (800) 378-1295

5002 Basin Street, Suite A1  
Midland, Texas 79703  
Tel (432) 689-6301  
Fax (432) 689-6313  
1 (888) 583-3443

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	MATRIX	PRESERVATIVE	METHOD	SAMPLING	TIME	DATE	ICP	NaOH	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	SLUDGE	AIR	WATER	VOLUME / AMOUNT	# CONTAINERS		TIME	DATE	ICP	NaOH	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	SLUDGE	AIR	WATER	VOLUME / AMOUNT	# CONTAINERS																																																																
																		15404	MW-14												2	VQA	X	X	3/26/08 14117	X	X	X	3/26/08 14125	X	X	X	X	X	X	2	2	X	2	X	X	X	X	X	2	2	X	X																																					
15405	MW-15	2	VQA	X	X	3/26/08 14134	X	X	X	3/26/08 14135	X	X	X	X	X	X	2	2	X	2	X	X	X	X	X	2	2	X	X																																																																		
906	MW-17	2	VQA	X	X	3/26/08 14136	X	X	X	3/26/08 14137	X	X	X	X	X	X	2	2	X	2	X	X	X	X	X	2	2	X	X																																																																		
907	MW-18	2	VQA	X	X	3/26/08 14138	X	X	X	3/26/08 14139	X	X	X	X	X	X	2	2	X	2	X	X	X	X	X	2	2	X	X																																																																		
908	MW-19	2	VQA	X	X	3/26/08 14140	X	X	X	3/26/08 14141	X	X	X	X	X	X	2	2	X	2	X	X	X	X	X	2	2	X	X																																																																		
909	MW-20	2	VQA	X	X	3/26/08 14142	X	X	X	3/26/08 14143	X	X	X	X	X	X	2	2	X	2	X	X	X	X	X	2	2	X	X																																																																		
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	3/27/08 1405	Y	N	LAB USE ONLY												REMARKS: <u>All tests - Michael</u>																																																																										
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	3/27/08 1358	Y	N																																																																																							
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:	3/27/09 13:00	Y	N																																																																																							
																								In tact <input checked="" type="checkbox"/>	Headspace <input checked="" type="checkbox"/>	Temp <input checked="" type="checkbox"/>	Log-in Review <input checked="" type="checkbox"/>	Dry Weight Basis Required <input type="checkbox"/>	TRRP Report Required <input type="checkbox"/>	Check If Special Reporting Limits Are Needed <input type="checkbox"/>																																																																	

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

ORIGINAL COPY

# TRACEANALYSIS, INC.

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

## Analytical and Quality Control Report

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

Report Date: June 27, 2008

Work Order: 8062603



Project Location: Hobbs, N.M.  
Project Name: Moore to Jal #1  
Project Number: PLAINS007SPL  
SRS#: 2000-10833

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
164649	MW-14	water	2008-06-25	14:00	2008-06-25
164650	MW-16	water	2008-06-25	14:03	2008-06-25
164651	MW-17	water	2008-06-25	14:09	2008-06-25
164652	MW-18	water	2008-06-25	14:18	2008-06-25
164653	MW-19	water	2008-06-25	14:14	2008-06-25
164654	MW-20	water	2008-06-25	14:06	2008-06-25

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



---

Dr. Blair Leftwich, Director

**Certifications**

Lubbock - NELAP T104704219-08-TX  
El Paso - NELAP T104704221-08-TX

**Standard Flags**

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

## Case Narrative

Samples for project Moore to Jal #1 were received by TraceAnalysis, Inc. on 2008-06-25 and assigned to work order 8062603. Samples for work order 8062603 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

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 8062603 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: June 27, 2008  
PLAINSO07SPL

Work Order: 8062603  
Moore to Jal #1

Page Number: 4 of 8  
Hobbs, N.M.

## Analytical Report

Sample: 164649 - MW-14

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 49787  
Prep Batch: 42749

Analytical Method: S 8021B  
Date Analyzed: 2008-06-26  
Sample Preparation: 2008-06-26

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<b>1.23</b>	mg/L	5	0.00100
Toluene		<b>0.0493</b>	mg/L	5	0.00100
Ethylbenzene		<0.00500	mg/L	5	0.00100
Xylene		<b>0.199</b>	mg/L	5	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.450	mg/L	5	0.500	90	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.456	mg/L	5	0.500	91	52 - 124.1

Sample: 164650 - MW-16

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 49787  
Prep Batch: 42749

Analytical Method: S 8021B  
Date Analyzed: 2008-06-26  
Sample Preparation: 2008-06-26

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<b>25.6</b>	mg/L	200	0.00100
Toluene		<b>8.52</b>	mg/L	200	0.00100
Ethylbenzene		<b>0.850</b>	mg/L	200	0.00100
Xylene		<b>2.07</b>	mg/L	200	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		18.3	mg/L	200	20.0	92	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		18.3	mg/L	200	20.0	92	52 - 124.1

Sample: 164651 - MW-17

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 49787  
Prep Batch: 42749

Analytical Method: S 8021B  
Date Analyzed: 2008-06-26  
Sample Preparation: 2008-06-26

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

Report Date: June 27, 2008  
PLAIN007SPL

Work Order: 8062603  
Moore to Jal #1

Page Number: 5 of 8  
Hobbs, N.M.

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.150	mg/L	1	0.00100
Toluene		0.0566	mg/L	1	0.00100
Ethylbenzene		0.00480	mg/L	1	0.00100
Xylene		0.0113	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0904	mg/L	1	0.100	90	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0901	mg/L	1	0.100	90	52 - 124.1

**Sample: 164652 - MW-18**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 49787  
Prep Batch: 42749

Analytical Method: S 8021B  
Date Analyzed: 2008-06-26  
Sample Preparation: 2008-06-26

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.113	mg/L	1	0.00100
Toluene		0.0483	mg/L	1	0.00100
Ethylbenzene		0.00420	mg/L	1	0.00100
Xylene		0.0100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0905	mg/L	1	0.100	90	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0902	mg/L	1	0.100	90	52 - 124.1

**Sample: 164653 - MW-19**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 49787  
Prep Batch: 42749

Analytical Method: S 8021B  
Date Analyzed: 2008-06-26  
Sample Preparation: 2008-06-26

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

Report Date: June 27, 2008  
PLAINS007SPL

Work Order: 8062603  
Moore to Jal #1

Page Number: 6 of 8  
Hobbs, N.M.

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)		0.0886	mg/L	1	0.100	89	52 - 124.1

**Sample: 164654 - MW-20**

Laboratory: Midland

Analysis: BTEX

QC Batch: 49787

Prep Batch: 42749

Analytical Method: S 8021B

Date Analyzed: 2008-06-26

Sample Preparation: 2008-06-26

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)		0.0893	mg/L	1	0.100	89	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.0887	mg/L	1	0.100	89	52 - 124.1

**Method Blank (1) QC Batch: 49787**

QC Batch: 49787

Prep Batch: 42749

Date Analyzed: 2008-06-26

QC Preparation: 2008-06-26

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		0.000500		mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0917	mg/L	1	0.100	92	44.6 - 137.4
4-Bromofluorobenzene (4-BFB)		0.0910	mg/L	1	0.100	91	37.1 - 130.9

Report Date: June 27, 2008  
PLAINS007SPL

Work Order: 8062603  
Moore to Jal #1

Page Number: 7 of 8  
Hobbs, N.M.

### Laboratory Control Spike (LCS-1)

QC Batch: 49787      Date Analyzed: 2008-06-26      Analyzed By: DC  
Prep Batch: 42749      QC Preparation: 2008-06-26      Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0903	mg/L	1	0.100	<0.000200	90	71.7 - 120.5
Toluene	0.0905	mg/L	1	0.100	<0.000200	90	75.4 - 118.8
Ethylbenzene	0.0902	mg/L	1	0.100	<0.000200	90	73.5 - 118
Xylene	0.271	mg/L	1	0.300	0.0005	90	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	0.0957	mg/L	1	0.100	<0.000200	96	71.7 - 120.5	6	20
Toluene	0.0961	mg/L	1	0.100	<0.000200	96	75.4 - 118.8	6	20
Ethylbenzene	0.0961	mg/L	1	0.100	<0.000200	96	73.5 - 118	6	20
Xylene	0.289	mg/L	1	0.300	0.0005	96	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)	0.0912	0.0933	mg/L	1	0.100	91	93	38.2 - 131.6
4-Bromofluorobenzene (4-BFB)	0.0917	0.0940	mg/L	1	0.100	92	94	43.9 - 132.4

### Matrix Spike (MS-1) Spiked Sample: 164650

QC Batch: 49787      Date Analyzed: 2008-06-26      Analyzed By: DC  
Prep Batch: 42749      QC Preparation: 2008-06-26      Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	41.6	mg/L	200	20.0	25.6481	80	10 - 160.8
Toluene	24.8	mg/L	200	20.0	8.525	81	10 - 160.7
Ethylbenzene	16.8	mg/L	200	20.0	0.8503	80	10 - 158.3
Xylene	50.3	mg/L	200	60.0	2.0685	80	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	44.0	mg/L	200	20.0	25.6481	92	10 - 160.8	6	20
Toluene	26.4	mg/L	200	20.0	8.525	89	10 - 160.7	6	20
Ethylbenzene	18.0	mg/L	200	20.0	0.8503	86	10 - 158.3	7	20
Xylene	53.8	mg/L	200	60.0	2.0685	86	10 - 158	7	20

Report Date: June 27, 2008  
PLAIN007SPL

Work Order: 8062603  
Moore to Jal #1

Page Number: 8 of 8  
Hobbs, N.M.

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)	17.6	18.5	mg/L	200	20	88	92	33.1 - 132.5
4-Bromofluorobenzene (4-BFB)	18.0	18.8	mg/L	200	20	90	94	37.5 - 136

### Standard (ICV-1)

QC Batch: 49787                          Date Analyzed: 2008-06-26                          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	0.0959	96	85 - 115	2008-06-26
Toluene		mg/L	0.100	0.0962	96	85 - 115	2008-06-26
Ethylbenzene		mg/L	0.100	0.0963	96	85 - 115	2008-06-26
Xylene		mg/L	0.300	0.289	96	85 - 115	2008-06-26

### Standard (CCV-1)

QC Batch: 49787                          Date Analyzed: 2008-06-26                          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	0.0898	90	85 - 115	2008-06-26
Toluene		mg/L	0.100	0.0898	90	85 - 115	2008-06-26
Ethylbenzene		mg/L	0.100	0.0890	89	85 - 115	2008-06-26
Xylene		mg/L	0.300	0.268	89	85 - 115	2008-06-26

# TraceAnalysis, Inc.

Lab ID # 8062603

Page /

Company Name: Tulsa LPE		Phone #: 432-522-2133	(Circle or Specify Method No.)																				
Address: 2601 Rankin Hwy		Fax #: 432-522-2190	ANALYSIS REQUEST																				
Contact Person: Shanna Smith		Email: Shanna@TulsaLPE.com																					
Invoice to: (If different from above) PLAINS																							
Project #: PLS # 200 - 10833		Project Name: Monroe for [redacted]																					
Project Location (including state): Hobbs NM		Sampler Signature: [Signature]																					
LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	VOLUME / AMOUNT	TIME	DATE	PRESERVATIVE	METHOD	SAMPLING	LAB USE ONLY														
									WATER	SOLI	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	TCLP Volatiles	TCLP Pesticides	RCI	GCMS Vol. 8260B / 624	GCMS Semi. Vol. 8270C / 625	PCBs 8082 / 608	Pesticides 8081A / 608
16499	MW-14	2	X	6-25-08 14:00	16-03-08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	6015 Harris Pkwy., Suite 110 El Paso, Texas 79922 Tel (915) 585-3443 Fax (915) 585-1944 1 (866) 586-3443	
16500	MW-16	1	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	5002 Basin Street, Suite A1 Midland, Texas 79303 Tel (432) 689-6301 Fax (432) 689-6313
16511	MW-17	1	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	200 East Sunset Rd., Suite E Ft. Worth, Texas 76132 Tel (817) 201-5260
16522	MW-18	1	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	6015 Harris Pkwy., Suite 110 El Paso, Texas 79922 Tel (915) 585-3443 Fax (915) 585-1944 1 (866) 586-3443
16533	MW-19	1	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	5002 Basin Street, Suite A1 Midland, Texas 79303 Tel (432) 689-6301 Fax (432) 689-6313
16544	MW-20	1	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	200 East Sunset Rd., Suite E Ft. Worth, Texas 76132 Tel (817) 201-5260
Relinquished by:		Date:	Time:	Received by:	Date:	Time:	REMARKS: all Tulsa - Midland																
Relinquished by:		Date:	Time:	Received by:	Date:	Time:	<input type="checkbox"/> Dry Weight Basis Required																
Relinquished by:		Date:	Time:	Received at Laboratory by:	Date:	Time:	<input type="checkbox"/> TRRP Report Required																
Relinquished by:		Date:	Time:	Carrier #	Login-Review		<input type="checkbox"/> Check If Special Reporting Limits Are Needed																
Original copy								Intact <input checked="" type="checkbox"/> N	Headspace <input type="checkbox"/> Y / N	Temp <input type="checkbox"/> 2.1													

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

# TRACEANALYSIS, INC.

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5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313  
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260  
E-Mail: lab@traceanalysis.com

## Certifications

WBENC: 237019

HUB: 1752439743100-86536

DBE: VN 20657

NCTRCA WFWB38444Y0909

## NELAP Certifications

Lubbock: T104704219-08-TX  
LELAP-02003  
Kansas E-10317

El Paso: T104704221-08-TX  
LELAP-02002

Midland: T104704392-08-TX

## Analytical and Quality Control Report

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

Report Date: September 29, 2008

Work Order: 8091805



Project Location: Hobbs, N.M.  
Project Name: Moore to Jal #1  
Project Number: PLAINS007SPL  
SRS#: 2002-10720

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
173733	MW-14	water	2008-09-17	11:30	2008-09-18
173734	MW-16	water	2008-09-17	12:00	2008-09-18
173735	MW-20	water	2008-09-17	12:30	2008-09-18
173736	MW-19	water	2008-09-17	13:00	2008-09-18
173737	MW-18	water	2008-09-17	13:30	2008-09-18

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
173738	MW-17	water	2008-09-17	13:45	2008-09-18
173739	MW-7	water	2008-09-17	16:30	2008-09-18
173740	MW-13	water	2008-09-17	15:30	2008-09-18
173741	MW-15	water	2008-09-17	14:34	2008-09-18
173742	MW-4A	water	2008-09-17	17:00	2008-09-18
173743	MW-12	water	2008-09-17	17:30	2008-09-18

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 32 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 Moore to Jal #1 were received by TraceAnalysis, Inc. on 2008-09-18 and assigned to work order 8091805. Samples for work order 8091805 were received intact without headspace and at a temperature of 3.2 deg. C.

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

Test	Method
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 8091805 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: 173733 - MW-14

Laboratory: Midland

Analysis: BTEX

QC Batch: 52545

Prep Batch: 45037

Analytical Method: S 8021B

Date Analyzed: 2008-09-19

Sample Preparation: 2008-09-19

Prep Method: S 5030B

Analyzed By: AG

Prepared By: DC

Parameter	Flag	Result	Units	Dilution	RL
Benzene		3.69	mg/L	50	0.00100
Toluene		0.196	mg/L	50	0.00100
Ethylbenzene		0.0929	mg/L	50	0.00100
Xylene		0.740	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.11	mg/L	50	5.00	102	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		3.96	mg/L	50	5.00	79	40.1 - 136

Sample: 173733 - MW-14

Laboratory: Lubbock

Analysis: PAH

QC Batch: 52619

Prep Batch: 45105

Analytical Method: S 8270C

Date Analyzed: 2008-09-22

Sample Preparation: 2008-09-22

Prep Method: S 3510C

Analyzed By: DS

Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.00204	mg/L	1	0.000200
2-Methylnaphthalene		0.00203	mg/L	1	0.000200
1-Methylnaphthalene		0.00995	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.000759	mg/L	1	0.000200
Fluorene		0.000606	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.000274	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 . . .

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sample 173733 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		0.0629	mg/L	1	0.0800	79	37.4 - 123
2-Fluorobiphenyl		0.0661	mg/L	1	0.0800	83	34.3 - 130
Terphenyl-d14		0.0615	mg/L	1	0.0800	77	10 - 252

Sample: 173734 - MW-16

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52499  
Prep Batch: 45006

Analytical Method: S 8021B  
Date Analyzed: 2008-09-18  
Sample Preparation: 2008-09-18

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		36.8	mg/L	200	0.00100
Toluene		9.55	mg/L	200	0.00100
Ethylbenzene		1.12	mg/L	200	0.00100
Xylene		2.16	mg/L	200	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		19.9	mg/L	200	20.0	100	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		15.2	mg/L	200	20.0	76	40.1 - 136

Sample: 173734 - MW-16

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 52619  
Prep Batch: 45105

Analytical Method: S 8270C  
Date Analyzed: 2008-09-22  
Sample Preparation: 2008-09-22

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

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.0765	mg/L	1	0.000200
2-Methylnaphthalene		0.0441	mg/L	1	0.000200
1-Methylnaphthalene		0.0390	mg/L	1	0.000200

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sample 173734 continued ...

Parameter	Flag	Result	Units	Dilution	RL
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.00244	mg/L	1	0.000200
Fluorene		0.000557	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.00144	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		0.0620	mg/L	1	0.0800	78	37.4 - 123
2-Fluorobiphenyl		0.0589	mg/L	1	0.0800	74	34.3 - 130
Terphenyl-d14		0.0629	mg/L	1	0.0800	79	10 - 252

Sample: 173735 - MW-20

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52499  
Prep Batch: 45006

Analytical Method: S 8021B  
Date Analyzed: 2008-09-18  
Sample Preparation: 2008-09-18

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.108	mg/L	1	0.00100
Toluene		0.0290	mg/L	1	0.00100
Ethylbenzene		0.00370	mg/L	1	0.00100
Xylene		0.00710	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	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0900	mg/L	1	0.100	90	40.1 - 136

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Sample: 173735 - MW-20

Laboratory:	Lubbock	Analytical Method:	S 8270C	Prep Method:	S 3510C
Analysis:	PAH	Date Analyzed:	2008-09-22	Analyzed By:	DS
QC Batch:	52619	Sample Preparation:	2008-09-22	Prepared By:	DS
Prep Batch:	45105				

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		<b>0.000256</b>	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		0.0644	mg/L	1	0.0800	80	37.4 - 123
2-Fluorobiphenyl		0.0639	mg/L	1	0.0800	80	34.3 - 130
Terphenyl-d14		0.0677	mg/L	1	0.0800	85	10 - 252

Sample: 173736 - MW-19

Laboratory:	Midland	Analytical Method:	S 8021B	Prep Method:	S 5030B
Analysis:	BTEX	Date Analyzed:	2008-09-18	Analyzed By:	DC
QC Batch:	52499	Sample Preparation:	2008-09-18	Prepared By:	DC
Prep Batch:	45006				

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<b>0.0604</b>	mg/L	1	0.00100
Toluene		<b>0.0214</b>	mg/L	1	0.00100

continued . . .

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sample 173736 continued ...

Parameter	Flag	Result	RL	Units	Dilution	RL
Ethylbenzene		0.00300		mg/L	1	0.00100
Xylene		0.00580		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	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0894	mg/L	1	0.100	89	40.1 - 136

Sample: 173736 - MW-19

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 52619  
Prep Batch: 45105

Analytical Method: S 8270C  
Date Analyzed: 2008-09-22  
Sample Preparation: 2008-09-22

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

Parameter	Flag	Result	RL	Units	Dilution	RL
Naphthalene		0.00103		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		0.000268		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		0.0443	mg/L	1	0.0800	55	37.4 - 123
2-Fluorobiphenyl		0.0475	mg/L	1	0.0800	59	34.3 - 130
Terphenyl-d14		0.0488	mg/L	1	0.0800	61	10 - 252

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**Sample: 173737 - MW-18**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52499  
Prep Batch: 45006

Analytical Method: S 8021B  
Date Analyzed: 2008-09-18  
Sample Preparation: 2008-09-18

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.0383	mg/L	1	0.00100
Toluene		0.0141	mg/L	1	0.00100
Ethylbenzene		0.00220	mg/L	1	0.00100
Xylene		0.00430	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.100	mg/L	1	0.100	100	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0876	mg/L	1	0.100	88	40.1 - 136

**Sample: 173737 - MW-18**

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 52619  
Prep Batch: 45105

Analytical Method: S 8270C  
Date Analyzed: 2008-09-22  
Sample Preparation: 2008-09-22

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

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.000405	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

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sample 173737 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		0.0652	mg/L	1	82
2-Fluorobiphenyl		0.0663	mg/L	1	83
Terphenyl-d14		0.0639	mg/L	1	80

Sample: 173738 - MW-17

Laboratory: Midland

Analysis: BTEX

QC Batch: 52499

Prep Batch: 45006

Analytical Method: S 8021B

Date Analyzed: 2008-09-18

Sample Preparation: 2008-09-18

Prep Method: S 5030B

Analyzed By: DC

Prepared By: DC

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.0299	mg/L	1	0.00100
Toluene		0.0117	mg/L	1	0.00100
Ethylbenzene		0.00200	mg/L	1	0.00100
Xylene		0.00380	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.100	mg/L	1	0.100	100	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0867	mg/L	1	0.100	87	40.1 - 136

Sample: 173738 - MW-17

Laboratory: Lubbock

Analysis: PAH

QC Batch: 52619

Prep Batch: 45105

Analytical Method: S 8270C

Date Analyzed: 2008-09-22

Sample Preparation: 2008-09-22

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
Acenaphthlene		<0.000200	mg/L	1	0.000200

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sample 173738 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		0.0480	mg/L	1	0.0800	60	37.4 - 123
2-Fluorobiphenyl		0.0464	mg/L	1	0.0800	58	34.3 - 130
Terphenyl-d14		0.0485	mg/L	1	0.0800	61	10 - 252

Sample: 173739 - MW-7

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52499  
Prep Batch: 45006

Analytical Method: S 8021B  
Date Analyzed: 2008-09-18  
Sample Preparation: 2008-09-18

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		38.6	mg/L	100	0.00100
Toluene		10.3	mg/L	100	0.00100
Ethylbenzene		1.80	mg/L	100	0.00100
Xylene		3.59	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		9.88	mg/L	100	10.0	99	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		9.02	mg/L	100	10.0	90	40.1 - 136

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Sample: 173739 - MW-7

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 52619  
Prep Batch: 45105

Analytical Method: S 8270C  
Date Analyzed: 2008-09-22  
Sample Preparation: 2008-09-22

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

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.0726	mg/L	1	0.000200
2-Methylnaphthalene		0.0475	mg/L	1	0.000200
1-Methylnaphthalene		0.0401	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.00294	mg/L	1	0.000200
Fluorene		0.00317	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.00262	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		0.0585	mg/L	1	0.0800	73	37.4 - 123
2-Fluorobiphenyl		0.0597	mg/L	1	0.0800	75	34.3 - 130
Terphenyl-d14		0.0683	mg/L	1	0.0800	85	10 - 252

Sample: 173739 - MW-7

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		<5.00	mg/L	1	5.00

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	1	17.5	mg/L	1	10.0	175	70 - 130

**Sample: 173739 - MW-7**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52546  
Prep Batch: 45037

Analytical Method: S 8015B  
Date Analyzed: 2008-09-19  
Sample Preparation: 2008-09-19

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		39.3	mg/L	100	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		8.99	mg/L	100	10.0	90	70 - 130
4-Bromofluorobenzene (4-BFB)		7.25	mg/L	100	10.0	72	70 - 130

**Sample: 173740 - MW-13**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52499  
Prep Batch: 45006

Analytical Method: S 8021B  
Date Analyzed: 2008-09-18  
Sample Preparation: 2008-09-18

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		4.04	mg/L	50	0.00100
Toluene		4.48	mg/L	50	0.00100
Ethylbenzene		0.550	mg/L	50	0.00100
Xylene		1.05	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.38	mg/L	50	5.00	108	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		5.18	mg/L	50	5.00	104	40.1 - 136

**Sample: 173740 - MW-13**

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 52619  
Prep Batch: 45105

Analytical Method: S 8270C  
Date Analyzed: 2008-09-22  
Sample Preparation: 2008-09-22

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

<sup>1</sup>High surrogate recovery. Sample non-detect, result bias high.

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Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.0191	mg/L	1	0.000200
2-Methylnaphthalene		0.0208	mg/L	1	0.000200
1-Methylnaphthalene		0.0189	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.00182	mg/L	1	0.000200
Fluorene		0.00242	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.00214	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		0.0376	mg/L	1	0.0800	47	37.4 - 123
2-Fluorobiphenyl		0.0339	mg/L	1	0.0800	42	34.3 - 130
Terphenyl-d14		0.0387	mg/L	1	0.0800	48	10 - 252

Sample: 173740 - MW-13

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		16.7	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	2	16.0	mg/L	1	10.0	160	70 - 130

<sup>2</sup>High surrogate recovery. Sample non-detect, result bias high.

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Sample: 173740 - MW-13

Laboratory: Midland	Analytical Method: S 8015B	Prep Method: S 5030B
Analysis: TPH GRO	Date Analyzed: 2008-09-19	Analyzed By: AG
QC Batch: 52546	Sample Preparation: 2008-09-19	Prepared By: DC
Prep Batch: 45037		

Parameter	Flag	Result	Units	Dilution	RL
GRO		19.6	mg/L	50	0.100
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		4.45	mg/L	5.00	89
4-Bromofluorobenzene (4-BFB)		3.75	mg/L	5.00	75

Sample: 173741 - MW-15

Laboratory: Midland	Analytical Method: S 8021B	Prep Method: S 5030B
Analysis: BTEX	Date Analyzed: 2008-09-19	Analyzed By: AG
QC Batch: 52545	Sample Preparation: 2008-09-19	Prepared By: DC
Prep Batch: 45037		

Parameter	Flag	Result	Units	Dilution	RL
Benzene		3.76	mg/L	50	0.00100
Toluene		2.58	mg/L	50	0.00100
Ethylbenzene		0.397	mg/L	50	0.00100
Xylene		0.664	mg/L	50	0.00100
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		5.02	mg/L	5.00	100
4-Bromofluorobenzene (4-BFB)		4.14	mg/L	5.00	83

Sample: 173741 - MW-15

Laboratory: Lubbock	Analytical Method: S 8270C	Prep Method: S 3510C
Analysis: PAH	Date Analyzed: 2008-09-22	Analyzed By: DS
QC Batch: 52619	Sample Preparation: 2008-09-22	Prepared By: DS
Prep Batch: 45105		

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.0208	mg/L	1	0.000200

continued ...

sample 173741 continued ...

Parameter	Flag	Result	Units	Dilution	RL
2-Methylnaphthalene		0.0200	mg/L	1	0.000200
1-Methylnaphthalene		0.0179	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.00177	mg/L	1	0.000200
Fluorene		0.00231	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.00245	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		0.0423	mg/L	1	0.0800	53	37.4 - 123
2-Fluorobiphenyl		0.0421	mg/L	1	0.0800	53	34.3 - 130
Terphenyl-d14		0.0609	mg/L	1	0.0800	76	10 - 252

### Sample: 173741 - MW-15

Laboratory:	Midland	Analytical Method:	Mod. 8015B	Prep Method:	N/A
Analysis:	TPH DRO	Date Analyzed:	2008-09-26	Analyzed By:	LD
QC Batch:	52748	Sample Preparation:	2008-09-26	Prepared By:	LD
Prep Batch:	45205				

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	3	14.4	mg/L	1	10.0	144	70 - 130

<sup>3</sup>High surrogate recovery. Sample non-detect, result bias high.

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**Sample: 173741 - MW-15**

Laboratory: Midland	Analytical Method: S 8015B	Prep Method: S 5030B
Analysis: TPH GRO	Date Analyzed: 2008-09-19	Analyzed By: AG
QC Batch: 52546	Sample Preparation: 2008-09-19	Prepared By: DC
Prep Batch: 45037		

Parameter	Flag	Result	Units	Dilution	RL
GRO		<b>13.2</b>	mg/L	50	0.100
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		4.45	mg/L	50	89
4-Bromofluorobenzene (4-BFB)		3.68	mg/L	50	74

**Sample: 173742 - MW-4A**

Laboratory: Midland	Analytical Method: S 8021B	Prep Method: S 5030B
Analysis: BTEX	Date Analyzed: 2008-09-19	Analyzed By: AG
QC Batch: 52545	Sample Preparation: 2008-09-19	Prepared By: DC
Prep Batch: 45037		

Parameter	Flag	Result	Units	Dilution	RL
Benzene		4.95	mg/L	50	0.00100
Toluene		4.14	mg/L	50	0.00100
Ethylbenzene		0.501	mg/L	50	0.00100
Xylene		1.02	mg/L	50	0.00100
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		5.00	mg/L	50	100
4-Bromofluorobenzene (4-BFB)		4.12	mg/L	50	82

**Sample: 173742 - MW-4A**

Laboratory: Lubbock	Analytical Method: S 8270C	Prep Method: S 3510C
Analysis: PAH	Date Analyzed: 2008-09-22	Analyzed By: DS
QC Batch: 52619	Sample Preparation: 2008-09-22	Prepared By: DS
Prep Batch: 45105		

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		<b>0.0157</b>	mg/L	1	0.000200

*continued ...*

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Parameter	Flag	Result	Units	Dilution	RL
2-Methylnaphthalene		0.0111	mg/L	1	0.000200
1-Methylnaphthalene		0.0117	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.000848	mg/L	1	0.000200
Fluorene		0.000965	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.000663	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		0.0469	mg/L	1	0.0800	59	37.4 - 123
2-Fluorobiphenyl		0.0492	mg/L	1	0.0800	62	34.3 - 130
Terphenyl-d14		0.0541	mg/L	1	0.0800	68	10 - 252

Sample: 173742 - MW-4A

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		<5.00	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	4	16.4	mg/L	1	10.0	164	70 - 130

<sup>4</sup>High surrogate recovery. Sample non-detect, result bias high.

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**Sample: 173742 - MW-4A**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52546  
Prep Batch: 45037

Analytical Method: S 8015B  
Date Analyzed: 2008-09-19  
Sample Preparation: 2008-09-19

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		17.7	mg/L	50	0.100
<hr/>					
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		4.43	mg/L	50	89
4-Bromofluorobenzene (4-BFB)		3.64	mg/L	50	73

**Sample: 173743 - MW-12**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52545  
Prep Batch: 45037

Analytical Method: S 8021B  
Date Analyzed: 2008-09-19  
Sample Preparation: 2008-09-19

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		4.44	mg/L	50	0.00100
Toluene		2.92	mg/L	50	0.00100
Ethylbenzene		0.401	mg/L	50	0.00100
Xylene		0.711	mg/L	50	0.00100
<hr/>					
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		5.04	mg/L	50	101
4-Bromofluorobenzene (4-BFB)		4.03	mg/L	50	81

**Sample: 173743 - MW-12**

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 52619  
Prep Batch: 45105

Analytical Method: S 8270C  
Date Analyzed: 2008-09-22  
Sample Preparation: 2008-09-22

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

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.0260	mg/L	1	0.000200

*continued ...*

sample 173743 continued ...

Parameter	Flag	Result	Units	Dilution	RL
2-Methylnaphthalene		0.0182	mg/L	1	0.000200
1-Methylnaphthalene		0.0185	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.00156	mg/L	1	0.000200
Fluorene		0.00187	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.00150	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		0.0687	mg/L	1	0.0800	86	37.4 - 123
2-Fluorobiphenyl		0.0660	mg/L	1	0.0800	82	34.3 - 130
Terphenyl-d14		0.0677	mg/L	1	0.0800	85	10 - 252

### Sample: 173743 - MW-12

Laboratory:	Midland	Analytical Method:	Mod. 8015B	Prep Method:	N/A
Analysis:	TPH DRO	Date Analyzed:	2008-09-26	Analyzed By:	LD
QC Batch:	52748	Sample Preparation:	2008-09-26	Prepared By:	LD
Prep Batch:	45205				

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	5	13.3	mg/L	1	10.0	133	70 - 130

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

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**Sample: 173743 - MW-12**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52546  
Prep Batch: 45037

Analytical Method: S 8015B  
Date Analyzed: 2008-09-19  
Sample Preparation: 2008-09-19

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		13.9	mg/L	50	0.100
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		4.46	mg/L	50	89
4-Bromofluorobenzene (4-BFB)		3.58	mg/L	50	72

**Method Blank (1) QC Batch: 52499**

QC Batch: 52499  
Prep Batch: 45006

Date Analyzed: 2008-09-18  
QC Preparation: 2008-09-18

Analyzed By: DC  
Prepared By: DC

Parameter	Flag	Result	Units	MDL	RL
Benzene		<0.000300	mg/L		0.001
Toluene		0.000300	mg/L		0.001
Ethylbenzene		<0.000500	mg/L		0.001
Xylene		<0.000400	mg/L		0.001
Surrogate	Flag	Result	Units	Dilution	Recovery
Trifluorotoluene (TFT)		0.100	mg/L	1	100
4-Bromofluorobenzene (4-BFB)		0.0805	mg/L	1	80

**Method Blank (1) QC Batch: 52545**

QC Batch: 52545  
Prep Batch: 45037

Date Analyzed: 2008-09-19  
QC Preparation: 2008-09-19

Analyzed By: AG  
Prepared By: DC

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

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.102	mg/L	1	0.100	102	77.2 - 129.1
4-Bromofluorobenzene (4-BFB)		0.0964	mg/L	1	0.100	96	69.1 - 122.3

Method Blank (1) QC Batch: 52546

QC Batch: 52546 Date Analyzed: 2008-09-19 Analyzed By: AG  
Prep Batch: 45037 QC Preparation: 2008-09-19 Prepared By: DC

Parameter	Flag	Result	MDL	Units	RL
GRO		0.0841		mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0895	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0848	mg/L	1	0.100	85	70 - 130

Method Blank (1) QC Batch: 52619

QC Batch: 52619 Date Analyzed: 2008-09-22 Analyzed By: DS  
Prep Batch: 45105 QC Preparation: 2008-09-22 Prepared By: DS

Parameter	Flag	Result	MDL	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
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

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method blank continued ...

Parameter	Flag	MDL Result	Units	RL
Benzo(g,h,i)perylene		<0.0000681	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0598	mg/L	1	0.0800	75	10 - 146
2-Fluorobiphenyl		0.0556	mg/L	1	0.0800	70	10 - 141
Terphenyl-d14		0.0576	mg/L	1	0.0800	72	10 - 266

Method Blank (1) QC Batch: 52748

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

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

QC Batch: 52499 Date Analyzed: 2008-09-18 Analyzed By: DC  
Prep Batch: 45006 QC Preparation: 2008-09-18 Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.104	mg/L	1	0.100	<0.00110	104	84 - 119.7
Toluene	0.103	mg/L	1	0.100	<0.00100	103	84.9 - 118.2
Ethylbenzene	0.105	mg/L	1	0.100	<0.00100	105	84.4 - 118.6
Xylene	0.301	mg/L	1	0.300	<0.00290	100	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	0.103	mg/L	1	0.100	<0.00110	103	84 - 119.7	2	20
Toluene	0.101	mg/L	1	0.100	<0.00100	101	84.9 - 118.2	2	20
Ethylbenzene	0.101	mg/L	1	0.100	<0.00100	101	84.4 - 118.6	4	20
Xylene	0.287	mg/L	1	0.300	<0.00290	96	84.8 - 117.8	5	20

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

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Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.101	0.101	mg/L	1	0.100	101	101	80 - 128.3
4-Bromofluorobenzene (4-BFB)	0.0837	0.0833	mg/L	1	0.100	84	83	67.7 - 126.3

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

QC Batch: 52545      Date Analyzed: 2008-09-19      Analyzed By: AG  
Prep Batch: 45037      QC Preparation: 2008-09-19      Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.112	mg/L	1	0.100	<0.00110	112	84 - 119.7
Toluene	0.112	mg/L	1	0.100	<0.00100	112	84.9 - 118.2
Ethylbenzene	0.114	mg/L	1	0.100	<0.00100	114	84.4 - 118.6
Xylene	0.332	mg/L	1	0.300	<0.00290	111	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 Limit	
Benzene	0.114	mg/L	1	0.100	<0.00110	114	84 - 119.7	2	20
Toluene	0.113	mg/L	1	0.100	<0.00100	113	84.9 - 118.2	1	20
Ethylbenzene	0.115	mg/L	1	0.100	<0.00100	115	84.4 - 118.6	1	20
Xylene	0.336	mg/L	1	0.300	<0.00290	112	84.8 - 117.8	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.104	0.102	mg/L	1	0.100	104	102	80 - 128.3
4-Bromofluorobenzene (4-BFB)	0.0990	0.0996	mg/L	1	0.100	99	100	67.7 - 126.3

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

QC Batch: 52546      Date Analyzed: 2008-09-19      Analyzed By: AG  
Prep Batch: 45037      QC Preparation: 2008-09-19      Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	0.840	mg/L	1	1.00	<0.0240	84	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 Limit	
GRO	0.898	mg/L	1	1.00	<0.0240	90	70 - 130	7	20

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

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Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0929	0.0966	mg/L	1	0.100	93	97	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0882	0.0884	mg/L	1	0.100	88	88	70 - 130

### Laboratory Control Spike (LCS-1)

QC Batch: 52619      Date Analyzed: 2008-09-22      Analyzed By: DS  
Prep Batch: 45105      QC Preparation: 2008-09-22      Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene	0.0553	mg/L	1	0.0800	<0.0000730	69	10 - 141
2-Methylnaphthalene	0.0572	mg/L	1	0.0800	<0.0000509	72	50 - 150
1-Methylnaphthalene	0.0562	mg/L	1	0.0800	<0.0000748	70	50 - 150
Acenaphthylene	0.0694	mg/L	1	0.0800	<0.0000767	87	10 - 152
Acenaphthene	0.0642	mg/L	1	0.0800	<0.000142	80	10 - 151
Dibenzofuran	0.0656	mg/L	1	0.0800	<0.0000470	82	10 - 148
Fluorene	0.0682	mg/L	1	0.0800	<0.0000569	85	10 - 172
Anthracene	0.0667	mg/L	1	0.0800	<0.0000876	83	22.5 - 172
Phenanthrene	0.0655	mg/L	1	0.0800	<0.0000552	82	19.6 - 172
Fluoranthene	0.0749	mg/L	1	0.0800	<0.0000954	94	17.3 - 187
Pyrene	0.0683	mg/L	1	0.0800	<0.0000497	85	14.9 - 199
Benzo(a)anthracene	0.0668	mg/L	1	0.0800	<0.0000328	84	19.4 - 185
Chrysene	0.0669	mg/L	1	0.0800	<0.0000990	84	18.4 - 188
Benzo(b)fluoranthene	0.0688	mg/L	1	0.0800	<0.0000684	86	10 - 193
Benzo(k)fluoranthene	0.0702	mg/L	1	0.0800	<0.0000830	88	27.8 - 196
Benzo(a)pyrene	0.0766	mg/L	1	0.0800	<0.0000549	96	12.4 - 205
Indeno(1,2,3-cd)pyrene	0.0792	mg/L	1	0.0800	<0.0000869	99	10 - 198
Dibenzo(a,h)anthracene	0.0781	mg/L	1	0.0800	<0.0000605	98	10 - 172
Benzo(g,h,i)perylene	0.0785	mg/L	1	0.0800	<0.0000681	98	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	0.0551	mg/L	1	0.0800	<0.0000730	69	10 - 141	0	20
2-Methylnaphthalene	0.0566	mg/L	1	0.0800	<0.0000509	71	50 - 150	1	20
1-Methylnaphthalene	0.0562	mg/L	1	0.0800	<0.0000748	70	50 - 150	0	20
Acenaphthylene	0.0690	mg/L	1	0.0800	<0.0000767	86	10 - 152	1	20
Acenaphthene	0.0644	mg/L	1	0.0800	<0.000142	80	10 - 151	0	20
Dibenzofuran	0.0662	mg/L	1	0.0800	<0.0000470	83	10 - 148	1	20
Fluorene	0.0709	mg/L	1	0.0800	<0.0000569	89	10 - 172	4	20
Anthracene	0.0652	mg/L	1	0.0800	<0.0000876	82	22.5 - 172	2	20
Phenanthrene	0.0649	mg/L	1	0.0800	<0.0000552	81	19.6 - 172	1	20
Fluoranthene	0.0715	mg/L	1	0.0800	<0.0000954	89	17.3 - 187	5	20
Pyrene	0.0686	mg/L	1	0.0800	<0.0000497	86	14.9 - 199	0	20

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Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Limit	RPD Limit	
Benzo(a)anthracene	0.0657	mg/L	1	0.0800	<0.0000328	82	19.4 - 185	2	20
Chrysene	0.0659	mg/L	1	0.0800	<0.0000990	82	18.4 - 188	2	20
Benzo(b)fluoranthene	0.0677	mg/L	1	0.0800	<0.0000684	85	10 - 193	2	20
Benzo(k)fluoranthene	0.0700	mg/L	1	0.0800	<0.0000830	88	27.8 - 196	0	20
Benzo(a)pyrene	0.0765	mg/L	1	0.0800	<0.0000549	96	12.4 - 205	0	20
Indeno(1,2,3-cd)pyrene	0.0793	mg/L	1	0.0800	<0.0000869	99	10 - 198	0	20
Dibenz(a,h)anthracene	0.0789	mg/L	1	0.0800	<0.0000605	99	10 - 172	1	20
Benzo(g,h,i)perylene	0.0782	mg/L	1	0.0800	<0.0000681	98	10 - 186	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
Nitrobenzene-d5	0.0647	0.0643	mg/L	1	0.0800	81	80	10 - 165
2-Fluorobiphenyl	0.0661	0.0644	mg/L	1	0.0800	83	80	10 - 157
Terphenyl-d14	0.0728	0.0725	mg/L	1	0.0800	91	91	10 - 220

**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.	RPD Limit
DRO	22.7	mg/L	1	25.0	<2.44	91	70 - 130

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

**Matrix Spike (MS-1)**      Spiked Sample: 173720

QC Batch: 52499                          Date Analyzed: 2008-09-18                          Analyzed By: DC  
Prep Batch: 45006                          QC Preparation: 2008-09-18                          Prepared By: DC

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Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.44	mg/L	5	0.500	0.9008	108	77.5 - 121.1
Toluene	0.552	mg/L	5	0.500	<0.00500	110	78.8 - 119.6
Ethylbenzene	0.589	mg/L	5	0.500	0.0323	111	77.9 - 120.5
Xylene	1.59	mg/L	5	1.50	<0.0145	106	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	1.42	mg/L	5	0.500	0.9008	104	77.5 - 121.1	1	20
Toluene	0.544	mg/L	5	0.500	<0.00500	109	78.8 - 119.6	1	20
Ethylbenzene	0.581	mg/L	5	0.500	0.0323	110	77.9 - 120.5	1	20
Xylene	1.56	mg/L	5	1.50	<0.0145	104	78.3 - 119.4	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.508	0.515	mg/L	5	0.5	102	103	86.6 - 118.9
4-Bromofluorobenzene (4-BFB)	0.395	0.381	mg/L	5	0.5	79	76	59.4 - 127.3

#### Matrix Spike (MS-1) Spiked Sample: 173599

QC Batch: 52545	Date Analyzed: 2008-09-19	Analyzed By: AG
Prep Batch: 45037	QC Preparation: 2008-09-19	Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.37	mg/L	10	1.00	0.2965	107	77.5 - 121.1
Toluene	1.03	mg/L	10	1.00	<0.0100	103	78.8 - 119.6
Ethylbenzene	1.29	mg/L	10	1.00	0.2205	107	77.9 - 120.5
Xylene	5.26	mg/L	10	3.00	2.0005	109	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	1.33	mg/L	10	1.00	0.2965	103	77.5 - 121.1	3	20
Toluene	1.02	mg/L	10	1.00	<0.0100	102	78.8 - 119.6	1	20
Ethylbenzene	1.23	mg/L	10	1.00	0.2205	101	77.9 - 120.5	5	20
Xylene	5.15	mg/L	10	3.00	2.0005	105	78.3 - 119.4	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.02	1.00	mg/L	10	1	102	100	86.6 - 118.9

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Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	0.790	0.807	mg/L	10	1	79	81	59.4 - 127.3

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

QC Batch: 52546 Date Analyzed: 2008-09-19 Analyzed By: AG  
Prep Batch: 45037 QC Preparation: 2008-09-19 Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	109	mg/L	100	100	39.2627	70	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	112	mg/L	100	100	39.2627	73	70 - 130	3	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	9.24	9.30	mg/L	100	10	92	93	70 - 130
4-Bromofluorobenzene (4-BFB)	7.42	7.59	mg/L	100	10	74	76	70 - 130

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

QC Batch: 52748 Date Analyzed: 2008-09-26 Analyzed By: LD  
Prep Batch: 45205 QC Preparation: 2008-09-26 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.	Rec. Limit	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.

*continued ...*

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Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit	
Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit	
n-Triacontane	6.7	14.2	13.6	mg/L	1	10	142	136	70 - 130

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

QC Batch: 52499

Date Analyzed: 2008-09-18

Analyzed By: DC

Param	Flag	Units	ICVs	ICVs	ICVs	Percent	Date
			True	Found	Percent	Recovery	
Benzene		mg/L	0.100	0.102	102	85 - 115	2008-09-18
Toluene		mg/L	0.100	0.101	101	85 - 115	2008-09-18
Ethylbenzene		mg/L	0.100	0.103	103	85 - 115	2008-09-18
Xylene		mg/L	0.300	0.292	97	85 - 115	2008-09-18

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

QC Batch: 52499

Date Analyzed: 2008-09-18

Analyzed By: DC

Param	Flag	Units	CCVs	CCVs	CCVs	Percent	Date
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	
Benzene		mg/L	0.100	0.103	103	85 - 115	2008-09-18
Toluene		mg/L	0.100	0.103	103	85 - 115	2008-09-18
Ethylbenzene		mg/L	0.100	0.103	103	85 - 115	2008-09-18
Xylene		mg/L	0.300	0.296	99	85 - 115	2008-09-18

### Standard (ICV-1)

QC Batch: 52545

Date Analyzed: 2008-09-19

Analyzed By: AG

Param	Flag	Units	ICVs	ICVs	ICVs	Percent	Date Analyzed
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	
Benzene		mg/L	0.100	0.112	112	85 - 115	2008-09-19
Toluene		mg/L	0.100	0.111	111	85 - 115	2008-09-19
Ethylbenzene		mg/L	0.100	0.113	113	85 - 115	2008-09-19
Xylene		mg/L	0.300	0.328	109	85 - 115	2008-09-19

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

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

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### Standard (CCV-1)

QC Batch: 52545      Date Analyzed: 2008-09-19      Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.100	100	85 - 115	2008-09-19
Toluene		mg/L	0.100	0.0991	99	85 - 115	2008-09-19
Ethylbenzene		mg/L	0.100	0.100	100	85 - 115	2008-09-19
Xylene		mg/L	0.300	0.277	92	85 - 115	2008-09-19

### Standard (ICV-1)

QC Batch: 52546      Date Analyzed: 2008-09-19      Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.01	101	85 - 115	2008-09-19

### Standard (CCV-1)

QC Batch: 52546      Date Analyzed: 2008-09-19      Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.934	93	85 - 115	2008-09-19

### Standard (CCV-1)

QC Batch: 52619      Date Analyzed: 2008-09-22      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	56.7	94	80 - 120	2008-09-22
2-Methylnaphthalene		mg/L	60.0	52.3	87	80 - 120	2008-09-22
1-Methylnaphthalene		mg/L	60.0	52.2	87	80 - 120	2008-09-22
Acenaphthylene		mg/L	60.0	59.7	100	80 - 120	2008-09-22
Acenaphthene		mg/L	60.0	58.6	98	80 - 120	2008-09-22
Dibenzofuran		mg/L	60.0	61.8	103	80 - 120	2008-09-22
Fluorene		mg/L	60.0	66.8	111	80 - 120	2008-09-22
Anthracene		mg/L	60.0	59.4	99	80 - 120	2008-09-22
Phenanthrene		mg/L	60.0	57.1	95	80 - 120	2008-09-22

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*standard continued ...*

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoranthene		mg/L	60.0	59.0	98	80 - 120	2008-09-22
Pyrene		mg/L	60.0	59.5	99	80 - 120	2008-09-22
Benzo(a)anthracene		mg/L	60.0	56.5	94	80 - 120	2008-09-22
Chrysene		mg/L	60.0	58.3	97	80 - 120	2008-09-22
Benzo(b)fluoranthene		mg/L	60.0	60.7	101	80 - 120	2008-09-22
Benzo(k)fluoranthene		mg/L	60.0	60.0	100	80 - 120	2008-09-22
Benzo(a)pyrene		mg/L	60.0	64.0	107	80 - 120	2008-09-22
Indeno(1,2,3-cd)pyrene		mg/L	60.0	68.1	114	80 - 120	2008-09-22
Dibenzo(a,h)anthracene		mg/L	60.0	68.4	114	80 - 120	2008-09-22
Benzo(g,h,i)perylene		mg/L	60.0	67.1	112	80 - 120	2008-09-22

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5		61.3	mg/L	1	60.0	102	80 - 120
2-Fluorobiphenyl		58.6	mg/L	1	60.0	98	80 - 120
Terphenyl-d14		59.0	mg/L	1	60.0	98	80 - 120

### Standard (CCV-2)

QC Batch: 52619

Date Analyzed: 2008-09-22

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	57.1	95	80 - 120	2008-09-22
2-Methylnaphthalene		mg/L	60.0	54.6	91	80 - 120	2008-09-22
1-Methylnaphthalene		mg/L	60.0	54.7	91	80 - 120	2008-09-22
Acenaphthylene		mg/L	60.0	59.0	98	80 - 120	2008-09-22
Acenaphthene		mg/L	60.0	57.8	96	80 - 120	2008-09-22
Dibenzofuran		mg/L	60.0	61.5	102	80 - 120	2008-09-22
Fluorene		mg/L	60.0	66.8	111	80 - 120	2008-09-22
Anthracene		mg/L	60.0	58.9	98	80 - 120	2008-09-22
Phenanthrene		mg/L	60.0	57.4	96	80 - 120	2008-09-22
Fluoranthene		mg/L	60.0	57.0	95	80 - 120	2008-09-22
Pyrene		mg/L	60.0	60.2	100	80 - 120	2008-09-22
Benzo(a)anthracene		mg/L	60.0	56.8	95	80 - 120	2008-09-22
Chrysene		mg/L	60.0	58.2	97	80 - 120	2008-09-22
Benzo(b)fluoranthene		mg/L	60.0	61.1	102	80 - 120	2008-09-22
Benzo(k)fluoranthene		mg/L	60.0	60.3	100	80 - 120	2008-09-22
Benzo(a)pyrene		mg/L	60.0	64.2	107	80 - 120	2008-09-22
Indeno(1,2,3-cd)pyrene		mg/L	60.0	69.2	115	80 - 120	2008-09-22
Dibenzo(a,h)anthracene		mg/L	60.0	69.4	116	80 - 120	2008-09-22
Benzo(g,h,i)perylene		mg/L	60.0	67.9	113	80 - 120	2008-09-22

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Work Order: 8091805  
Moore to Jal #1

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Hobbs, N.M.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5		61.9	mg/L	1	60.0	103	80 - 120
2-Fluorobiphenyl		55.1	mg/L	1	60.0	92	80 - 120
Terphenyl-d14		58.9	mg/L	1	60.0	98	80 - 120

**Standard (ICV-1)**

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

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	231	92	85 - 115	2008-09-26

**Standard (CCV-1)**

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	240	96	85 - 115	2008-09-26

**TraceAnalysis, Inc.**

Company Name: Taylor Lab  
 Address: 2901 5th Street, Midland, TX 79701  
 Contact Person: Shane Smith  
 Invoice to: Camille Reynolds  
 (If different from above) Plains Resources  
 Project #: 8015302  
 Project Location (including state): Plains, NM

Company Name:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS										
		WATER	AIR	SOLID	SLUdge	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	DATE	TIME
734	MW-16	X							X	9/17/05	12:00	
735	MW-20								X	9/30/05		
736	MW-19								X	13:00		
737	MW-17								X	13:30		
738	MW-12								X	13:45		
739	MW-7								X	14:30		
740	MW-13								X	15:30		
741	MW-15								X	14:30		
742	MW-14								X	14:30		
743	MW-12								X	17:30		
Relinquished by:		Date:	Time:	Received by:		Date:	Time:	LAB USE ONLY		REMARKS:		
<u>Jeff Brown</u>		<u>9/18/05</u>	<u>8:00 AM</u>	<u>Jeff Brown</u>		<u>9/18/05</u>	<u>8:30</u>	<u>TEX &amp; TH - Williams</u>		<u>RAH - Labwork</u>		
Relinquished by:		Date:	Time:	Received by:		Date:	Time:	Intact <input checked="" type="checkbox"/> / N		<input type="checkbox"/> Dry Weight Basis Required		
<u>Jeff Brown</u>		<u>9/18/05</u>	<u>8:00 AM</u>	<u>Jeff Brown</u>		<u>9/18/05</u>	<u>8:30</u>	<u>Headspace <input checked="" type="checkbox"/> Y/N</u>		<input type="checkbox"/> TRRP Report Required		
Relinquished by:		Date:	Time:	Received at Laboratory by:		Date:	Time:	<u>Temp <input checked="" type="checkbox"/> 22°C</u>		<input type="checkbox"/> Check If Special Reporting		
								<u>Login/Review _____</u>		<input type="checkbox"/> Limits Are Needed		
Carrier # _____												

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

ORIGINAL COPY

# 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•588•3443 915•585•3443 FAX 915•585•4944  
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313  
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5200  
E-Mail: lab@traceanalysis.com

## Certifications

WBENC: 237019

HUB: 1752439743100-86536  
NCTRCA WFWB38444Y0909

DBE: VN 20657

Lubbock: T104704219-08-TX  
LELAP-02003  
Kansas E-10317

## NELAP Certifications

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: September 29, 2008

Work Order: 8091908



Project Location: Hobbs, N.M.  
Project Name: Moore to Jal #1  
Project Number: PLAINS007SPL  
SRS#: 2002-10720

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
173888	MW-8	water	2008-09-18	12:05	2008-09-19
173889	MW-6	water	2008-09-18	11:25	2008-09-19
173890	MW-3	water	2008-09-18	13:30	2008-09-19
173891	MW-11	water	2008-09-18	08:50	2008-09-19
173892	MW-10	water	2008-09-18	10:20	2008-09-19

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
173893	MW-2	water	2008-09-18	09:30	2008-09-19

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 27 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 Moore to Jal #1 were received by TraceAnalysis, Inc. on 2008-09-19 and assigned to work order 8091908. Samples for work order 8091908 were received intact without headspace and at a temperature of 3.6 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 8091908 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: 173888 - MW-8

Laboratory: Midland  
 Analysis: BTEX  
 QC Batch: 52545  
 Prep Batch: 45037

Analytical Method: S 8021B  
 Date Analyzed: 2008-09-19  
 Sample Preparation: 2008-09-19

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		26.1	mg/L	100	0.00100
Toluene		5.35	mg/L	100	0.00100
Ethylbenzene		0.983	mg/L	100	0.00100
Xylene		1.37	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		10.2	mg/L	100	10.0	102	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		7.87	mg/L	100	10.0	79	40.1 - 136

Sample: 173888 - MW-8

Laboratory: Lubbock  
 Analysis: PAH  
 QC Batch: 52619  
 Prep Batch: 45105

Analytical Method: S 8270C  
 Date Analyzed: 2008-09-22  
 Sample Preparation: 2008-09-22

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

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.0697	mg/L	1	0.000200
2-Methylnaphthalene		0.0821	mg/L	1	0.000200
1-Methylnaphthalene		0.0699	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		0.00834	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.0101	mg/L	1	0.000200
Fluoranthene		0.000386	mg/L	1	0.000200
Pyrene		0.000660	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: September 29, 2008  
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Work Order: 8091908  
Moore to Jal #1

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sample 173888 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		0.0523	mg/L	1	0.0800	65	37.4 - 123
2-Fluorobiphenyl		0.0396	mg/L	1	0.0800	50	34.3 - 130
Terphenyl-d14		0.0538	mg/L	1	0.0800	67	10 - 252

Sample: 173888 - MW-8

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		<5.00	mg/L	1	5.00		
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	1	15.0	mg/L	1	10.0	150	70 - 130

Sample: 173888 - MW-8

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52546  
Prep Batch: 45037

Analytical Method: S 8015B  
Date Analyzed: 2008-09-19  
Sample Preparation: 2008-09-19

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

Parameter	Flag	Result	Units	Dilution	RL		
GRO		26.8	mg/L	100	0.100		
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		8.92	mg/L	100	10.0	89	70 - 130
4-Bromofluorobenzene (4-BFB)		7.03	mg/L	100	10.0	70	70 - 130

<sup>1</sup> High surrogate recovery. Sample non-detect, result bias high.

Report Date: September 29, 2008  
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Work Order: 8091908  
Moore to Jal #1

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**Sample: 173889 - MW-6**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52545  
Prep Batch: 45037

Analytical Method: S 8021B  
Date Analyzed: 2008-09-19  
Sample Preparation: 2008-09-19

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		38.9	mg/L	100	0.00100
Toluene		3.80	mg/L	100	0.00100
Ethylbenzene		1.50	mg/L	100	0.00100
Xylene		1.96	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		10.2	mg/L	100	10.0	102	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		8.03	mg/L	100	10.0	80	40.1 - 136

**Sample: 173889 - MW-6**

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 52619  
Prep Batch: 45105

Analytical Method: S 8270C  
Date Analyzed: 2008-09-22  
Sample Preparation: 2008-09-22

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

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.0906	mg/L	1	0.000200
2-Methylnaphthalene		0.0890	mg/L	1	0.000200
1-Methylnaphthalene		0.0762	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.00757	mg/L	1	0.000200
Fluorene		0.00955	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.0104	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

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Moore to Jal #1

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0577	mg/L	1	0.0800	72	37.4 - 123
2-Fluorobiphenyl		0.0459	mg/L	1	0.0800	57	34.3 - 130
Terphenyl-d14		0.0648	mg/L	1	0.0800	81	10 - 252

**Sample: 173889 - MW-6**

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		<5.00	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		12.9	mg/L	1	10.0	129	70 - 130

**Sample: 173889 - MW-6**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52546  
Prep Batch: 45037

Analytical Method: S 8015B  
Date Analyzed: 2008-09-19  
Sample Preparation: 2008-09-19

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		27.7	mg/L	100	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		8.89	mg/L	100	10.0	89	70 - 130
4-Bromofluorobenzene (4-BFB)		7.22	mg/L	100	10.0	72	70 - 130

**Sample: 173890 - MW-3**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52545  
Prep Batch: 45037

Analytical Method: S 8021B  
Date Analyzed: 2008-09-19  
Sample Preparation: 2008-09-19

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

Report Date: September 29, 2008  
PLAINSO07SPL

Work Order: 8091908  
Moore to Jal #1

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Parameter	Flag	Result	Units	Dilution	RL		
Benzene		39.7	mg/L	100	0.00100		
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		10.2	mg/L	100	10.0	102	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		8.11	mg/L	100	10.0	81	40.1 - 136

### Sample: 173890 - MW-3

Laboratory: Lubbock

Analysis: PAH

QC Batch: 52619

Prep Batch: 45105

Analytical Method: S 8270C

Date Analyzed: 2008-09-22

Sample Preparation: 2008-09-22

Prep Method: S 3510C

Analyzed By: DS

Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene	2	0.108	mg/L	1	0.000200
2-Methylnaphthalene	3	0.203	mg/L	1	0.000200
1-Methylnaphthalene	4	0.171	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.0171	mg/L	1	0.000200
Fluorene		0.0224	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.0274	mg/L	1	0.000200
Fluoranthene		0.000986	mg/L	1	0.000200
Pyrene		0.000820	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		0.000319	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

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

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

<sup>4</sup>Estimated concentration value greater than standard range.

Report Date: September 29, 2008  
PLAINSO07SPL

Work Order: 8091908  
Moore to Jal #1

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Hobbs, N.M.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5	5	0.0260	mg/L	1	0.0800	32	37.4 - 123
2-Fluorobiphenyl	6	0.0221	mg/L	1	0.0800	28	34.3 - 130
Terphenyl-d14		0.0299	mg/L	1	0.0800	37	10 - 252

**Sample: 173890 - MW-3**

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		61.2	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	7	18.9	mg/L	1	10.0	189	70 - 130

**Sample: 173890 - MW-3**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52546  
Prep Batch: 45037

Analytical Method: S 8015B  
Date Analyzed: 2008-09-19  
Sample Preparation: 2008-09-19

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		37.1	mg/L	100	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		8.89	mg/L	100	10.0	89	70 - 130
4-Bromofluorobenzene (4-BFB)		7.30	mg/L	100	10.0	73	70 - 130

**Sample: 173891 - MW-11**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52545  
Prep Batch: 45037

Analytical Method: S 8021B  
Date Analyzed: 2008-09-19  
Sample Preparation: 2008-09-19

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

<sup>5</sup>Matrix interference retained surrogate during solvent phase of extraction. Accompanying quality control within limits show extraction was performed properly. •

<sup>6</sup>Matrix interference retained surrogate during solvent phase of extraction. Accompanying quality control within limits show extraction was performed properly. •

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

Report Date: September 29, 2008  
PLAIN007SPL

Work Order: 8091908  
Moore to Jal #1

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Parameter	Flag	Result	Units	Dilution	RL		
Benzene		4.06	mg/L	20	0.00100		
Toluene		1.70	mg/L	20	0.00100		
Ethylbenzene		0.308	mg/L	20	0.00100		
Xylene		0.575	mg/L	20	0.00100		
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.00	mg/L	20	2.00	100	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		1.64	mg/L	20	2.00	82	40.1 - 136

Sample: 173891 - MW-11

Laboratory: Lubbock

Analysis: PAH

QC Batch: 52619

Prep Batch: 45105

Analytical Method: S 8270C

Date Analyzed: 2008-09-22

Sample Preparation: 2008-09-22

Prep Method: S 3510C

Analyzed By: DS

Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.0285	mg/L	1	0.000200
2-Methylnaphthalene		0.0313	mg/L	1	0.000200
1-Methylnaphthalene		0.0259	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.00265	mg/L	1	0.000200
Fluorene		0.00366	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.00366	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		0.0670	mg/L	1	0.0800	84	37.4 - 123
2-Fluorobiphenyl		0.0617	mg/L	1	0.0800	77	34.3 - 130
Terphenyl-d14		0.0727	mg/L	1	0.0800	91	10 - 252

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**Sample: 173891 - MW-11**

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		<5.00	mg/L	1	5.00		
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery		
n-Triacontane	<sup>8</sup>	19.4	mg/L	1	10.0	194	70 - 130

**Sample: 173891 - MW-11**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52546  
Prep Batch: 45037

Analytical Method: S 8015B  
Date Analyzed: 2008-09-19  
Sample Preparation: 2008-09-19

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

Parameter	Flag	Result	Units	Dilution	RL		
GRO		8.69	mg/L	20	0.100		
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery		
Trifluorotoluene (TFT)		1.77	mg/L	20	2.00	88	70 - 130
4-Bromofluorobenzene (4-BFB)		1.48	mg/L	20	2.00	74	70 - 130

**Sample: 173892 - MW-10**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 52600  
Prep Batch: 45094

Analytical Method: S 8021B  
Date Analyzed: 2008-09-22  
Sample Preparation: 2008-09-22

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		11.0	mg/L	200	0.00100
Toluene		5.25	mg/L	200	0.00100
Ethylbenzene		1.10	mg/L	200	0.00100
Xylene		2.05	mg/L	200	0.00100

<sup>8</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)		17.7	mg/L	200	20.0	88	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		18.0	mg/L	200	20.0	90	52 - 124.1

**Sample: 173892 - MW-10**

Laboratory: Lubbock

Analysis: PAH

QC Batch: 52619

Prep Batch: 45105

Analytical Method: S 8270C

Date Analyzed: 2008-09-22

Sample Preparation: 2008-09-22

Prep Method: S 3510C

Analyzed By: DS

Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		<b>0.0511</b>	mg/L	1	0.000200
2-Methylnaphthalene		<b>0.0368</b>	mg/L	1	0.000200
1-Methylnaphthalene		<b>0.0321</b>	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		<b>0.00277</b>	mg/L	1	0.000200
Fluorene		<b>0.00246</b>	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		<b>0.00188</b>	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		0.0590	mg/L	1	0.0800	74	37.4 - 123
2-Fluorobiphenyl		0.0612	mg/L	1	0.0800	76	34.3 - 130
Terphenyl-d14		0.0679	mg/L	1	0.0800	85	10 - 252

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**Sample: 173892 - MW-10**

Laboratory:	Midland	Analytical Method:	Mod. 8015B	Prep Method:	N/A
Analysis:	TPH DRO	Date Analyzed:	2008-09-26	Analyzed By:	LD
QC Batch:	52748	Sample Preparation:	2008-09-26	Prepared By:	LD
Prep Batch:	45205				

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	<sup>9</sup>	14.3	mg/L	1	10.0	143	70 - 130

**Sample: 173892 - MW-10**

Laboratory:	Midland	Analytical Method:	S 8015B	Prep Method:	S 5030B
Analysis:	TPH GRO	Date Analyzed:	2008-09-22	Analyzed By:	DC
QC Batch:	52618	Sample Preparation:	2008-09-22	Prepared By:	AG
Prep Batch:	45094				

Parameter	Flag	Result	Units	Dilution	RL
GRO		59.3	mg/L	200	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		17.9	mg/L	200	20.0	90	70 - 130
4-Bromofluorobenzene (4-BFB)		17.6	mg/L	200	20.0	88	70 - 130

**Sample: 173893 - MW-2**

Laboratory:	Midland	Analytical Method:	S 8021B	Prep Method:	S 5030B
Analysis:	BTEX	Date Analyzed:	2008-09-22	Analyzed By:	DC
QC Batch:	52600	Sample Preparation:	2008-09-22	Prepared By:	AG
Prep Batch:	45094				

Parameter	Flag	Result	Units	Dilution	RL
Benzene		6.29	mg/L	50	0.00100
Toluene		3.21	mg/L	50	0.00100
Ethylbenzene		0.592	mg/L	50	0.00100
Xylene		1.28	mg/L	50	0.00100

<sup>9</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)		4.67	mg/L	50	5.00	93	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		4.76	mg/L	50	5.00	95	52 - 124.1

Sample: 173893 - MW-2

Laboratory: Lubbock

Analysis: PAH

QC Batch: 52619

Prep Batch: 45105

Analytical Method: S 8270C

Date Analyzed: 2008-09-22

Sample Preparation: 2008-09-22

Prep Method: S 3510C

Analyzed By: DS

Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
Naphthalene		0.0380	mg/L	1	0.000200
2-Methylnaphthalene		0.0507	mg/L	1	0.000200
1-Methylnaphthalene		0.0410	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.00436	mg/L	1	0.000200
Fluorene		0.00600	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.00612	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		0.0573	mg/L	1	0.0800	72	37.4 - 123
2-Fluorobiphenyl		0.0542	mg/L	1	0.0800	68	34.3 - 130
Terphenyl-d14		0.0673	mg/L	1	0.0800	84	10 - 252

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**Sample: 173893 - 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		<5.00	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	<sup>10</sup>	13.9	mg/L	1	10.0	139	70 - 130

**Sample: 173893 - MW-2**

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52546  
Prep Batch: 45037

Analytical Method: S 8015B  
Date Analyzed: 2008-09-19  
Sample Preparation: 2008-09-19

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		16.0	mg/L	50	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.44	mg/L	50	5.00	89	70 - 130
4-Bromofluorobenzene (4-BFB)		3.59	mg/L	50	5.00	72	70 - 130

**Method Blank (1) QC Batch: 52545**

QC Batch: 52545  
Prep Batch: 45037

Date Analyzed: 2008-09-19  
QC Preparation: 2008-09-19

Analyzed By: AG  
Prepared By: DC

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

<sup>10</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)		0.102	mg/L	1	0.100	102	77.2 - 129.1
4-Bromofluorobenzene (4-BFB)		0.0964	mg/L	1	0.100	96	69.1 - 122.3

Method Blank (1) QC Batch: 52546

QC Batch: 52546 Date Analyzed: 2008-09-19 Analyzed By: AG  
Prep Batch: 45037 QC Preparation: 2008-09-19 Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
GRO		0.0841	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0895	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0848	mg/L	1	0.100	85	70 - 130

Method Blank (1) QC Batch: 52600

QC Batch: 52600 Date Analyzed: 2008-09-22 Analyzed By: DC  
Prep Batch: 45094 QC Preparation: 2008-09-22 Prepared By: AG

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)		0.0985	mg/L	1	0.100	98	44.6 - 137.4
4-Bromofluorobenzene (4-BFB)		0.0973	mg/L	1	0.100	97	37.1 - 130.9

Method Blank (1) QC Batch: 52618

QC Batch: 52618 Date Analyzed: 2008-09-22 Analyzed By: DC  
Prep Batch: 45094 QC Preparation: 2008-09-22 Prepared By: AG

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Parameter	Flag	MDL Result	Units		RL		
GRO		0.0947	mg/L		0.1		
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0996	mg/L	1	0.100	100	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0955	mg/L	1	0.100	96	50 - 130

Method Blank (1) QC Batch: 52619

QC Batch: 52619 Date Analyzed: 2008-09-22 Analyzed By: DS  
Prep Batch: 45105 QC Preparation: 2008-09-22 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
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		0.0598	mg/L	1	0.0800	75	10 - 146
2-Fluorobiphenyl		0.0556	mg/L	1	0.0800	70	10 - 141
Terphenyl-d14		0.0576	mg/L	1	0.0800	72	10 - 266

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Method Blank (1) QC Batch: 52748

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

Laboratory Control Spike (LCS-1)

QC Batch: 52545 Date Analyzed: 2008-09-19 Analyzed By: AG  
Prep Batch: 45037 QC Preparation: 2008-09-19 Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.112	mg/L	1	0.100	<0.00110	112	84 - 119.7
Toluene	0.112	mg/L	1	0.100	<0.00100	112	84.9 - 118.2
Ethylbenzene	0.114	mg/L	1	0.100	<0.00100	114	84.4 - 118.6
Xylene	0.332	mg/L	1	0.300	<0.00290	111	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	0.114	mg/L	1	0.100	<0.00110	114	84 - 119.7	2	20
Toluene	0.113	mg/L	1	0.100	<0.00100	113	84.9 - 118.2	1	20
Ethylbenzene	0.115	mg/L	1	0.100	<0.00100	115	84.4 - 118.6	1	20
Xylene	0.336	mg/L	1	0.300	<0.00290	112	84.8 - 117.8	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.104	0.102	mg/L	1	0.100	104	102	80 - 128.3
4-Bromofluorobenzene (4-BFB)	0.0990	0.0996	mg/L	1	0.100	99	100	67.7 - 126.3

Laboratory Control Spike (LCS-1)

QC Batch: 52546 Date Analyzed: 2008-09-19 Analyzed By: AG  
Prep Batch: 45037 QC Preparation: 2008-09-19 Prepared By: DC

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Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	0.840	mg/L	1	1.00	<0.0240	84	70 - 130

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	0.898	mg/L	1	1.00	<0.0240	90	70 - 130	7	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)	0.0929	0.0966	mg/L	1	0.100	93	97	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0882	0.0884	mg/L	1	0.100	88	88	70 - 130

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

QC Batch: 52600                          Date Analyzed: 2008-09-22                          Analyzed By: DC  
Prep Batch: 45094                          QC Preparation: 2008-09-22                          Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0980	mg/L	1	0.100	<0.000500	98	71.7 - 120.5
Toluene	0.0976	mg/L	1	0.100	<0.000700	98	75.4 - 118.8
Ethylbenzene	0.0970	mg/L	1	0.100	<0.000700	97	73.5 - 118
Xylene	0.293	mg/L	1	0.300	<0.00180	98	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	RPD Limit	
Benzene	0.100	mg/L	1	0.100	<0.000500	100	71.7 - 120.5	2	20
Toluene	0.0996	mg/L	1	0.100	<0.000700	100	75.4 - 118.8	2	20
Ethylbenzene	0.100	mg/L	1	0.100	<0.000700	100	73.5 - 118	3	20
Xylene	0.302	mg/L	1	0.300	<0.00180	100	72.9 - 118.2	3	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0898	0.0900	mg/L	1	0.100	90	90	38.2 - 131.6
4-Bromofluorobenzene (4-BFB)	0.0913	0.0921	mg/L	1	0.100	91	92	43.9 - 132.4

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

QC Batch: 52618                          Date Analyzed: 2008-09-22                          Analyzed By: DC  
Prep Batch: 45094                          QC Preparation: 2008-09-22                          Prepared By: AG

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Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec. 80	Rec. Limit 70 - 130
GRO	0.897	mg/L	1	1.00	0.0947		

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. 88	Rec. Limit 70 - 130	RPD 8	RPD Limit 20
GRO	0.976	mg/L	1	1.00	0.0947				

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)	0.0953	0.0943	mg/L	1	0.100	95	94	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0944	0.0922	mg/L	1	0.100	94	92	70 - 130

### Laboratory Control Spike (LCS-1)

QC Batch: 52619    Date Analyzed: 2008-09-22  
 Prep Batch: 45105    QC Preparation: 2008-09-22    Analyzed By: DS  
     Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec. 69	Rec. Limit 10 - 141
Naphthalene	0.0553	mg/L	1	0.0800	<0.0000730		
2-Methylnaphthalene	0.0572	mg/L	1	0.0800	<0.0000509	72	50 - 150
1-Methylnaphthalene	0.0562	mg/L	1	0.0800	<0.0000748	70	50 - 150
Acenaphthylene	0.0694	mg/L	1	0.0800	<0.0000767	87	10 - 152
Acenaphthene	0.0642	mg/L	1	0.0800	<0.000142	80	10 - 151
Dibenzofuran	0.0656	mg/L	1	0.0800	<0.0000470	82	10 - 148
Fluorene	0.0682	mg/L	1	0.0800	<0.0000569	85	10 - 172
Anthracene	0.0667	mg/L	1	0.0800	<0.0000876	83	22.5 - 172
Phenanthrene	0.0655	mg/L	1	0.0800	<0.0000552	82	19.6 - 172
Fluoranthene	0.0749	mg/L	1	0.0800	<0.0000954	94	17.3 - 187
Pyrene	0.0683	mg/L	1	0.0800	<0.0000497	85	14.9 - 199
Benzo(a)anthracene	0.0668	mg/L	1	0.0800	<0.0000328	84	19.4 - 185
Chrysene	0.0669	mg/L	1	0.0800	<0.0000990	84	18.4 - 188
Benzo(b)fluoranthene	0.0688	mg/L	1	0.0800	<0.0000684	86	10 - 193
Benzo(k)fluoranthene	0.0702	mg/L	1	0.0800	<0.0000830	88	27.8 - 196
Benzo(a)pyrene	0.0766	mg/L	1	0.0800	<0.0000549	96	12.4 - 205
Indeno(1,2,3-cd)pyrene	0.0792	mg/L	1	0.0800	<0.0000869	99	10 - 198
Dibenzo(a,h)anthracene	0.0781	mg/L	1	0.0800	<0.0000605	98	10 - 172
Benzo(g,h,i)perylene	0.0785	mg/L	1	0.0800	<0.0000681	98	10 - 186

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

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*control spikes continued ...*

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Naphthalene	0.0551	mg/L	1	0.0800	<0.0000730	69	10 - 141	0	20
2-Methylnaphthalene	0.0566	mg/L	1	0.0800	<0.0000509	71	50 - 150	1	20
1-Methylnaphthalene	0.0562	mg/L	1	0.0800	<0.0000748	70	50 - 150	0	20
Acenaphthylene	0.0690	mg/L	1	0.0800	<0.0000767	86	10 - 152	1	20
Acenaphthene	0.0644	mg/L	1	0.0800	<0.000142	80	10 - 151	0	20
Dibenzofuran	0.0662	mg/L	1	0.0800	<0.0000470	83	10 - 148	1	20
Fluorene	0.0709	mg/L	1	0.0800	<0.0000569	89	10 - 172	4	20
Anthracene	0.0652	mg/L	1	0.0800	<0.0000876	82	22.5 - 172	2	20
Phenanthrene	0.0649	mg/L	1	0.0800	<0.0000552	81	19.6 - 172	1	20
Fluoranthene	0.0715	mg/L	1	0.0800	<0.0000954	89	17.3 - 187	5	20
Pyrene	0.0686	mg/L	1	0.0800	<0.0000497	86	14.9 - 199	0	20
Benzo(a)anthracene	0.0657	mg/L	1	0.0800	<0.0000328	82	19.4 - 185	2	20
Chrysene	0.0659	mg/L	1	0.0800	<0.0000990	82	18.4 - 188	2	20
Benzo(b)fluoranthene	0.0677	mg/L	1	0.0800	<0.0000684	85	10 - 193	2	20
Benzo(k)fluoranthene	0.0700	mg/L	1	0.0800	<0.0000830	88	27.8 - 196	0	20
Benzo(a)pyrene	0.0765	mg/L	1	0.0800	<0.0000549	96	12.4 - 205	0	20
Indeno(1,2,3-cd)pyrene	0.0793	mg/L	1	0.0800	<0.0000869	99	10 - 198	0	20
Dibenzo(a,h)anthracene	0.0789	mg/L	1	0.0800	<0.0000605	99	10 - 172	1	20
Benzo(g,h,i)perylene	0.0782	mg/L	1	0.0800	<0.0000681	98	10 - 186	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
Nitrobenzene-d5	0.0647	0.0643	mg/L	1	0.0800	81	80	10 - 165
2-Fluorobiphenyl	0.0661	0.0644	mg/L	1	0.0800	83	80	10 - 157
Terphenyl-d14	0.0728	0.0725	mg/L	1	0.0800	91	91	10 - 220

#### 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

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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
n-Triacontane	10.5	10.2	mg/L	1	10.0	105	102	70 - 130

Matrix Spike (MS-1) Spiked Sample: 173599

QC Batch: 52545 Date Analyzed: 2008-09-19 Analyzed By: AG  
Prep Batch: 45037 QC Preparation: 2008-09-19 Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.37	mg/L	10	1.00	0.2965	107	77.5 - 121.1
Toluene	1.03	mg/L	10	1.00	<0.0100	103	78.8 - 119.6
Ethylbenzene	1.29	mg/L	10	1.00	0.2205	107	77.9 - 120.5
Xylene	5.26	mg/L	10	3.00	2.0005	109	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	1.33	mg/L	10	1.00	0.2965	103	77.5 - 121.1	3	20
Toluene	1.02	mg/L	10	1.00	<0.0100	102	78.8 - 119.6	1	20
Ethylbenzene	1.23	mg/L	10	1.00	0.2205	101	77.9 - 120.5	5	20
Xylene	5.15	mg/L	10	3.00	2.0005	105	78.3 - 119.4	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.02	1.00	mg/L	10	1	102	100	86.6 - 118.9
4-Bromofluorobenzene (4-BFB)	0.790	0.807	mg/L	10	1	79	81	59.4 - 127.3

Matrix Spike (MS-1) Spiked Sample: 173739

QC Batch: 52546 Date Analyzed: 2008-09-19 Analyzed By: AG  
Prep Batch: 45037 QC Preparation: 2008-09-19 Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	109	mg/L	100	100	39.2627	70	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	112	mg/L	100	100	39.2627	73	70 - 130	3	20

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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)	9.24	9.30	mg/L	100	10	92	93	70 - 130
4-Bromofluorobenzene (4-BFB)	7.42	7.59	mg/L	100	10	74	76	70 - 130

Matrix Spike (MS-1) Spiked Sample: 173893

QC Batch: 52600 Date Analyzed: 2008-09-22 Analyzed By: DC  
Prep Batch: 45094 QC Preparation: 2008-09-22 Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	10.7	mg/L	50	5.00	6.2921	88	10 - 160.8
Toluene	7.78	mg/L	50	5.00	3.2111	91	10 - 160.7
Ethylbenzene	5.29	mg/L	50	5.00	0.5921	94	10 - 158.3
Xylene	15.4	mg/L	50	15.0	1.2802	94	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	11.0	mg/L	50	5.00	6.2921	94	10 - 160.8	3	20
Toluene	8.08	mg/L	50	5.00	3.2111	97	10 - 160.7	4	20
Ethylbenzene	5.60	mg/L	50	5.00	0.5921	100	10 - 158.3	6	20
Xylene	16.4	mg/L	50	15.0	1.2802	101	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. Limit
Trifluorotoluene (TFT)	4.46	4.59	mg/L	50	5	89	92	33.1 - 132.5
4-Bromofluorobenzene (4-BFB)	4.65	4.74	mg/L	50	5	93	95	37.5 - 136

Matrix Spike (MS-1) Spiked Sample: 173892

QC Batch: 52618 Date Analyzed: 2008-09-22 Analyzed By: DC  
Prep Batch: 45094 QC Preparation: 2008-09-22 Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	221	mg/L	200	200	59.3011	81	70 - 130

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

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Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	237	mg/L	200	200	59.3011	89	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
Trifluorotoluene (TFT)	18.5	18.5	mg/L	200	20	92	92	70 - 130
4-Bromofluorobenzene (4-BFB)	18.8	18.4	mg/L	200	20	94	92	70 - 130

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

QC Batch: 52748                          Date Analyzed: 2008-09-26                          Analyzed By: LD  
Prep Batch: 45205                          QC Preparation: 2008-09-26                          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.	Rec. Limit	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	11 <sup>11</sup> 12 <sup>12</sup>	14.2	13.6	mg/L	1	10	142	136	70 - 130

#### Standard (ICV-1)

QC Batch: 52545                          Date Analyzed: 2008-09-19                          Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.112	112	85 - 115	2008-09-19
Toluene		mg/L	0.100	0.111	111	85 - 115	2008-09-19
Ethylbenzene		mg/L	0.100	0.113	113	85 - 115	2008-09-19
Xylene		mg/L	0.300	0.328	109	85 - 115	2008-09-19

<sup>11</sup>High surrogate recovery due to peak interference.

<sup>12</sup>High surrogate recovery due to peak interference.

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### Standard (CCV-1)

QC Batch: 52545

Date Analyzed: 2008-09-19

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.100	100	85 - 115	2008-09-19
Toluene		mg/L	0.100	0.0991	99	85 - 115	2008-09-19
Ethylbenzene		mg/L	0.100	0.100	100	85 - 115	2008-09-19
Xylene		mg/L	0.300	0.277	92	85 - 115	2008-09-19

### Standard (ICV-1)

QC Batch: 52546

Date Analyzed: 2008-09-19

Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.01	101	85 - 115	2008-09-19

### Standard (CCV-1)

QC Batch: 52546

Date Analyzed: 2008-09-19

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.934	93	85 - 115	2008-09-19

### Standard (ICV-1)

QC Batch: 52600

Date Analyzed: 2008-09-22

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	0.112	112	85 - 115	2008-09-22
Toluene		mg/L	0.100	0.112	112	85 - 115	2008-09-22
Ethylbenzene		mg/L	0.100	0.109	109	85 - 115	2008-09-22
Xylene		mg/L	0.300	0.330	110	85 - 115	2008-09-22

### Standard (CCV-1)

QC Batch: 52600

Date Analyzed: 2008-09-22

Analyzed By: DC

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.111	111	85 - 115	2008-09-22
Toluene		mg/L	0.100	0.107	107	85 - 115	2008-09-22
Ethylbenzene		mg/L	0.100	0.103	103	85 - 115	2008-09-22
Xylene		mg/L	0.300	0.308	103	85 - 115	2008-09-22

### Standard (ICV-1)

QC Batch: 52618    Date Analyzed: 2008-09-22    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	1.06	106	85 - 115	2008-09-22

### Standard (CCV-1)

QC Batch: 52618    Date Analyzed: 2008-09-22    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	1.11	111	85 - 115	2008-09-22

### Standard (CCV-2)

QC Batch: 52619    Date Analyzed: 2008-09-22    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	57.1	95	80 - 120	2008-09-22
2-Methylnaphthalene		mg/L	60.0	54.6	91	80 - 120	2008-09-22
1-Methylnaphthalene		mg/L	60.0	54.7	91	80 - 120	2008-09-22
Acenaphthylene		mg/L	60.0	59.0	98	80 - 120	2008-09-22
Acenaphthene		mg/L	60.0	57.8	96	80 - 120	2008-09-22
Dibenzofuran		mg/L	60.0	61.5	102	80 - 120	2008-09-22
Fluorene		mg/L	60.0	66.8	111	80 - 120	2008-09-22
Anthracene		mg/L	60.0	58.9	98	80 - 120	2008-09-22
Phenanthrene		mg/L	60.0	57.4	96	80 - 120	2008-09-22
Fluoranthene		mg/L	60.0	57.0	95	80 - 120	2008-09-22
Pyrene		mg/L	60.0	60.2	100	80 - 120	2008-09-22
Benzo(a)anthracene		mg/L	60.0	56.8	95	80 - 120	2008-09-22

*continued ...*

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*standard continued ...*

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chrysene		mg/L	60.0	58.2	97	80 - 120	2008-09-22
Benzo(b)fluoranthene		mg/L	60.0	61.1	102	80 - 120	2008-09-22
Benzo(k)fluoranthene		mg/L	60.0	60.3	100	80 - 120	2008-09-22
Benzo(a)pyrene		mg/L	60.0	64.2	107	80 - 120	2008-09-22
Indeno(1,2,3-cd)pyrene		mg/L	60.0	69.2	115	80 - 120	2008-09-22
Dibenzo(a,h)anthracene		mg/L	60.0	69.4	116	80 - 120	2008-09-22
Benzo(g,h,i)perylene		mg/L	60.0	67.9	113	80 - 120	2008-09-22
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5		61.9	mg/L	1	60.0	103	80 - 120
2-Fluorobiphenyl		55.1	mg/L	1	60.0	92	80 - 120
Terphenyl-d14		58.9	mg/L	1	60.0	98	80 - 120

**Standard (ICV-1)**

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

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	231	92	85 - 115	2008-09-26

**Standard (CCV-1)**

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	240	96	85 - 115	2008-09-26

**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

# TraceAnalysis, Inc.

email: lab@traceanalysis.com  
 Company Name: Talon Lab  
 Address: (Street, City, Zip) 2901 S.H. 342 Midland, TX 79306  
 Contact Person: Suzanne Smith, Camille Reynolds  
 Invoice to: Plains Oil & Gas  
 Project #: SR542002-102705  
 Project Location (including state): Tobots, TX

Company Name: <u>Talon Lab</u>		Phone #: <u>(432) 5822-2137</u>	Fax #: <u>(432) 5822-2180</u>
Address: (Street, City, Zip) <u>2901 S.H. 342 Midland, TX 79306</u>		Email: <u>Suzanne Smith, Camille Reynolds</u>	
Contact Person:	<u>Plains Oil &amp; Gas</u>		
Invoice to:			
Project #:	<u>SR542002-102705</u>		
Project Location (including state):	<u>Tobots, TX</u>		

LAB # (LAB USE) ONLY	FIELD CODE	# CONTAINERS	VOLUME / AMOUNT	MATRIX	PRESERVATIVE	METHOD	SAMPLING	TIME	DATE	ICP	NaOH	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	SLUDGE	AIR	WATER	SOIL	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICP	NONE	PAH6200C	Total Metals Ag As Cd Cr Pb Se Hg 6010B/2000.7	TCLP Metals Ag As Cd Cr Pb Se Hg 6010B/2000.7	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. B260B / 624	GC/MS Semi. Vol. B270C / 625	PCBs 8082 / 608	Pesticides 8081A / 608	BOD, TSS, PH	Moisture Content	Hold	Turn Around Time if different from standard		
																																					ANALYSIS REQUEST (Circle or Specify Method No.)		
113888	MW-8							9/18	1205	X																													
88	MW-6							9/18	1225	X																													
880	MW-3							9/18	034	X																													
881	MW-11							9/18	0830	X																													
882	MW-10							9/18	0730	X																													
883	MW-9 MW-2							9/18	0930	X																													
Relinquished by: <u>Bethany Hanes 1900</u> Received by: <u>Robert Farmer</u> Date: <u>9/19/08</u> Time: <u>8:12</u>																				Date:	Time:	LAB USE ONLY		REMARKS:															
Relinquished by: <u>Jay D. Farmer 9/19/08 8:30</u> Received by: <u>Bob Farmer</u> Date: <u>9/19/08</u> Time: <u>8:30</u>																				Date:	Time:	BTEX, TRH- Midland		Turn Around Time per Shanna Smith (9-11-08)															
Relinquished by: <u>Jay D. Farmer 9/19/08 8:30</u> Received at Laboratory by: <u>Bob Farmer</u> Date: <u>9/19/08</u> Time: <u>8:30</u>																				Date:	Time:	PAH - Lubbock		Turn Around Time per Shanna Smith (9-11-08)															
Relinquished by: <u>Jay D. Farmer 9/19/08 8:30</u> Received by: <u>Bob Farmer</u> Date: <u>9/19/08</u> Time: <u>8:30</u>																				Date:	Time:	Dry Weight Basis Required		Dry Weight Basis Required															
Relinquished by: <u>Jay D. Farmer 9/19/08 8:30</u> Received by: <u>Bob Farmer</u> Date: <u>9/19/08</u> Time: <u>8:30</u>																				Date:	Time:	TRRP Report Required		TRRP Report Required															
Relinquished by: <u>Jay D. Farmer 9/19/08 8:30</u> Received by: <u>Bob Farmer</u> Date: <u>9/19/08</u> Time: <u>8:30</u>																				Date:	Time:	Check If Special Reporting Limits Are Needed		Check If Special Reporting Limits Are Needed															
Log-in/Review _____																				Carrier # _____		Carrier # _____																	

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

# TRACE ANALYSIS, INC.

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200 East Sunset Road, Suite E      El Paso, Texas 79922      888•598•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

DBE: VN 20657

NCTRCA WFWB38444Y0909

## NELAP Certifications

Lubbock: T104704219-08-TX  
LELAP-02003  
Kansas E-10317

El Paso: T104704221-08-TX  
LELAP-02002

Midland: T104704392-08-TX

## Analytical and Quality Control Report

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

Report Date: September 30, 2008

Work Order: 8092202



Project Location: Hobbs, N.M.  
Project Name: Moore to Jal #1  
Project Number: PLAINS007SPL  
SRS#: 2002-10720

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
174077	MW-9	water	2008-09-20	19:50	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 15 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



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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 Moore to Jal #1 were received by TraceAnalysis, Inc. on 2008-09-22 and assigned to work order 8092202. Samples for work order 8092202 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 8092202 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: 174077 - 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		25.4	mg/L	100	0.00100
Toluene		7.58	mg/L	100	0.00100
Ethylbenzene		1.65	mg/L	100	0.00100
Xylene		3.70	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		8.89	mg/L	100	10.0	89	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		9.09	mg/L	100	10.0	91	52 - 124.1

Sample: 174077 - MW-9

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	1	0.113	mg/L	1	0.000200
2-Methylnaphthalene	2	0.240	mg/L	1	0.000200
1-Methylnaphthalene	3	0.201	mg/L	1	0.000200
Acenaphthylene		<0.000200	mg/L	1	0.000200
Acenaphthene		<0.000200	mg/L	1	0.000200
Dibenzofuran		0.0171	mg/L	1	0.000200
Fluorene		0.0238	mg/L	1	0.000200
Anthracene		<0.000200	mg/L	1	0.000200
Phenanthrene		0.0290	mg/L	1	0.000200
Fluoranthene		0.000585	mg/L	1	0.000200
Pyrene		0.00175	mg/L	1	0.000200
Benzo(a)anthracene		<0.000200	mg/L	1	0.000200
Chrysene		0.00393	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 174077 continued ...

Parameter	Flag	Result	Units	Dilution	RL
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		0.0371	mg/L	1	0.0800	46	37.4 - 123
2-Fluorobiphenyl		0.0316	mg/L	1	0.0800	40	34.3 - 130
Terphenyl-d14		0.0423	mg/L	1	0.0800	53	10 - 252

Sample: 174077 - MW-9

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		<5.00	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	4	16.0	mg/L	1	10.0	160	70 - 130

Sample: 174077 - MW-9

Laboratory: Midland  
Analysis: TPH GRO  
QC Batch: 52618  
Prep Batch: 45094

Analytical Method: S 8015B  
Date Analyzed: 2008-09-22  
Sample Preparation: 2008-09-22

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		92.0	mg/L	50	0.100

<sup>4</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)		4.47	mg/L	50	5.00	89	70 - 130
4-Bromofluorobenzene (4-BFB)		4.51	mg/L	50	5.00	90	70 - 130

Method Blank (1) QC Batch: 52618

QC Batch: 52618 Date Analyzed: 2008-09-22 Analyzed By: DC  
Prep Batch: 45094 QC Preparation: 2008-09-22 Prepared By: AG

Parameter	Flag	Result	MDL	Units	RL
GRO		0.0947		mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0996	mg/L	1	0.100	100	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0955	mg/L	1	0.100	96	50 - 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	Result	MDL	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: 52748

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

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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: 52820**

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

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

QC Batch: 52618      Date Analyzed: 2008-09-22      Analyzed By: DC  
Prep Batch: 45094      QC Preparation: 2008-09-22      Prepared By: AG

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Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit
GRO	0.897	mg/L	1	1.00	0.0947	80	70 - 130

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

Param	LCSD		Dil.	Spike Amount	Matrix		Rec.	Rec. Limit	RPD	RPD Limit
	Result	Units			Result	Rec.				
GRO	0.976	mg/L	1	1.00	0.0947	88	70 - 130	8	20	

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0953	0.0943	mg/L	1	0.100	95	94	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0944	0.0922	mg/L	1	0.100	94	92	70 - 130

## **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		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
	Result	Units					
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		Spike Amount	Matrix Result	Rec.		RPD	RPD Limit	
	Result	Units			Dil.	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. Limit
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

## Laboratory Control Spike (LCS-1)

QC Batch: 52748  
Prep Batch: 45205

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

Analyzed By: LD  
Prepared By: LD

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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		Spike		Matrix		Rec.		RPD
	Result	Units	Dil.	Amount	Result	Rec.	Limit	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: 52820  
Prep Batch: 45266

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

Analyzed By: DS  
Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec. 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.	Rec. Limit	RPD RPD	RPD Limit
Naphthalene	0.0454	mg/L	1	0.0800	<0.0000730	57	10 - 141	2	20

*continued . . .*

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*control spikes continued . . .*

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD RPD	RPD Limit
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.

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

**Matrix Spike (MS-1)** Spiked Sample: 173892

QC Batch: 52618	Date Analyzed: 2008-09-22	Analyzed By: DC
Prep Batch: 45094	QC Preparation: 2008-09-22	Prepared By: AG

Param	MS			Spike	Matrix	Rec.
	Result	Units	Dil.	Amount	Result	Rec.
GRO	221	mg/L	200	200	59.3011	81

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.	Rec. Limit	RPD RPD	RPD Limit
GRO	237	mg/L	200	200	59.3011	89	70 - 130	7	20

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

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Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	18.5	18.5	mg/L	200	20	92	92	70 - 130
4-Bromofluorobenzene (4-BFB)	18.8	18.4	mg/L	200	20	94	92	70 - 130

**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. 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. Limit	RPD	RPD Limit
Benzene	3.57	mg/L	10	1.00	2.815	76	10 - 160.8	8	20
Toluene	1.00	mg/L	10	1.00	<0.00700	100	10 - 160.7	10	20
Ethylbenzene	1.06	mg/L	10	1.00	0.0575	100	10 - 158.3	11	20
Xylene	3.13	mg/L	10	3.00	0.089	101	10 - 158	12	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.872	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	

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

QC Batch: 52748 Date Analyzed: 2008-09-26 Analyzed By: LD  
Prep Batch: 45205 QC Preparation: 2008-09-26 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.	Rec. Limit	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.

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Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit	
n-Triacontane	5.6	14.2	13.6	mg/L	1	10	142	136	70 - 130

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

QC Batch: 52618

Date Analyzed: 2008-09-22

Analyzed By: DC

Param	Flag	Units	ICVs	ICVs	ICVs	Percent	Date Analyzed
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	
GRO		mg/L	1.00	1.06	106	85 - 115	2008-09-22

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

QC Batch: 52618

Date Analyzed: 2008-09-22

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	1.11	111	85 - 115	2008-09-22

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

QC Batch: 52654

Date Analyzed: 2008-09-23

Analyzed By: DC

Param	Flag	Units	ICVs	ICVs	ICVs	Percent	Date Analyzed
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	
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	CCVs	CCVs	Percent	Date Analyzed
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	
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

*continued . . .*

<sup>5</sup> High surrogate recovery due to peak interference.

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

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*standard continued . . .*

Param	Flag	Units	CCVs	CCVs	CCVs	Percent	Date Analyzed
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	
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 (CCV-1)**

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	240	96	85 - 115	2008-09-26

### **Standard (CCV-2)**

QC Batch: 52748

Date Analyzed: 2008-09-26

Analyzed By: JLD

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

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

QC Batch: 52820

Date Analyzed: 2008-09-26

Analyzed By: DS

Param	Flag	Units	CCVs	CCVs	CCVs	Percent	Date Analyzed
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	
Naphthalene		mg/L	60.0	56.6	94	80 - 120	2008-09-26
2-Methylnaphthalene		mg/L	60.0	52.3	87	80 - 120	2008-09-26
1-Methylnaphthalene		mg/L	60.0	52.7	88	80 - 120	2008-09-26
Acenaphthylene		mg/L	60.0	58.4	97	80 - 120	2008-09-26
Acenaphthene		mg/L	60.0	58.1	97	80 - 120	2008-09-26
Dibenzofuran		mg/L	60.0	61.9	103	80 - 120	2008-09-26
Fluorene		mg/L	60.0	69.6	116	80 - 120	2008-09-26
Anthracene		mg/L	60.0	58.3	97	80 - 120	2008-09-26
Phenanthrene		mg/L	60.0	56.4	94	80 - 120	2008-09-26
Fluoranthene		mg/L	60.0	57.4	96	80 - 120	2008-09-26
Pyrene		mg/L	60.0	59.2	99	80 - 120	2008-09-26
Benzo(a)anthracene		mg/L	60.0	55.6	93	80 - 120	2008-09-26
Chrysene		mg/L	60.0	57.3	96	80 - 120	2008-09-26

*continued . . .*

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(b)fluoranthene		mg/L	60.0	60.3	100	80 - 120	2008-09-26
Benzo(k)fluoranthene		mg/L	60.0	60.3	100	80 - 120	2008-09-26
Benzo(a)pyrene		mg/L	60.0	64.1	107	80 - 120	2008-09-26
Indeno(1,2,3-cd)pyrene		mg/L	60.0	68.7	114	80 - 120	2008-09-26
Dibenzo(a,h)anthracene		mg/L	60.0	68.7	114	80 - 120	2008-09-26
Benzo(g,h,i)perylene		mg/L	60.0	66.6	111	80 - 120	2008-09-26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5		60.4	mg/L	1	60.0	101	80 - 120
2-Fluorobiphenyl		53.2	mg/L	1	60.0	89	80 - 120
Terphenyl-d14		58.9	mg/L	1	60.0	98	80 - 120

### 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

*continued . . .*

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*standard continued . . .*

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

# TraceAnalysis, Inc.

email: lab@traceanalysis.com

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Address:  
(Street, City, Zip)

Contact Person:  
*Shanna Smith*

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*Camille Reynolds PLATINS*

Project Location (including state):  
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E-mail:  
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Project Name:  
*Mines to Tail #2*

Sampler Signature:  
*Toshua Battles*

FIELD CODE	MATRIX	# CONTAINERS	PRESERVATIVE	METHOD	SAMPLING	TIME	DATE	ICP	NaOH	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	SLUDGE	AIR	SOIL	WATER	VOLUME / AMOUNT	REMARKS:	LAB USE:	Turn Around Time if different from standard	Hold	
						PATHEX	8021B															
MU-9	WATER	6	VDA	1 hr.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°C:	LAB USE:	
<i>Bill Talon Lee</i>				<i>Trace</i>					<i>ONLY</i>	<i>BTEx, 8015 - Midland PAH - Lubbock</i>
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°C:	REMARKS:	
									<input type="checkbox"/> Dry Weight Basis Required	
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°C:	<input type="checkbox"/> TRRP Report Required	
									<input type="checkbox"/> Check If Special Reporting Limits Are Needed	
Carrier # <i>Carney</i>										

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

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## Certifications

WBENC: 237019

HUB: 1752439743100-86536  
NCTRCA WFWB38444Y0909

DBE: VN 20657

Lubbock: T104704219-08-TX  
LELAP-02003  
Kansas E-10317

## NELAP Certifications

El Paso: T104704221-08-TX  
LELAP-02002

Midland: T104704392-08-TX

## Analytical and Quality Control Report

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

Report Date: December 18, 2008

Work Order: 8121701



Project Location: Hobbs, NM  
Project Name: 8 inches Moore to Jal #1  
Project Number: Plains007SPL  
SRS #: 2002-10270

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
182626	MW-16	water	2008-12-16	15:13	2008-12-17
182627	MW-17	water	2008-12-16	15:41	2008-12-17
182628	MW-18	water	2008-12-16	15:37	2008-12-17
182629	MW-19	water	2008-12-16	15:31	2008-12-17
182630	MW-20	water	2008-12-16	15:24	2008-12-17
182631	MW-14	water	2008-12-16	15:20	2008-12-17

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

This report consists of a total of 8 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



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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 8 inches Moore to Jal #1 were received by TraceAnalysis, Inc. on 2008-12-17 and assigned to work order 8121701. Samples for work order 8121701 were received intact without headspace and at a temperature of 3.4 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 8121701 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 18, 2008  
Plains007SPL

Work Order: 8121701  
8 inches Moore to Jal #1

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## Analytical Report

Sample: 182626 - MW-16

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 55289  
Prep Batch: 47253

Analytical Method: S 8021B  
Date Analyzed: 2008-12-17  
Sample Preparation: 2008-12-17

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		30.4	mg/L	200	0.00100
Toluene		5.28	mg/L	200	0.00100
Ethylbenzene		1.12	mg/L	200	0.00100
Xylene		2.58	mg/L	200	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		20.0	mg/L	200	20.0	100	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		19.8	mg/L	200	20.0	99	52 - 124.1

Sample: 182627 - MW-17

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 55289  
Prep Batch: 47253

Analytical Method: S 8021B  
Date Analyzed: 2008-12-17  
Sample Preparation: 2008-12-17

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.0388	mg/L	1	0.00100
Toluene		0.00710	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		0.00540	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.106	mg/L	1	0.100	106	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		0.104	mg/L	1	0.100	104	52 - 124.1

Sample: 182628 - MW-18

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 55289  
Prep Batch: 47253

Analytical Method: S 8021B  
Date Analyzed: 2008-12-17  
Sample Preparation: 2008-12-17

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

Report Date: December 18, 2008  
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8 inches Moore to Jal #1

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Hobbs, NM

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.0315	mg/L	1	0.00100
Toluene		0.00500	mg/L	1	0.00100
Ethylbenzene		0.00250	mg/L	1	0.00100
Xylene		0.00370	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)		0.101	mg/L	1	0.100	101	52 - 124.1

**Sample: 182629 - MW-19**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 55289  
Prep Batch: 47253

Analytical Method: S 8021B  
Date Analyzed: 2008-12-17  
Sample Preparation: 2008-12-17

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.0514	mg/L	1	0.00100
Toluene		0.00670	mg/L	1	0.00100
Ethylbenzene		0.00280	mg/L	1	0.00100
Xylene		0.00590	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)		0.102	mg/L	1	0.100	102	52 - 124.1

**Sample: 182630 - MW-20**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 55289  
Prep Batch: 47253

Analytical Method: S 8021B  
Date Analyzed: 2008-12-17  
Sample Preparation: 2008-12-17

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.0483	mg/L	1	0.00100
Toluene		0.00670	mg/L	1	0.00100
Ethylbenzene		0.00400	mg/L	1	0.00100
Xylene		0.00870	mg/L	1	0.00100

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8 inches Moore to Jal #1

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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)		0.102	mg/L	1	0.100	102	52 - 124.1

Sample: 182631 - MW-14

Laboratory: Midland

Analysis: BTEX

QC Batch: 55289

Prep Batch: 47253

Analytical Method: S 8021B

Date Analyzed: 2008-12-17

Sample Preparation: 2008-12-17

Prep Method: S 5030B

Analyzed By: ME

Prepared By: ME

Parameter	Flag	Result	Units	Dilution	RL
Benzene		4.99	mg/L	50	0.00100
Toluene		0.0537	mg/L	50	0.00100
Ethylbenzene		<0.0500	mg/L	50	0.00100
Xylene		0.505	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.19	mg/L	50	5.00	104	65.1 - 116.8
4-Bromofluorobenzene (4-BFB)		5.00	mg/L	50	5.00	100	52 - 124.1

Method Blank (1) QC Batch: 55289

QC Batch: 55289

Date Analyzed: 2008-12-17

Analyzed By: ME

Prep Batch: 47253

QC Preparation: 2008-12-17

Prepared By: ME

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.104	mg/L	1	0.100	104	44.6 - 137.4
4-Bromofluorobenzene (4-BFB)		0.101	mg/L	1	0.100	101	37.1 - 130.9

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8 inches Moore to Jal #1

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### Laboratory Control Spike (LCS-1)

QC Batch: 55289      Date Analyzed: 2008-12-17      Analyzed By: ME  
Prep Batch: 47253      QC Preparation: 2008-12-17      Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0986	mg/L	1	0.100	<0.000800	99	71.7 - 120.5
Toluene	0.0972	mg/L	1	0.100	<0.000800	97	75.4 - 118.8
Ethylbenzene	0.0958	mg/L	1	0.100	<0.000500	96	73.5 - 118
Xylene	0.290	mg/L	1	0.300	<0.000900	97	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	1	20
Toluene	0.100	mg/L	1	0.100	<0.000800	100	75.4 - 118.8	3	20
Ethylbenzene	0.0994	mg/L	1	0.100	<0.000500	99	73.5 - 118	4	20
Xylene	0.301	mg/L	1	0.300	<0.000900	100	72.9 - 118.2	4	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.104	0.102	mg/L	1	0.100	104	102	38.2 - 131.6
4-Bromofluorobenzene (4-BFB)	0.104	0.102	mg/L	1	0.100	104	102	43.9 - 132.4

### Matrix Spike (MS-1) Spiked Sample: 182631

QC Batch: 55289      Date Analyzed: 2008-12-17      Analyzed By: ME  
Prep Batch: 47253      QC Preparation: 2008-12-17      Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	10.4	mg/L	50	5.00	4.9874	108	10 - 160.8
Toluene	4.83	mg/L	50	5.00	0.0537	96	10 - 160.7
Ethylbenzene	4.72	mg/L	50	5.00	<0.0250	94	10 - 158.3
Xylene	14.7	mg/L	50	15.0	0.505	95	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	10.2	mg/L	50	5.00	4.9874	104	10 - 160.8	2	20
Toluene	4.72	mg/L	50	5.00	0.0537	93	10 - 160.7	2	20
Ethylbenzene	4.68	mg/L	50	5.00	<0.0250	94	10 - 158.3	1	20
Xylene	14.6	mg/L	50	15.0	0.505	94	10 - 158	1	20

Report Date: December 18, 2008  
Plains007SPL

Work Order: 8121701  
8 inches Moore to Jal #1

Page Number: 8 of 8  
Hobbs, NM

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	5.11	5.01	mg/L	50	5	102	100	33.1 - 132.5
4-Bromofluorobenzene (4-BFB)	5.16	5.00	mg/L	50	5	103	100	37.5 - 136

#### Standard (ICV-1)

QC Batch: 55289                          Date Analyzed: 2008-12-17                          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	0.0968	97	85 - 115	2008-12-17
Toluene		mg/L	0.100	0.0957	96	85 - 115	2008-12-17
Ethylbenzene		mg/L	0.100	0.0960	96	85 - 115	2008-12-17
Xylene		mg/L	0.300	0.291	97	85 - 115	2008-12-17

#### Standard (CCV-1)

QC Batch: 55289                          Date Analyzed: 2008-12-17                          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	0.102	102	85 - 115	2008-12-17
Toluene		mg/L	0.100	0.0999	100	85 - 115	2008-12-17
Ethylbenzene		mg/L	0.100	0.0982	98	85 - 115	2008-12-17
Xylene		mg/L	0.300	0.298	99	85 - 115	2008-12-17



**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 October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

## Release Notification and Corrective Action

### OPERATOR

Initial Report     Final Report

Name of Company: Plains All American Pipeline, L. P. (formerly Link Energy and EOTT)	Contact: Frank Hernandez
Address: PO Box 1660 5805 East Highway 80 Midland, Texas 79702	Telephone No.: 915.638.3799
Facility Name: 8" Moore to Jal #1	Facility Type: 8" Steel Pipeline

Surface Owner: State of New Mexico	Mineral Owner:	Lease No.:
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### LOCATION OF RELEASE

Unit Letter 16	Section 16	Township T17S	Range R37E	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea Lat. 32° 50' 12.36"N Lon. 103° 15' 26.234"W
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### NATURE OF RELEASE

Type of Release: Crude Oil	Volume of Release: 200 bbls barrels	Volume Recovered: 0 bbls barrels
Source of Release: 8" Steel Pipeline	Date and Hour of Occurrence: EOTT	Date and Hour of Discovery: 10-18-02 @ 8:00 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	
By Whom? Pat McCasland, EPI	Date and Hour 10-18-02 @ 11:00 AM Pat McCasland EPI left message with Paul Sheeley and sent page to the "ON-CALL" representative	
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.\* 8" Steel Pipeline Site will be delineated to determine the vertical and horizontal extents of contamination. Contaminated soil will be blended on site or disposed of.

Describe Area Affected and Cleanup Action Taken.\* 8,000 sqft ~200' x 40' Site will be delineated to determine the vertical and horizontal extents of contamination. Contaminated soil will be blended on site or disposed of. Remedial Goals: TPH 8015m = 1000 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethyl Benzene, Toluene, and Xylenes = 50 mg/Kg.

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: .....	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Frank Hernandez	Approved by District Supervisor:	
Title: District Environmental Supervisor	Approval Date:	Expiration Date:
Date: October 23, 2003      Phone: 915.638.3799	Conditions of Approval:	Attached <input type="checkbox"/>

\* Attach Additional Sheets If Necessary

<b>EOTT Site Information and Metrics</b>		<b>Incident Date:</b> 10-18-02 @ 10:00 AM	<b>NMOCD Notified:</b> 10-18-02 @ 11:00 AM Pat McCasland EPI left message with Paul Sheeley and sent page to the "ON-CALL" representative
<b>SITE:</b> 8" Moore to Jal #1 <b>Company:</b> EOTT <b>Street Address:</b> PO Box 1660 <b>Mailing Address:</b> 5805 East Highway 80 <b>City, State, Zip:</b> Midland, Texas 79702 <b>Representative:</b> Frank Hernandez <b>Representative Telephone:</b> 915.638.3799 <b>Telephone:</b>		<b>Assigned Site Reference #:</b> 2002-10270	
<b>Fluid volume released (bbls):</b> 200 bbls		<b>Recovered (bbls):</b> 0 bbls >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> 8" Moore to Jal #1 <b>Source of contamination:</b> 8" Steel Pipeline <b>Land Owner, i.e., BLM, ST, Fee, Other:</b> State of New Mexico <b>LSP Dimensions:</b> ~200' x 40' <b>LSP Area:</b> 8,000 sqft ft <sup>2</sup>			
<b>Location of Reference Point (RP):</b> <b>Location distance and direction from RP:</b> <b>Latitude:</b> 32° 50' 12.36"N <b>Longitude:</b> 103° 15' 26.234"W.			
<b>Elevation above mean sea level:</b> <b>Feet from South Section Line:</b> <b>Feet from West Section Line:</b> <b>Location- Unit or 1/4:</b> SE 1/4 of the NW 1/4 <b>Unit Letter:</b> F			
<b>Location- Section:</b> 16 <b>Location- Township:</b> T17S <b>Location- Range:</b> R37E			
<b>Surface water body within 1000' radius of site:</b> none <b>Surface water body within 1000' radius of site:</b> none <b>Domestic water wells 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>Agricultural water wells within 1000' radius of site:</b> none <b>Public water supply 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> ~66 feet <b>Depth of contamination (DC):</b> ? <b>Depth to ground water (DG - DC = DtGW):</b> <50 feet			
<b>1. Ground Water</b>		<b>2. Wellhead Protection Area</b>	
If Depth to GW <50 feet: 20 points		If <1000' from water source, or; <200' from private domestic water source: 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		>1000 horizontal feet: 0 points	
<b>Ground water Score = 10</b>		<b>Wellhead Protection Area Score= 0</b>	
<b>Site Rank (1+2+3) = 10</b>			
<b>Total Site Ranking Score and Acceptable Concentrations</b>			
<b>Parameter</b>	<b>&gt;19</b>	<b>10-19</b>	<b>0-9</b>
Benzene <sup>1</sup>	10 ppm	10 ppm	10 ppm
BTEX <sup>1</sup>	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1,000 ppm	5,000 ppm

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