

AP - 91

**ANNUAL  
MONITORING REPORT**

**YEAR(S):**  
2011



# 2011 ANNUAL GROUNDWATER MONITORING REPORT

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

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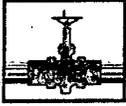
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**March, 2012**



**PLAINS  
ALL AMERICAN**

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APR - 5 2012

March 29, 2012

Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

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

Re: Plains All American – 2011 Annual Monitoring Reports  
6 Sites in Lea County, New Mexico

Dear Mr. Hansen:

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

8-inch Moore to Jal #1	AP-91 (1R-0380)	Section 16, T17S, R37E, Lea County
8-inch Moore to Jal #2	AP-92 (1R-0381)	Section 16, T17S, R37E, Lea County
C.S. Caylor	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 06, T17S, R36E, Lea County

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

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

Sincerely,

Jason Henry  
Remediation Coordinator  
Plains All American

CC: Geoff Leking, NMOCD, Hobbs, NM

Enclosures

# 2011 ANNUAL GROUNDWATER MONITORING REPORT

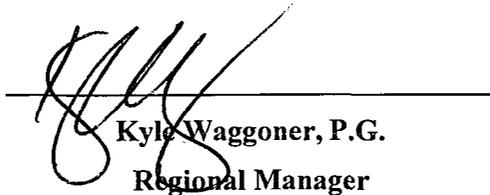
8" MOORE TO JAL #1  
LEA, COUNTY, NEW MEXICO  
SRS #2002 - 10270  
NMOCD REF. # AP-91

TALON/LPE PROJECT NO. 700376.044.01

Prepared by:



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March 2012

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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 Site Background**

The 8" Moore to Jal #1 release 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 residence or surface water features are located within a 1,000-foot radius of the site.

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

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

The average elevation of the site and surrounding area is approximately 3,770-feet above mean sea level with a slight slope to the southeast. The regional slope of the land surface in the Southern High Plains is approximately 100 feet per mile in a southeasterly direction.

In October 2002, a release of approximately 200 barrels (bbls) occurred from a Plains Pipeline, L.P. (Plains) pipeline at the site. Approximately 8,000 square feet of surface area was impacted by the release. Soil excavation and over-excavation activities were initiated in October 2002 and that activity is 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 and operation and maintenance of the phase separated hydrocarbon (PSH) recovery system.

### **1.2 Site Geology**

The surface deposits in Lea County are composed of Blackwater Draw (Illinoian) sediments, Ogallala sediments and undivided Quaternary alluvium, which is also termed 'cover sands'. The soil in the upper two (2) feet at the site composed of gravelly loam that consists of 43% sand, 18% clay and 40% silt and also contains abundant eroded gravel to cobble size caliche fragments. Below the top soil is predominately unconsolidated sand to weakly cemented sandstone which has undergone calichification of varying extent.

Below the Blackwater Draw Formation is the Ogallala Formation of Miocene to Pliocene age. The Ogallala Formation was deposited from sediments eroded from the Southern Rockies and consists mostly of eolian sediments, silty to very fine sand or loess. During the

middle to late Miocene, the Ogallala was deposited by fluvial mechanism as paleo-valley fill composed of gravelly to sandy braided stream deposits that trended west to east across the Southern High Plains. During the late Miocene the west to east drainage was diverted (captured) by the Pecos River. Subsequently, the Pecos River basin has experienced deflation, which facilitated eolian deposition on the Southern High Plains during the Pliocene.

### **1.3 Previous Environmental Investigations**

Currently, a total of thirty-six (36) monitor wells have been installed proximal to the release point (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 PSH entered the casing immediately upon completion of the well. Subsequently, three (3) additional monitor wells (MW-2, MW-3, and MW-4) were installed in October of 2004, and PSH entered the casing on those wells.

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. The purpose of the sixteen (16) monitor wells (MW-5–MW-20) was to further delineate the extent of the PSH and dissolved phase plumes. In addition to the sixteen (16) monitor well installations, monitor wells MW-1 and MW-4 were plugged and abandoned (P&A'd) on March 14, 2007 and re-drilled as new groundwater monitor wells, MW-1A and MW-4A. Of the sixteen monitor wells that were installed, ten (10), (MW-4A, MW-5 through MW-12, and MW-15), are impacted with PSH.

During the year 2010, a total of eleven (11) specific gravity skimmers with bladder pumps were in operation in monitor wells MW-2, MW-3, MW-5, MW-7 through MW-13, and MW-15. In addition, a total of three (3) total fluids pumps are operating in monitor wells MW-1A, MW-4A, and MW-6. This pump configuration is designed to enhance PSH recovery and inhibit migration of the PSH plume.

Also during 2010, sixteen (16) additional monitor wells were installed at the site (MW-21 through MW-36) to further delineate the PSH and dissolved-phase plumes. Monitor wells MW-24, MW-25, and MW-30 through MW-31 are impacted with PSH. Additional skimmers with bladder pumps were installed in monitor wells MW-24 and MW-25. Currently, the PSH recovery system is composed of thirteen (13) specific gravity skimmers with bladder pumps and three (3) pneumatic total fluid pumps.

A transfer system was installed during the year 2011 that is designed to pump recovered groundwater from the site to the Rocky Smith SWD Systems, State 'E' #23 salt water disposal (SWD) (NMOCD # 307219) facility, thereby, eliminating the need to haul water to a disposal facility with a vacuum truck. The system is composed of a three (3) inch HDPE line that was installed (slip-lined) into the out of service Moore to Jal eight (8) inch pipeline from the Moore to Jal #2 site through the Moore to Jal #1 site to the C.S. Cayler site, where it is connected to the HDPE line that runs from the Cayler site to the afore referenced SWD. A five (5) HP transfer pump is used to impel the water down the HDPE line.

PSH recovery operations have been performed at the site since 2004. During 2011

approximately 403 barrels (bbls) of crude oil and 2,861 bbls of water were recovered by the system and approximately 974 bbls of crude oil has been recovered by the system to date.

#### 1.4 Regulatory Framework

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

<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

The sections that follow provide summaries of the four quarterly groundwater monitoring events conducted at the subject site as well as analytical results from each groundwater sampling event of 2011. Analytical results for the four (4) sampling events are summarized in Table 2, and Table 3 in Appendix B, and Figures 3a through 3d in Appendix A. Laboratory analytical data reports and chain of custody documentation are included in Appendix C. Historic fluid level measurements are included on Table 1 in Appendix B and gradient maps are provided as Figures 2a through 2d in Appendix A. In addition, this report with all attachments are provided on the attached CD, which is an adjunct to this report.

## **2.0 SITE ACTIVITIES**

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The sections that follow summarize groundwater monitoring and PSH recovery activities conducted at the subject site during 2011. The primary focus of groundwater monitoring activities is to measure depth to fluid measurements and collect groundwater samples from monitor wells for laboratory analysis. The objective of groundwater monitoring is to evaluate the status of the dissolved-phase and PSH plumes in order to verify the effectiveness of the remediation system as to inhibiting plume migration, reducing the volume of PSH impacting the groundwater and determining if modifications to the remediation system would improve its performance and efficiency.

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

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

Subsequent to gauging, all monitor wells were purged using a down-hole pump equipped with vinyl tubing. The pump and tubing were decontaminated with Alconox® detergent and rinsed with distilled water after each use. Recovered purge water and water used in the decontamination process was contained in on-site 55-gallon drums. After the groundwater monitoring event, all retained water was removed with a vacuum truck. Approximately 2,212 gallons of purged groundwater and decontamination water during the monitoring events of 2011.

Groundwater samples were collected from all monitor wells that were not impacted with PSH using dedicated disposable polyethylene bailers. The groundwater samples were contained in laboratory supplied 40-ml VOA sample vials with the appropriate preservative required for the analysis requested. The groundwater samples were maintained on ice, in the custody of Talon personnel, until they were delivered to TraceAnalysis, Inc. in Midland, Texas for analyses.

The groundwater samples collected during the all four events were quantified for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method SW-846 8021B. In addition, during the December event, groundwater samples collected from monitor wells MW-16 and MW-27, were quantified for poly-nuclear aromatic hydrocarbons (PAHs) using EPA Method SW-846 8270C.

### **2.2 Phase Separated Hydrocarbon Recovery**

PSH recovery has been conducted at the site since 2004, initially by hand bailing and then by using pneumatic pumps. In October of 2008, Talon installed a pneumatic skimmer system at the site. During the year 2010, a total of eleven (11) specific gravity skimmers and bladder pumps and a total of three (3) total fluids pumps were in operation. Two (2) skimmers were

added to the system in monitor wells MW-24 and MW-25 in October of 2010. During the year 2011, a total of thirteen (13) specific gravity skimmers and bladder pumps operated in monitor wells MW-2, MW-3, MW-5, MW-7 through MW-13, MW-15, MW-24, and MW-25. In addition, a total of three (3) total fluids pumps operated in monitor wells MW-1A, MW-4A, and MW-6 during 2011. The discharge and recharge cycles for the total fluids pumps were set on timers in order to reduce the amount of groundwater recovered and to increase the PSH recovery. The system has been effective for increasing PSH recovery and inhibiting PSH plume and dissolved-phase migration. Talon personnel performed a minimum of weekly maintenance to the remediation system to ensure efficient operation and to minimize down time.

PSH recovered by the skimmer system and total fluids pumps was expelled to an on-site 350 barrel frac tank, which is monitored for the accumulation of water and PSH on a weekly basis. PSH is removed from the recovery tank periodically using a vacuum truck and is re-introduced to the Plains' pipeline system at the Plains operated Lea Station. Water is also removed from the recovery tank periodically with a vacuum truck and transferred to a disposal facility.

During 2011 the quarterly PSH and groundwater recovery totals are as follows:

- 1<sup>st</sup> Quarter - 87 bbls crude oil and 730 bbls of groundwater
- 2<sup>nd</sup> Quarter - 78 bbls crude oil and 686 bbls of groundwater
- 3<sup>rd</sup> Quarter - 159 bbls crude oil and 675 bbls of groundwater
- 4<sup>th</sup> Quarter - 79 bbls of crude oil and 770 bbls of groundwater

A total of approximately 974 bbls of PSH have been recovered at the subject site to date by both hand bailing and from the PSH recovery system since PSH recovery was initiated.

### **3.0 GROUNDWATER MONITORING RESULTS**

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

#### **3.1 Groundwater Monitoring Results**

The following sections present the results from the four (4) groundwater monitoring events conducted at the subject site.

##### **3.1.1 Physical Characteristics of the First Water-Bearing Zone**

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

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

The Ogallala Aquifer is generally unconfined and the potentiometric surface generally mirrors the land surface elevation with the regional flow direction from the northwest to the southeast. The mean regional gradient is 15 feet per mile and the typical groundwater velocity averages seven inches per day. The regional hydraulic conductivity averages 17 gallons per day per square-foot and specific yield averages 16%. The depth to groundwater at the site has historically ranged from 64 to 72 feet below ground surface (bgs) and the groundwater flow direction is to the southeast at an average of 20 feet per mile.

The composition of Ogallala groundwater is defined as mixed-cation-HCO<sub>3</sub>, therefore, Ogallala groundwater is considered hard. Problems with scale have occurred with residential and commercial water systems that use Ogallala groundwater and often treatment strategies are employed to reduce the effects of scale. The typical total dissolved solids of Ogallala groundwater in the Hobbs-Lovington area is generally less than 1,000 mg/L (ppm) in areas not impacted by oil-field brines with an average pH of 7.3.

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

The depth to fluid measurements was collected during each of the four (4) groundwater monitoring events during the year 2011. The results of the fluid level measurements are summarized in Table 1 - Summary of Historical Fluid Level Measurements in Appendix B. In addition, cumulative historical gauging data is located in the tables section on the CD that is an adjunct to this report.

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

The potentiometric surface maps constructed for each of the four (4) groundwater monitoring events indicates that the groundwater flow direction is to southeast at an average gradient of 0.0040 feet/foot or 21 feet per mile. Groundwater levels at the subject site have exhibited a steady decline of an average of 1.26 feet for the year 2011 and have dropped approximately 10 feet since 2004. The decline in groundwater levels appears to be associated with a regional trend of declining groundwater levels for the Ogallala Aquifer.

### 3.1.3 Phase Separated Hydrocarbon (PSH)

An oil/water interface probe was used to determine the thicknesses of PSH during the four (4) groundwater monitoring events. The following summarizes the status of the PSH thicknesses observed during the four groundwater monitoring events:

- In March 2011, PSH was observed in 20 monitor wells MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, MW-15, MW-24, MW-25, and MW-30 through 33. PSH thicknesses ranged from 2.06 feet to 8.09 feet.
- In June 2011, PSH was observed in 20 monitor wells MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, MW-15, MW-24, MW-25, and MW-30 through 33.. PSH thicknesses ranged from 1.18 feet to 7.97 feet.
- In September 2011, PSH was observed in 20 monitor wells MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, MW-15, MW-24, MW-25, and MW-30 through 33. PSH thicknesses ranged from 0.28 feet to 7.93 feet.
- In January 2012, PSH was observed in 20 monitor wells MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, MW-15, MW-24, MW-25, and MW-30 through 33. PSH thicknesses ranged from 0.86 feet to 7.95 feet.

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

### 3.1.4 Groundwater Analytical Results

During the first quarter, March 2011, groundwater monitoring event, groundwater samples were collected from 16 monitor wells, (MW-14, MW-16 through MW-22, MW-26 through MW-29, and MW-34 through MW-36.). Each monitor well was purged a minimum of three casing volumes and groundwater samples were collected. Groundwater samples were not collected from 20 monitor wells, MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, MW-15, MW-24, MW-25, and MW-30 through MW-33 due to the presence of PSH.

Groundwater samples collected during the event exhibited the following analytical results:

- Benzene concentrations ranged from <0.00100 mg/L to 26.3 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-29, and MW-35.

- Toluene concentrations ranged from <0.00100 mg/L to 2.08 mg/L. The toluene concentration exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater sample collected from monitor wells MW-14.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 1.31 mg/L. Ethylbenzene concentrations exceed the NMWQCC groundwater standard of 0.750 mg/L in the groundwater samples collected from monitor wells MW-14, MW-16, and MW-29.
- Xylene concentrations ranged from 0.00100 mg/L to 2.18 mg/L. Xylene concentrations exceeded the NMWQCC groundwater standard of 0.620 mg/L in the groundwater samples collected from monitor wells MW-14, MW-16, and MW-29.

During the second quarter, June 2011, groundwater monitoring event, groundwater samples were collected from 16 monitor wells, (MW-14, MW-16 through MW-22, MW-26 through MW-29, and MW-34 through MW-36.). Each monitor well was purged a minimum of three casing volumes and groundwater samples were collected. Groundwater samples were not collected from 20 monitor wells, MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, MW-15, MW-24, MW-25, and MW-30 through MW-33 due to the presence of PSH.

The groundwater samples that were collected exhibited the following analytical results:

- Benzene concentrations ranged from <0.00100 mg/L to 39.6 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, and MW-29.
- Toluene concentrations ranged from <0.00100 mg/L to 1.48 mg/L. The toluene concentration exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater sample collected from monitor well MW-16.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 2.08 mg/L. Ethylbenzene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater samples collected from monitor wells MW-16 and MW-29.
- Xylene concentrations ranged from <0.00100 mg/L to 4.19 mg/L. The xylene concentration exceeded the NMWQCC groundwater standard of 0.620 mg/L in the groundwater sample collected from monitor well MW-29.

During the third quarter, September 2011, groundwater monitoring event, groundwater samples were collected from 16 monitor wells, (MW-14, MW-16 through MW-22, MW-26 through MW-29, and MW-34 through MW-36.). Each monitor well was purged a minimum of three casing volumes and groundwater samples were collected. Groundwater samples were not collected from 20 monitor wells, MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, MW-15, MW-24, MW-25, and MW-30 through MW-33 due to the presence of PSH.

The groundwater samples that were collected exhibited the following analytical results:

- Benzene concentrations ranged from <0.00100 mg/L to 47.6 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 and MW-29.
- Toluene concentrations ranged from <0.00100 mg/L to 1.58 mg/L. Toluene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in groundwater samples collected from monitor wells MW-14 and MW-16.

- Ethylbenzene concentrations ranged from <0.00100 mg/L to 1.50 mg/L. Ethylbenzene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in groundwater samples collected from monitor wells MW-16 and MW-29.
- Xylene concentrations ranged from <0.00100 mg/L to 1.22 mg/L. The xylene concentration exceeded the NMWQCC groundwater standard of 0.620 mg/L in groundwater sample collected from monitor well MW-29.

During the fourth quarter, December 2011, groundwater monitoring event, groundwater samples were collected from 16 monitor wells, (MW-14, MW-16 through MW-22, MW-26 through MW-29, and MW-34 through MW-36.). Each monitor well was purged a minimum of three casing volumes and groundwater samples were collected. Groundwater samples were not collected from 20 monitor wells, MW-1A, MW-2, MW-3, MW-4A, MW-5 through MW-13, MW-15, MW-24, MW-25, and MW-30 through MW-33 due to the presence of PSH. In addition, groundwater samples were collected from monitor wells MW-16 and MW-27 for PAH analyses.

The groundwater samples that were collected exhibited the following analytical results:

- Benzene concentrations ranged from <0.00100 mg/L to 33.2 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-28, and MW-29..
- Toluene concentrations ranged from <0.00100 mg/L to 1.44 mg/L. The toluene concentration exceeded the NMWQCC groundwater standard of 0.750 mg/L in the groundwater sample collected monitor well MW-14.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.991 mg/L. The ethylbenzene concentration exceeded the NMWQCC groundwater standard of 0.750 mg/L in monitor wells MW-16 and MW-29.
- Xylene concentrations ranged from <0.00100 mg/L to 0.305 mg/L. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any of the groundwater samples collected.
- The total naphthalene concentration in the MW-16 sample was quantified at 0.02184 mg/L. The naphthalene concentration did not exceed the NMWQCC groundwater standard of 0.030 mg/L in the MW-16 sample. The total naphthalene concentration in the MW-27 sample did not exceed the laboratory reporting limit of 0.000183. No other PAH constituent exceeded the laboratory reporting limit in the MW-16 and MW-27 samples.

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

## **4.0 CONCLUSIONS AND RECOMMENDATIONS**

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The following section presents a summary of findings in regards to the four (4) groundwater monitoring events and provides recommendations for future corrective action.

### **4.1 Summary of Findings**

- The groundwater flow direction is to southeast at an approximate gradient of 0.0040 feet/foot or 21 feet per mile.
- Groundwater levels at the subject site have exhibited a steady decline for the year 2011 that appears to be associated with a regional trend of declining groundwater levels for the Ogallala Aquifer.
- Generally, PSH thicknesses have remained relatively stable during the year 2011.
- Currently, the PSH plume is delineated by the current monitor well array.
- Currently, the dissolved-phase plume is not delineated down-gradient.
- A three (3) inch HDPE line was installed (slip-lined) into the out of service Moore to Jal 8" pipeline and a transfer pump was installed to dispose of recovered groundwater more efficiently directly to the Rocky Smith disposal facility. Currently, the transfer system is being evaluated and once operational, total fluid pumps will be installed in select monitor wells in order to increase PSH recovery and draw-down the PSH and dissolved-phase plumes. In addition, this retrofit should increase system run times; thereby, inhibiting the migration of the PSH and dissolve-phase plumes.
- The PSH recovery system has removed 403 bbls of crude oil from the groundwater during 2011 indicating that the system is performing its function.

### **4.2 Recommendations**

Based upon the results of the four (4) quarterly groundwater monitoring events and PSH recovery efforts, Talon proposes the following actions:

- Continue operation and maintenance of the skimmer/bladder pump and total fluids pumps recovery system. Monitor the system on a weekly basis to optimize PSH recovery efficiency.
- Add or reposition pumps as necessary to optimize PSH recovery and inhibit plume migration.
- Perform quarterly groundwater monitoring events in accordance with NMOCD directives.

## **APPENDIX A**

### **Figures**

**Figure 1 - Site Plan**

**Figure 2a - Groundwater Gradient Map - 03/16/2011**

**Figure 2b - Groundwater Gradient Map - 06/28/2011**

**Figure 2c - Groundwater Gradient Map - 09/21/2011**

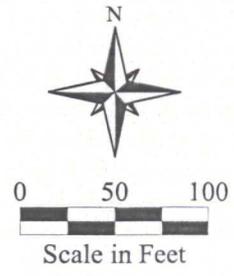
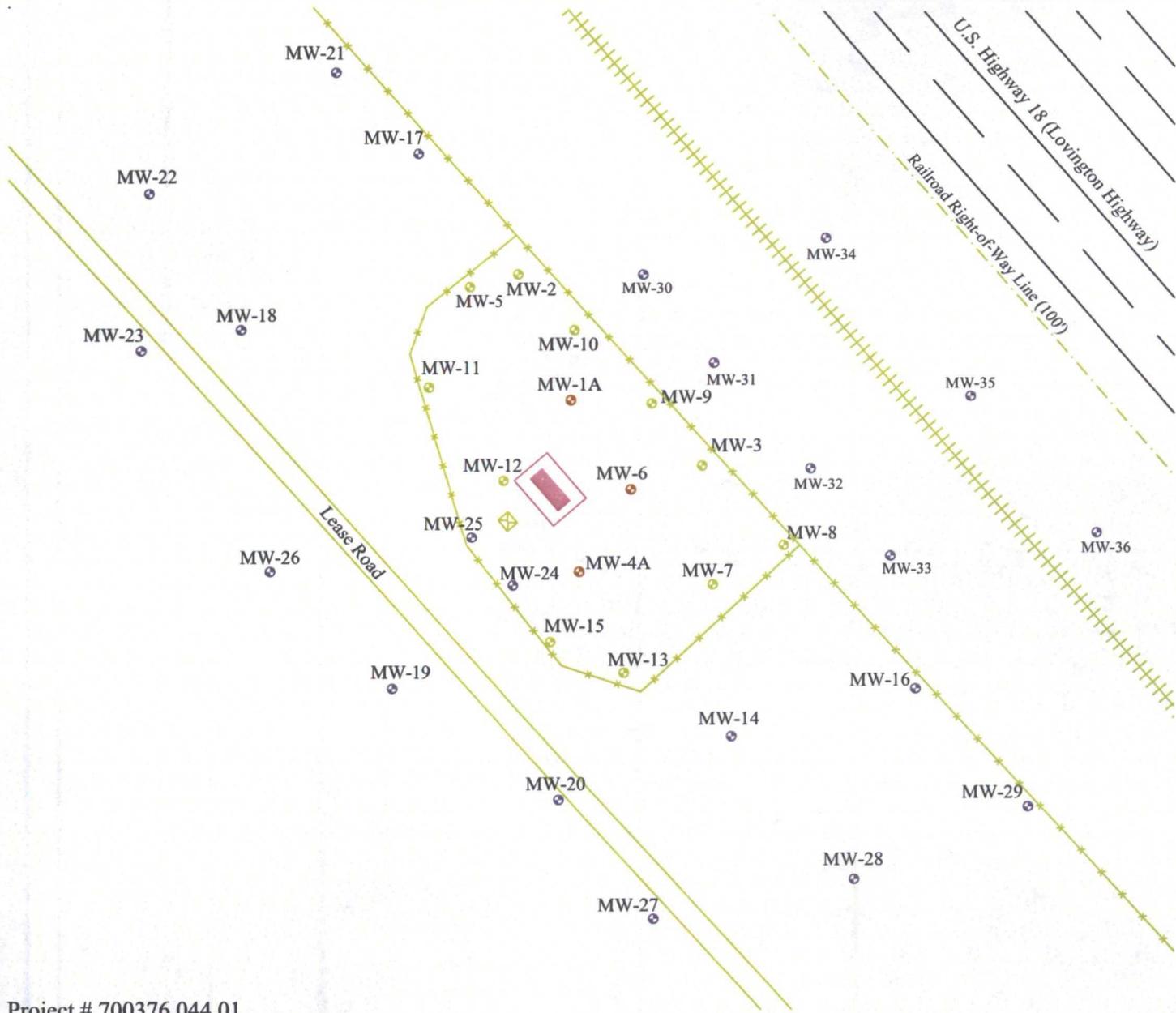
**Figure 2d - Groundwater Gradient Map - 12/29/2011**

**Figure 3a - PSH Thickness & Groundwater Concentration Map - 03/16-22//2011**

**Figure 3b - PSH Thickness & Groundwater Concentration Map - 06/28-29/2011**

**Figure 3c - PSH Thickness & Groundwater Concentration Map - 09/21-22/2011**

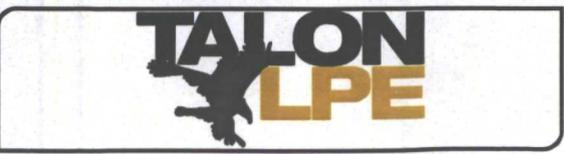
**Figure 3d - PSH Thickness & Groundwater Concentration Map - 12/29-30/2011**



**Legend**

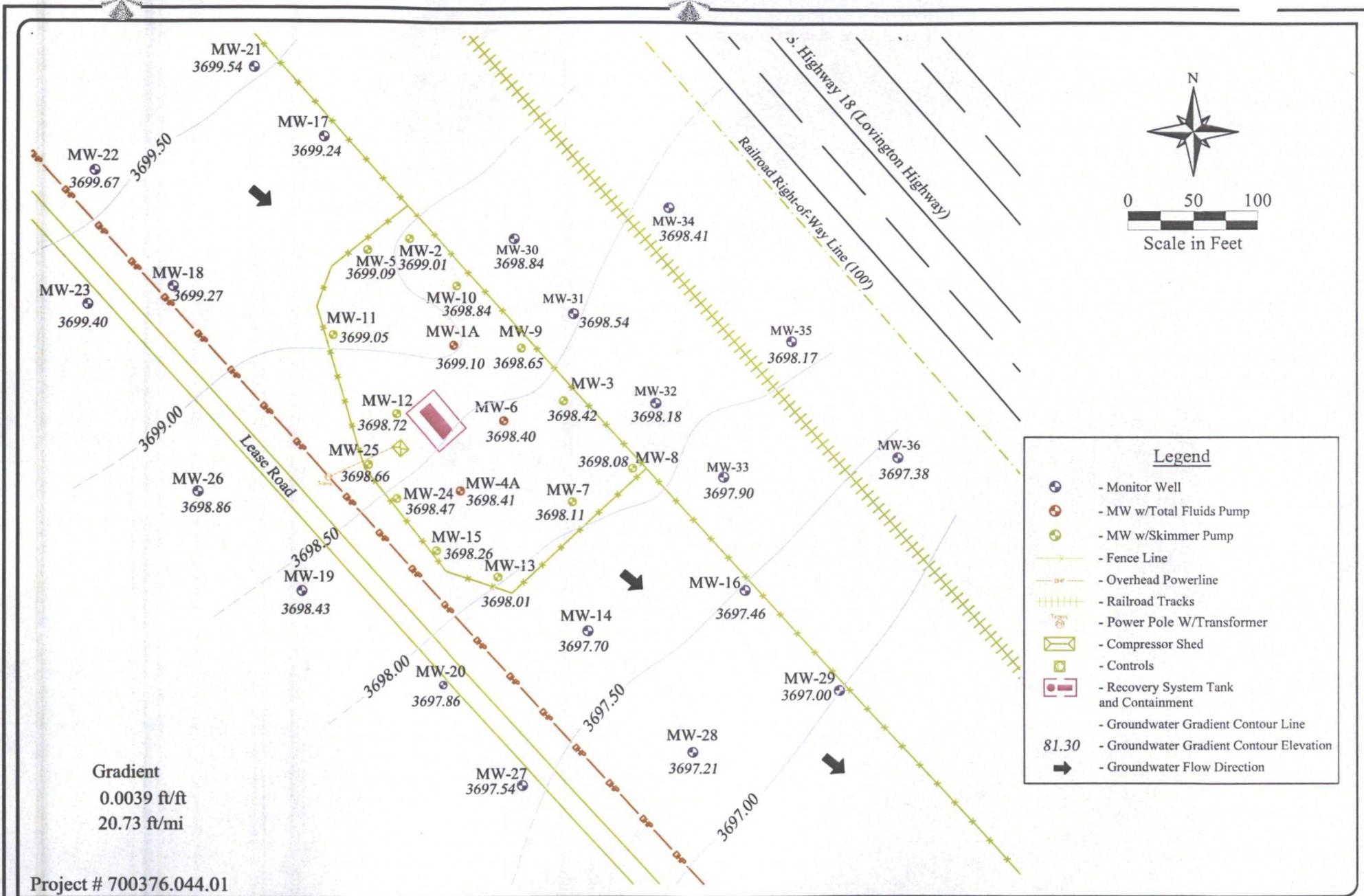
- Monitor Well
- MW w/Total Fluids Pump
- MW w/Skimmer Pump
- Fence Line
- Overhead Powerline
- Railroad Tracks
- Power Pole W/Transformer
- Compressor Shed
- Controls
- Recovery System Tank and Containment

Project # 700376.044.01



Date: 06/18/2010  
 Scale: 1" = 100'  
 Drawn By: TJS

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

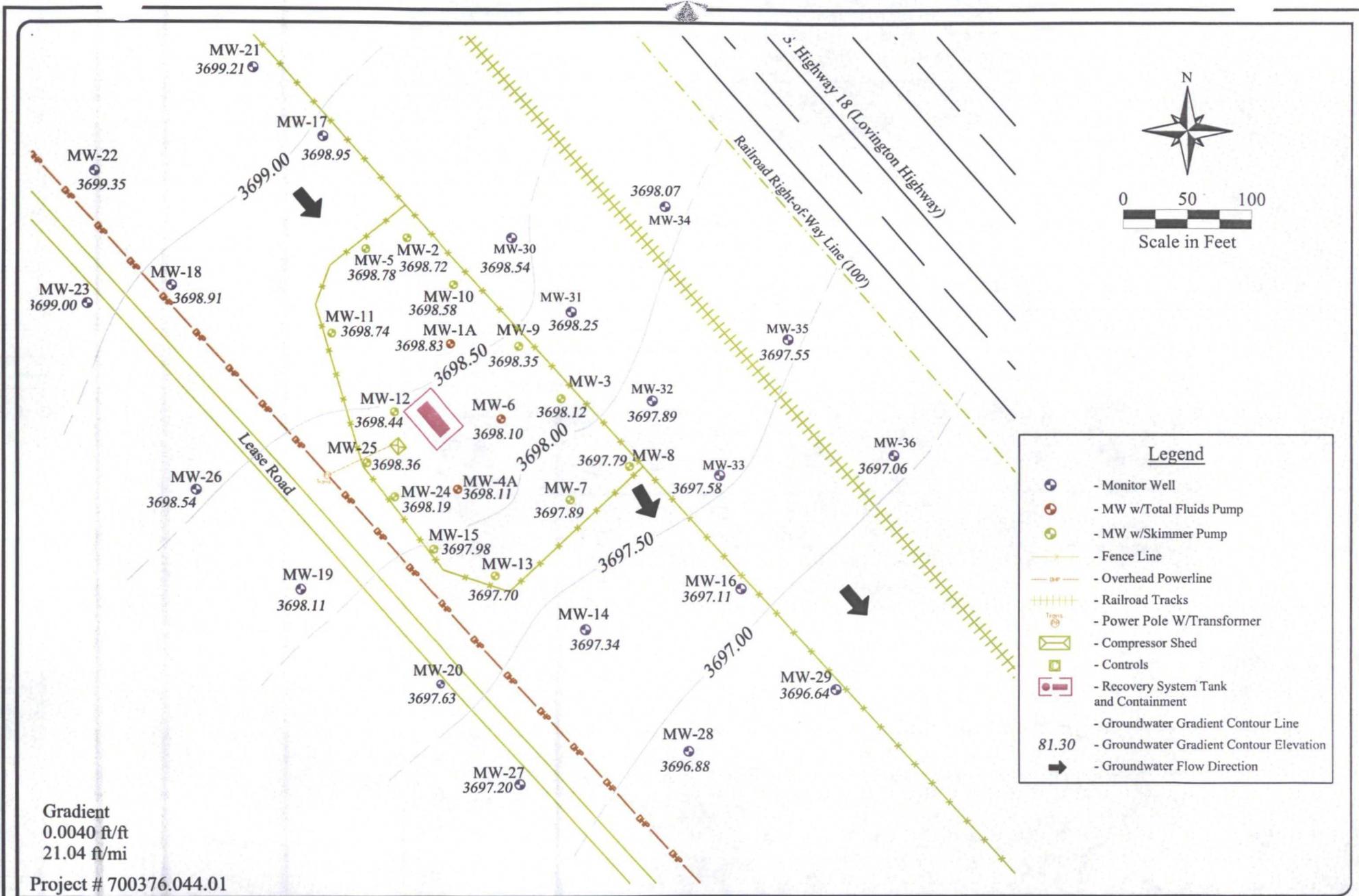


Date: 04/05/2011

Scale: 1" = 100'

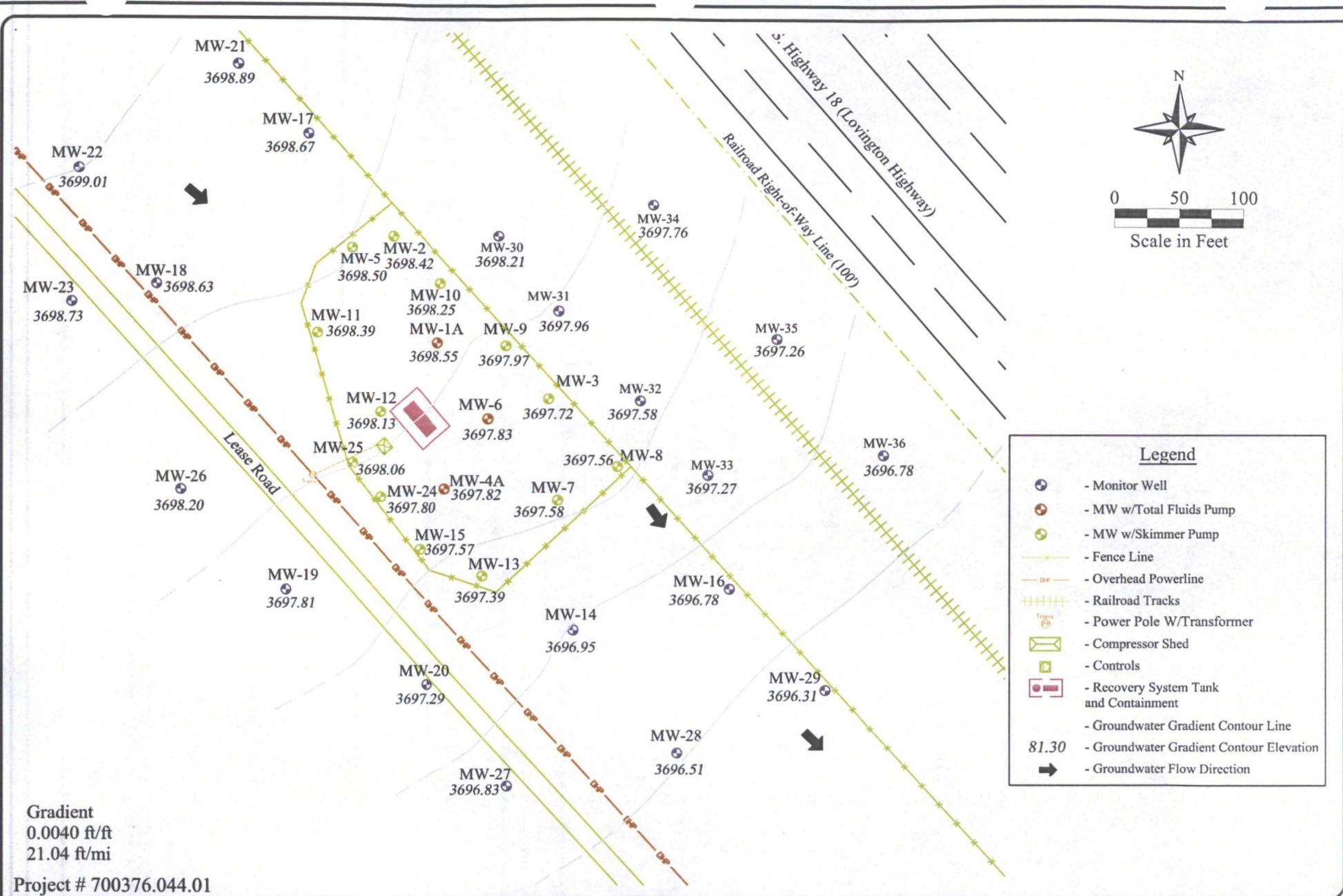
Drawn By: TJS

8" Moore to Jal #1  
SRS # 2002-10270, NMOCD REF. # AP-91  
9.2 Miles SE of Lovington, NM, Lea County, New Mexico  
Figure 2a - Groundwater Gradient Map, (03/16/2011)



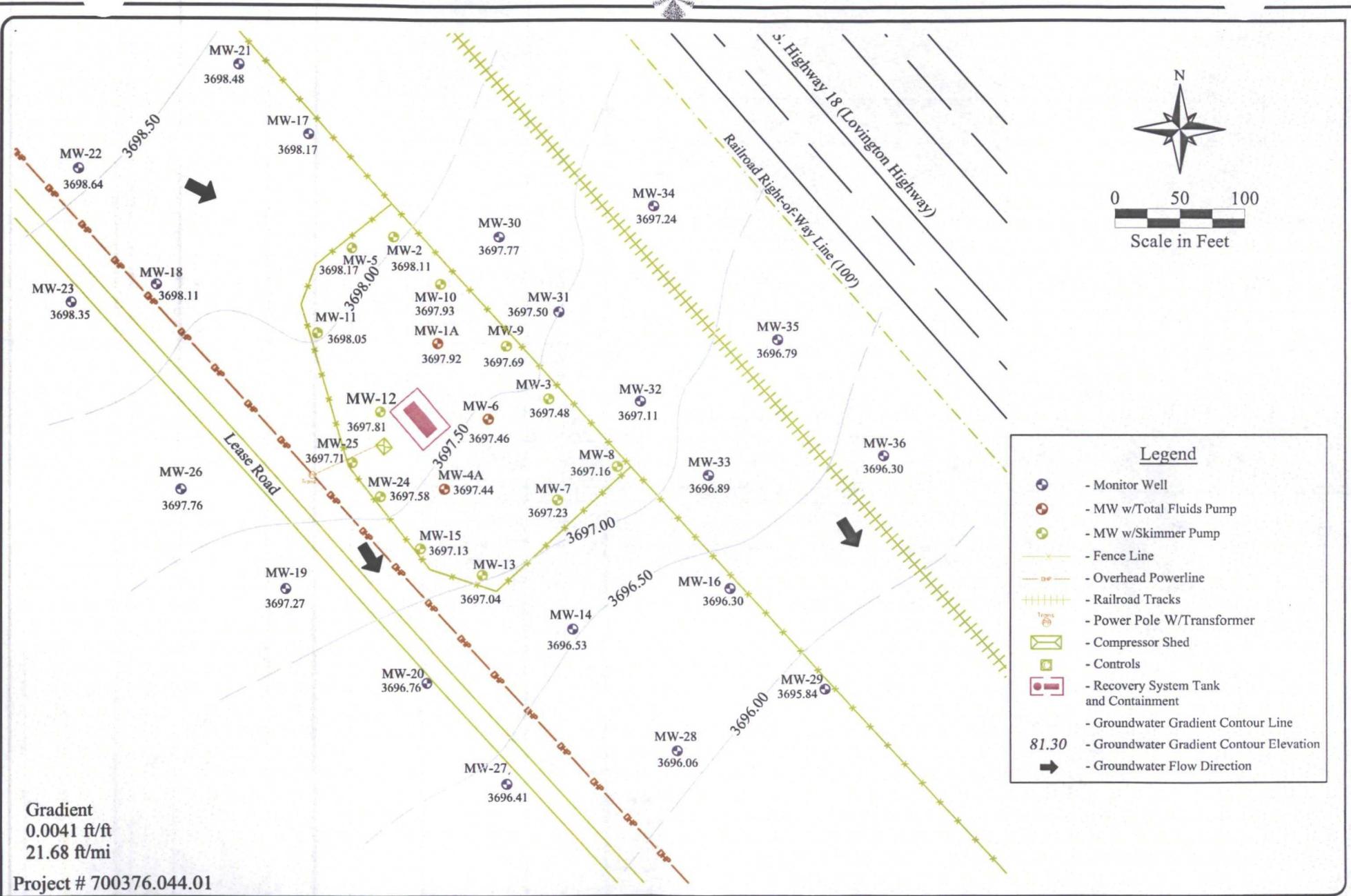
Date: 07/07/2011  
 Scale: 1" = 100'  
 Drawn By: TJS

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, (06/28-29/2011)



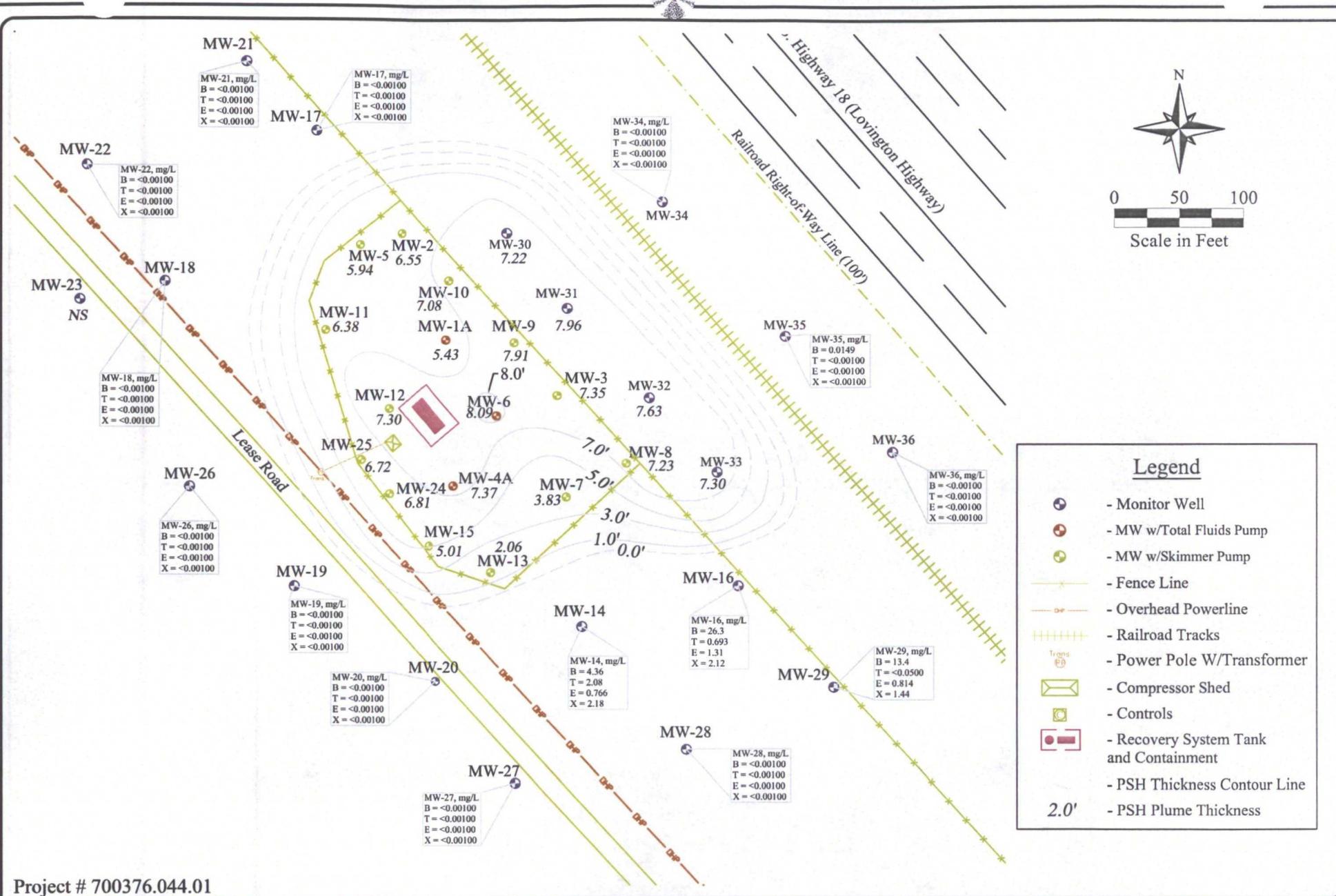
Date: 10/03/2011  
 Scale: 1" = 100'  
 Drawn By: TJS

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, (09/21/2011)



Date: 01/17/2012  
 Scale: 1" = 100'  
 Drawn By: TJS

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, (12/29/2011)

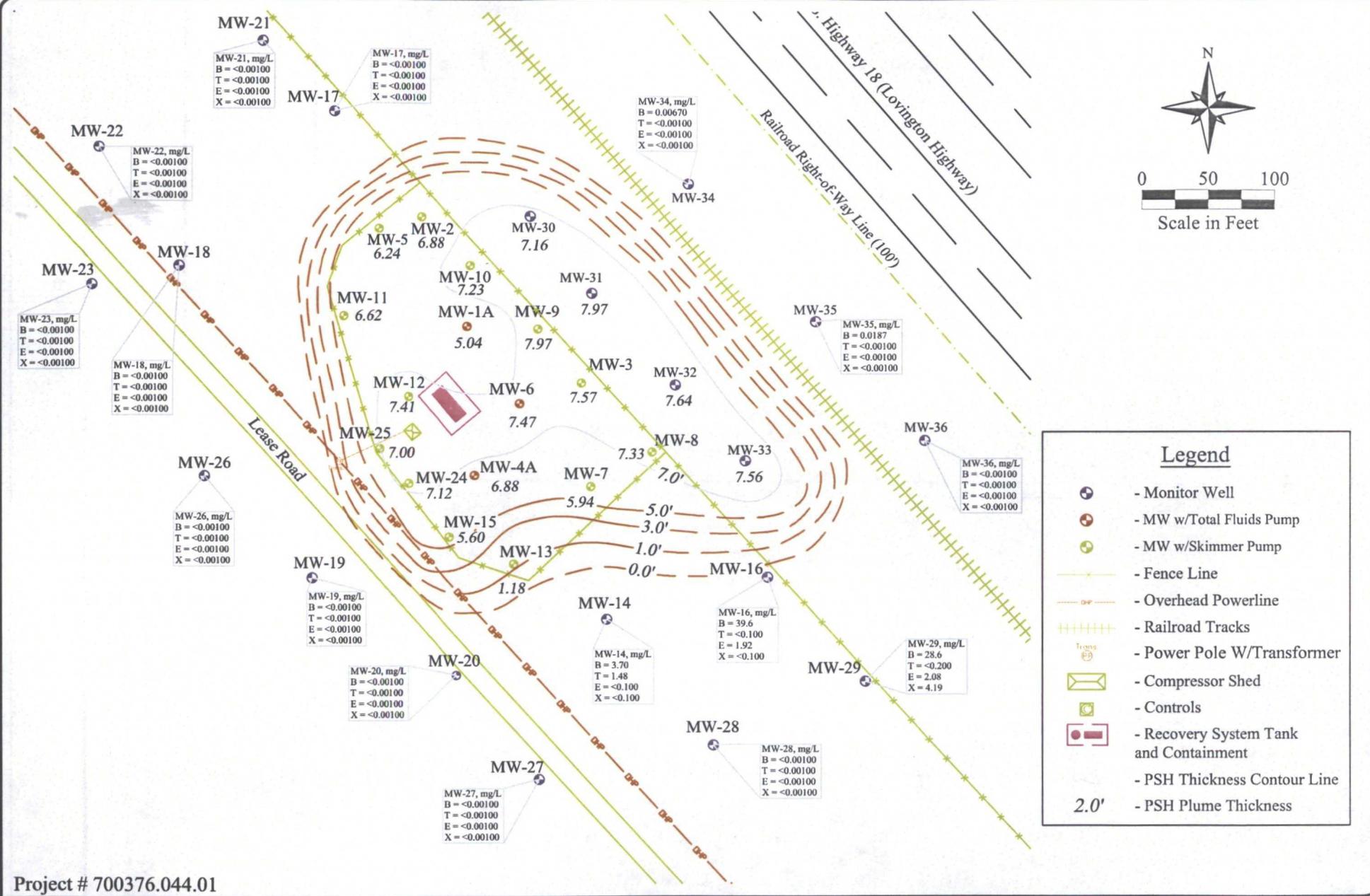


Project # 700376.044.01



Date: 04/05/2011  
 Scale: 1" = 100'  
 Drawn By: TJS

8" Moore to Jal #1  
 SRS # 2002-10270, NMOCD REF. # AP-91  
 9.2 Miles SE of Lovington, NM, Lea County, New Mexico  
 Figure 3a - PSH Thickness & Groundwater Concentration Map - 03/16/2011

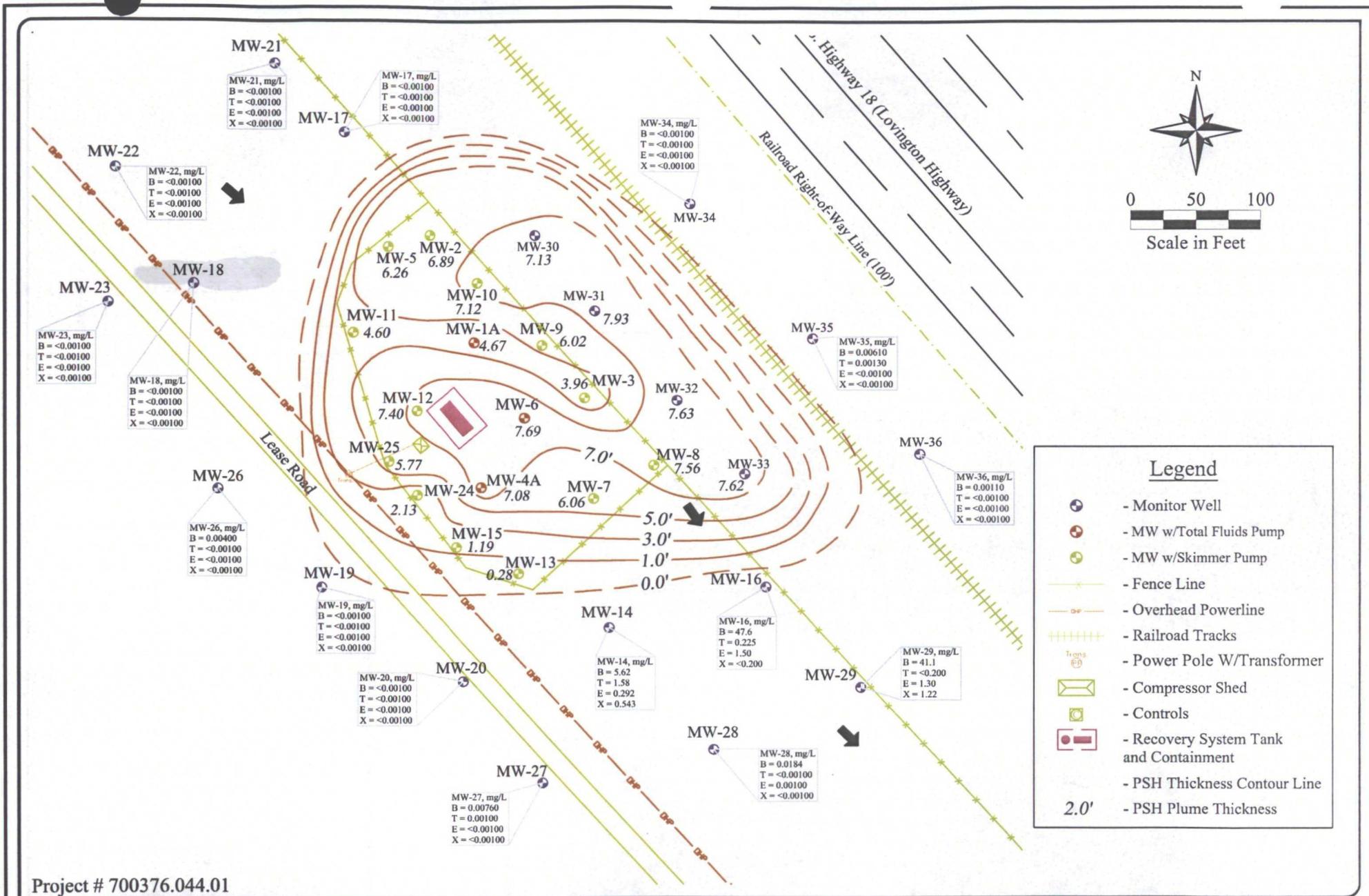


Project # 700376.044.01



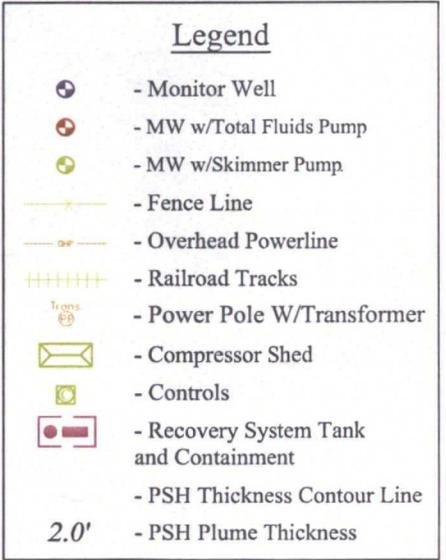
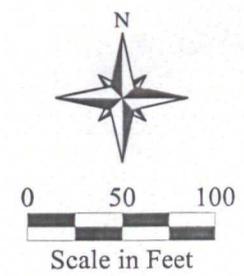
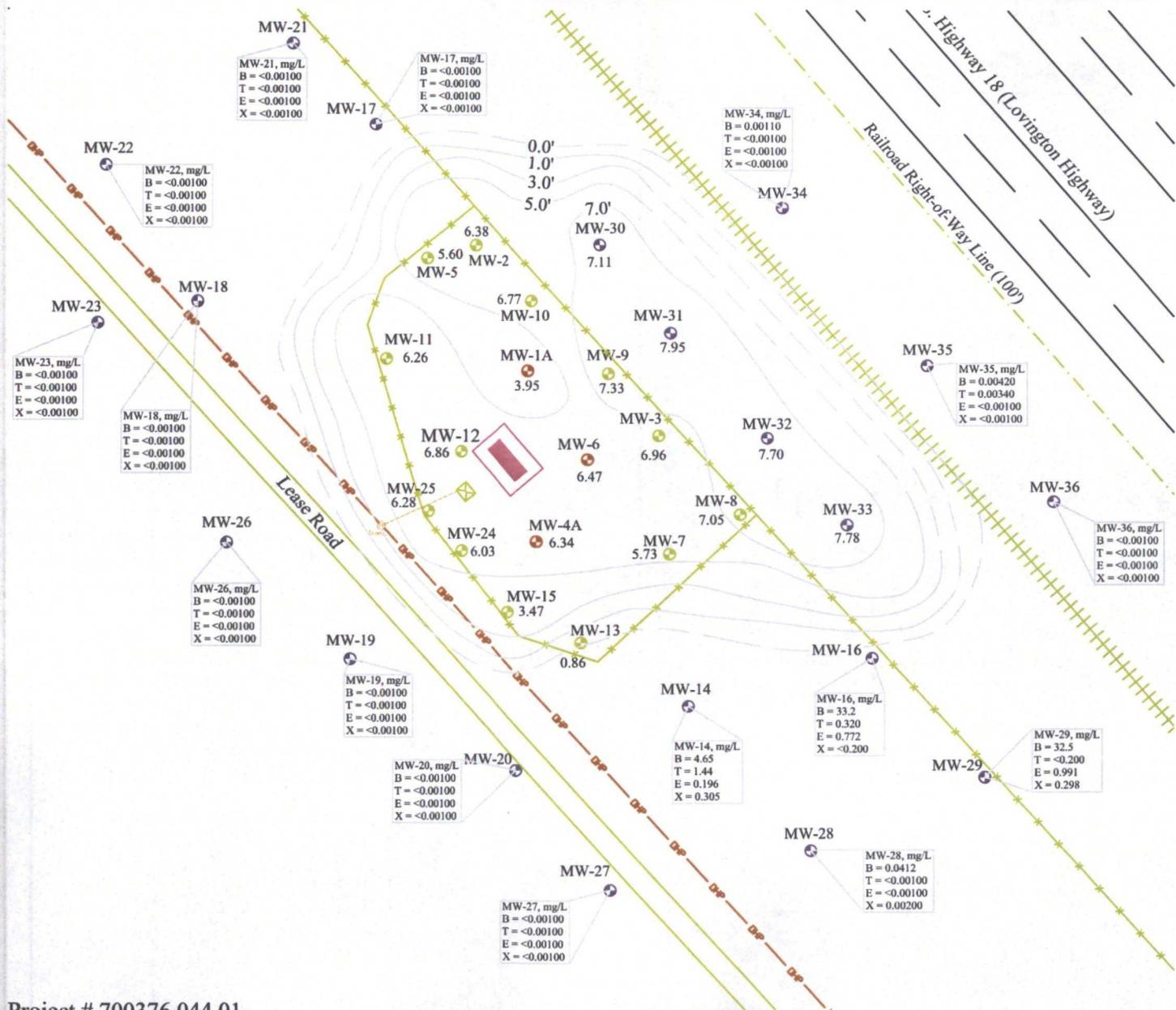
Date: 07/07/2011  
 Scale: 1" = 100'  
 Drawn By: TJS

8" Moore to Jal #1  
 SRS # 2002-10270, NMOCD REF. # AP-91  
 9.2 Miles SE of Lovington, NM, Lea County, New Mexico  
 Figure 3b - PSH Thickness & Groundwater Concentration Map - 06/28-29/2011



Date: 10/03/2011  
 Scale: 1" = 100'  
 Drawn By: TJS

8" Moore to Jal #1  
 SRS # 2002-10270, NMOCD REF. # AP-91  
 9.2 Miles SE of Lovington, NM, Lea County, New Mexico  
 Figure 3c - PSH Thickness & Groundwater Concentration Map - 09/21/2011



Project # 700376.044.01



Date: 01/17/2012  
 Scale: 1" = 100'  
 Drawn By: TJS

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 - 12/29/2011

## **APPENDIX B**

### **Tables**

**Table 1 - Summary of Historical Fluid Level Measurements**

**Table 2 - Summary of Groundwater Analytical Results for BTEX**

**Table 3 - Summary of Groundwater Analytical Results for PAH**

**Chart 1 – Product Recovery**



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-1A	10/08/04	3765.34	53.48	56.38	2.90	3711.38
MW-1A	10/14/04	3765.34	53.25	68.36	15.11	3709.60
MW-1A	10/20/04	3765.34	54.11	65.92	11.81	3709.28
MW-1A	10/29/04	3765.34		55.09	55.09	3756.25
MW-1A	11/04/04	3765.34	55.51	63.71	8.20	3708.48
MW-1A	11/10/04	3765.34	55.72	63.49	7.77	3708.34
MW-1A	11/17/04	3765.34	55.93	63.49	7.56	3708.16
MW-1A	11/24/04	3765.34	55.23	66.10	10.87	3708.32
MW-1A	12/02/04	3765.34	55.26	65.63	10.37	3708.37
MW-1A	12/08/04	3765.34	55.22	65.60	10.38	3708.41
MW-1A	12/15/04	3765.34	56.06	63.65	7.59	3708.03
MW-1A	12/27/04	3765.34	56.35	63.59	7.24	3707.80
MW-1A	12/29/04	3765.34	56.34	63.58	7.24	3707.81
MW-1A	01/06/05	3765.34	56.41	63.64	7.23	3707.74
MW-1A	01/13/05	3765.34	56.56	63.76	7.20	3707.59
MW-1A	01/19/05	3765.34	56.57	63.78	7.21	3707.58
MW-1A	01/26/05	3765.34	56.61	63.78	7.17	3707.55
MW-1A	02/02/05	3765.34	56.63	64.00	7.37	3707.49
MW-1A	02/09/05	3765.34	56.65	64.11	7.46	3707.46
MW-1A	02/16/05	3765.34	56.68	64.21	7.53	3707.42
MW-1A	02/24/05	3765.34	56.69	64.25	7.56	3707.40
MW-1A	03/03/05	3765.34	56.71	64.41	7.70	3707.36
MW-1A	03/11/05	3765.34	56.86	63.54	6.68	3707.38
MW-1A	03/18/05	3765.34	56.72	64.51	7.79	3707.33
MW-1A	04/01/05	3765.34	56.74	64.65	7.91	3707.29
MW-1A	04/07/05	3765.34	56.75	64.68	7.93	3707.28
MW-1A	05/18/05	3765.34	56.80	64.99	8.19	3707.19
MW-1A	05/23/05	3765.34	56.81	65.00	8.19	3707.18
MW-1A	05/26/05	3765.34	56.83	65.02	8.19	3707.16
MW-1A	06/01/05	3765.34	56.82	65.03	8.21	3707.17
MW-1A	06/03/05	3765.34	56.84	65.01	8.17	3707.15
MW-1A	06/07/05	3765.34	56.85	65.03	8.18	3707.14
MW-1A	06/10/05	3765.34	56.85	65.07	8.22	3707.13
MW-1A	06/13/05	3765.34	56.87	65.10	8.23	3707.11
MW-1A	06/16/05	3765.34	56.86	65.06	8.20	3707.13
MW-1A	06/20/05	3765.34	56.88	65.12	8.24	3707.10
MW-1A	06/22/05	3765.34	56.90	65.10	8.20	3707.09
MW-1A	06/29/05	3765.34	56.89	65.17	8.28	3707.08
MW-1A	07/01/05	3765.34	56.91	65.15	8.24	3707.07
MW-1A	07/06/05	3765.34	56.91	65.17	8.26	3707.07



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-1A	07/08/05	3765.34	56.91	65.04	8.13	3707.09
MW-1A	07/12/05	3765.34	56.95	65.25	8.30	3707.02
MW-1A	07/14/05	3765.34	56.92	65.21	8.29	3707.05
MW-1A	07/19/05	3765.34	56.93	65.26	8.33	3707.04
MW-1A	07/21/05	3765.34	56.96	65.29	8.33	3707.01
MW-1A	07/26/05	3765.34	56.95	65.31	8.36	3707.01
MW-1A	07/28/05	3765.34	56.58	65.30	8.72	3707.32
MW-1A	08/02/05	3765.34	56.98	65.27	8.29	3706.99
MW-1A	08/04/05	3765.34	57.00	65.33	8.33	3706.97
MW-1A	08/09/05	3765.34	57.00	65.38	8.38	3706.96
MW-1A	08/11/05	3765.34	56.99	65.37	8.38	3706.97
MW-1A	08/16/05	3765.34	57.02	65.42	8.40	3706.93
MW-1A	08/18/05	3765.34	57.01	65.40	8.39	3706.95
MW-1A	08/24/05	3765.34	57.03	65.44	8.41	3706.92
MW-1A	08/26/05	3765.34	57.04	65.44	8.40	3706.91
MW-1A	08/30/05	3765.34	56.45	66.48	10.03	3707.24
MW-1A	09/01/05	3765.34	56.52	66.74	10.22	3707.13
MW-1A	09/06/05	3765.34	56.65	66.28	9.63	3707.10
MW-1A	09/08/05	3765.34	56.73	65.88	9.15	3707.10
MW-1A	09/13/05	3765.34	56.86	65.64	8.78	3707.03
MW-1A	09/16/05	3765.34	56.94	65.46	8.52	3706.99
MW-1A	09/20/05	3765.34	57.01	65.31	8.30	3706.96
MW-1A	09/23/05	3765.34	57.04	65.23	8.19	3706.95
MW-1A	09/27/05	3765.34	57.07	65.17	8.10	3706.93
MW-1A	09/29/05	3765.34	57.09	65.10	8.01	3706.93
MW-1A	10/04/05	3765.34	57.08	65.18	8.10	3706.92
MW-1A	10/06/05	3765.34	57.09	65.21	8.12	3706.91
MW-1A	10/11/05	3765.34	57.09	65.31	8.22	3706.89
MW-1A	10/13/05	3765.34	57.10	65.28	8.18	3706.89
MW-1A	10/18/05	3765.34	57.12	65.31	8.19	3706.87
MW-1A	10/21/05	3765.34	57.13	65.29	8.16	3706.86
MW-1A	10/26/05	3765.34	57.15	65.34	8.19	3706.84
MW-1A	10/28/05	3765.34	57.14	65.28	8.14	3706.86
MW-1A	11/01/05	3765.34	57.16	65.34	8.18	3706.83
MW-1A	11/04/05	3765.34	57.17	65.33	8.16	3706.82
MW-1A	11/09/05	3765.34	57.21	65.38	8.17	3706.78
MW-1A	11/11/05	3765.34	57.24	65.36	8.12	3706.76
MW-1A	11/16/05	3765.34	57.21	65.42	8.21	3706.78
MW-1A	11/18/05	3765.34	57.25	65.36	8.11	3706.75
MW-1A	11/22/05	3765.34	57.24	65.42	8.18	3706.75
MW-1A	11/30/05	3765.34	57.25	65.49	8.24	3706.73



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-1A	12/02/05	3765.34	57.28	65.45	8.17	3706.71
MW-1A	12/06/05	3765.34	57.27	65.52	8.25	3706.71
MW-1A	12/14/05	3765.34	57.30	65.57	8.27	3706.68
MW-1A	12/16/05	3765.34	57.31	65.51	8.20	3706.68
MW-1A	12/21/05	3765.34	57.31	65.61	8.30	3706.66
MW-1A	12/23/05	3765.34	57.33	65.53	8.20	3706.66
MW-1A	12/27/05	3765.34	57.33	65.63	8.30	3706.64
MW-1A	12/30/05	3765.34	57.34	65.63	8.29	3706.63
MW-1A	01/03/06	3765.34	57.35	65.69	8.34	3706.61
MW-1A	01/05/06	3765.34	57.36	65.66	8.30	3706.61
MW-1A	01/11/06	3765.34	57.37	65.75	8.38	3706.59
MW-1A	01/13/06	3765.34	57.40	65.68	8.28	3706.57
MW-1A	01/18/06	3765.34	57.38	65.77	8.39	3706.58
MW-1A	01/20/06	3765.34	57.39	65.69	8.30	3706.58
MW-1A	01/24/06	3765.34	57.41	65.83	8.42	3706.54
MW-1A	01/26/06	3765.34	57.40	65.80	8.40	3706.55
MW-1A	02/02/06	3765.34	57.40	65.87	8.47	3706.54
MW-1A	02/08/06	3765.34	57.41	65.91	8.50	3706.53
MW-1A	02/10/06	3765.34	57.40	65.87	8.47	3706.54
MW-1A	02/14/06	3765.34	57.43	65.91	8.48	3706.51
MW-1A	02/16/06	3765.34	57.46	65.83	8.37	3706.50
MW-1A	02/21/06	3765.34	57.45	66.00	8.55	3706.48
MW-1A	02/24/06	3765.34	57.47	65.91	8.44	3706.48
MW-1A	02/28/06	3765.34	57.21	71.50	14.29	3705.77
MW-1A	03/03/06	3765.34	57.43	66.00	8.57	3706.50
MW-1A	03/06/06	3765.34	57.45	66.00	8.55	3706.48
MW-1A	03/08/06	3765.34	57.50	65.87	8.37	3706.46
MW-1A	03/15/06	3765.34	57.51	66.03	8.52	3706.42
MW-1A	03/17/06	3765.34	57.53	65.93	8.40	3706.42
MW-1A	03/21/06	3765.34	57.51	66.04	8.53	3706.42
MW-1A	03/23/06	3765.34	57.42	65.83	8.41	3706.53
MW-1A	03/28/06	3765.34	57.52	66.03	8.51	3706.42
MW-1A	03/30/06	3765.34	57.54	65.95	8.41	3706.41
MW-1A	04/04/06	3765.34	57.55	66.07	8.52	3706.38
MW-1A	04/07/06	3765.34	57.57	66.05	8.48	3706.37
MW-1A	04/12/06	3765.34	57.59	66.10	8.51	3706.35
MW-1A	04/14/06	3765.34	57.58	66.01	8.43	3706.37
MW-1A	04/18/06	3765.34	57.55	66.10	8.55	3706.38
MW-1A	04/21/06	3765.34	57.61	61.18	3.57	3707.14
MW-1A	04/26/06	3765.34	57.56	66.10	8.54	3706.37
MW-1A	04/28/06	3765.34	57.60	65.98	8.38	3706.36



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**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-1A	05/04/06	3765.34	57.61	66.13	8.52	3706.32
MW-1A	05/05/06	3765.34	57.62	66.11	8.49	3706.32
MW-1A	05/10/06	3765.34	57.66	66.20	8.54	3706.27
MW-1A	05/12/06	3765.34	57.65	66.05	8.40	3706.30
MW-1A	05/16/06	3765.34	57.66	66.20	8.54	3706.27
MW-1A	05/18/06	3765.34	57.66	66.08	8.42	3706.29
MW-1A	05/23/06	3765.34	57.67	66.22	8.55	3706.26
MW-1A	05/26/06	3765.34	57.87	66.16	8.29	3706.10
MW-1A	05/30/06	3765.34	57.68	66.23	8.55	3706.25
MW-1A	06/01/06	3765.34	57.70	66.11	8.41	3706.25
MW-1A	06/06/06	3765.34	57.70	66.25	8.55	3706.23
MW-1A	06/09/06	3765.34	57.70	66.26	8.56	3706.23
MW-1A	06/13/06	3765.34	57.71	66.27	8.56	3706.22
MW-1A	06/16/06	3765.34	57.72	66.25	8.53	3706.21
MW-1A	06/20/06	3765.34	57.72	66.27	8.55	3706.21
MW-1A	06/23/06	3765.34	57.72	66.26	8.54	3706.21
MW-1A	06/27/06	3765.34	57.74	66.28	8.54	3706.19
MW-1A	06/30/06	3765.34	57.75	66.25	8.50	3706.19
MW-1A	07/05/06	3765.34	57.75	66.27	8.52	3706.18
MW-1A	07/07/06	3765.34	57.77	66.31	8.54	3706.16
MW-1A	07/11/06	3765.34	57.78	66.30	8.52	3706.15
MW-1A	07/13/06	3765.34	57.79	66.20	8.41	3706.16
MW-1A	07/18/06	3765.34	57.80	66.36	8.56	3706.13
MW-1A	07/21/06	3765.34	57.80	66.30	8.50	3706.14
MW-1A	07/25/06	3765.34	57.81	66.38	8.57	3706.12
MW-1A	07/27/06	3765.34	57.81	66.28	8.47	3706.13
MW-1A	08/01/06	3765.34	57.83	66.41	8.58	3706.09
MW-1A	08/03/06	3765.34	57.85	66.36	8.51	3706.09
MW-1A	08/09/06	3765.34	57.87	66.44	8.57	3706.06
MW-1A	08/11/06	3765.34	57.87	66.35	8.48	3706.07
MW-1A	08/15/06	3765.34	57.89	66.46	8.57	3706.04
MW-1A	08/15/06	3765.34	57.89	66.46	8.57	3706.04
MW-1A	08/18/06	3765.34	57.89	66.46	8.57	3706.04
MW-1A	08/25/06	3765.34	57.92	66.51	8.59	3706.00
MW-1A	08/30/06	3765.34	57.94	66.43	8.49	3706.00
MW-1A	09/15/06	3765.34	57.27	67.55	10.28	3706.37
MW-1A	09/20/06	3765.34	57.74	66.64	8.90	3706.13
MW-1A	09/26/06	3765.34	57.92	66.16	8.24	3706.06
MW-1A	09/29/06	3765.34	57.98	66.03	8.05	3706.03
MW-1A	10/04/06	3765.34	58.01	66.03	8.02	3706.01
MW-1A	10/06/06	3765.34	58.03	65.94	7.91	3706.00



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCDF REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-1A	10/12/06	3765.34	58.06	63.14	5.08	3706.44
MW-1A	10/17/06	3765.34	58.90	66.30	7.40	3705.22
MW-1A	10/20/06	3765.34	58.08	66.04	7.96	3705.95
MW-1A	10/24/06	3765.34	58.10	66.02	7.92	3705.93
MW-1A	10/26/06	3765.34	58.90	66.02	7.12	3705.27
MW-1A	11/22/06	3765.34	58.16	66.34	8.18	3705.83
MW-1A	11/28/06	3765.34	58.19	66.41	8.22	3705.79
MW-1A	12/06/06	3765.34	58.25	66.49	8.24	3705.73
MW-1A	12/08/06	3765.34	58.44	68.14	9.70	3705.30
MW-1A	12/12/06	3765.34	58.25	66.49	8.24	3705.73
MW-1A	12/15/06	3765.34	58.92	66.01	7.09	3705.25
MW-1A	12/20/06	3765.34	NM	NM		
MW-1A	12/22/06	3765.34	58.34	66.41	8.07	3705.67
MW-1A	12/27/06	3765.34	58.30	66.65	8.35	3705.66
MW-1A	01/03/07	3765.34	58.34	66.69	8.35	3705.62
MW-1A	01/05/07	3765.34	58.32	66.72	8.40	3705.63
MW-1A	01/12/07	3765.34	58.35	66.76	8.41	3705.60
MW-1A	01/15/07	3765.34	58.40	66.72	8.32	3705.57
MW-1A	01/18/07	3765.34	58.38	66.78	8.40	3705.57
MW-1A	01/31/07	3765.34	58.41	66.87	8.46	3705.53
MW-1A	02/07/07	3765.34	58.31	67.78	9.47	3705.47
MW-1A	02/09/07	3765.34	58.43	66.69	8.26	3705.55
MW-1A	02/13/07	3765.34	58.44	66.85	8.41	3705.51
MW-1A	02/16/07	3765.34	58.42	66.79	8.37	3705.54
MW-1A	02/19/07	3765.34	58.48	66.42	7.94	3705.55
MW-1A	03/09/07	3765.34	65.02	73.50	8.48	3698.92
MW-1A	03/13/07	3765.34	65.67	74.02	8.35	3698.29
MW-1A	03/23/07	3765.34	65.10	73.47	8.37	3698.86
MW-1A	03/27/07	3768.36	65.09	73.55	8.46	3701.87
MW-1A	04/06/07		65.13	73.52	8.39	3701.85
MW-1A	04/11/07		66.17	72.20	6.03	3701.20
MW-1A	04/17/07		65.15	73.65	8.50	3701.81
MW-1A	04/19/07		65.15	73.42	8.27	3701.85
MW-1A	04/24/07		65.15	73.76	8.61	3701.79
MW-1A	05/01/07		65.20	72.21	7.01	3702.00
MW-1A	05/21/07		65.23	73.54	8.31	3701.76
MW-1A	05/24/07		65.45	73.84	8.39	3701.53
MW-1A	06/28/07		65.38	73.90	8.52	3701.57
MW-1A	08/07/07		65.31	73.92	8.61	3701.63
MW-1A	08/17/07		64.25	71.76	7.51	3702.87
MW-1A	08/23/07		65.34	73.86	8.52	3701.61



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-1A	08/31/07		65.37	73.89	8.52	3701.58
MW-1A	09/21/07		65.43	73.60	8.17	3701.58
MW-1A	09/28/07		65.45	73.96	8.51	3701.51
MW-1A	10/11/07		65.48	72.48	7.00	3701.73
MW-1A	10/18/07		65.51	73.98	8.47	3701.45
MW-1A	11/13/07		64.68	73.17	8.49	3702.28
MW-1A	11/27/07		64.72	73.21	8.49	3702.24
MW-1A	12/13/07		64.76	73.29	8.53	3702.19
MW-1A	12/17/07		64.83	73.28	8.45	3702.14
MW-1A	12/31/07		64.84	73.36	8.52	3702.11
MW-1A	01/06/08		64.91	73.29	8.38	3702.07
MW-1A	03/05/08		65.06	73.57	8.51	3701.90
MW-1A	03/26/08		65.12	73.37	8.25	3701.88
MW-1A	04/02/08		65.17	73.46	8.29	3701.82
MW-1A	04/04/08		65.28	73.49	8.21	3701.73
MW-1A	04/24/08		65.23	73.63	8.40	3701.74
MW-1A	05/06/08		65.31	73.77	8.46	3701.65
MW-1A	05/27/08		65.42	73.88	8.46	3701.54
MW-1A	06/04/08		65.47	73.92	8.45	3701.50
MW-1A	06/24/08		65.61	74.09	8.48	3701.35
MW-1A	07/02/08		65.68	74.17	8.49	3701.28
MW-1A	07/15/08		65.78	74.21	8.43	3701.19
MW-1A	07/22/08		65.83	74.21	8.38	3701.15
MW-1A	07/31/08		65.94	74.35	8.41	3701.03
MW-1A	08/07/08		66.03	74.36	8.33	3700.96
MW-1A	08/29/08		65.42	73.88	8.46	3701.54
MW-1A	09/16/08		65.49	74.00	8.51	3701.47
MW-1A	12/16/08		65.73	73.61	7.88	3701.33
MW-1A	01/29/09		65.82	73.96	8.14	3701.20
MW-1A	02/04/09		65.85	73.95	8.10	3701.17
MW-1A	05/26/09		66.15	74.02	7.87	3700.91
MW-1A	08/12/09		66.43	74.15	7.72	3700.66
MW-1A	11/19/09		66.95	74.21	7.26	3700.21
MW-1A	02/17/10		67.32	74.38	7.06	3699.88
MW-1A	06/02/10		67.85	73.04	5.19	3699.71
MW-1A	09/23/10		68.00	73.92	5.92	3699.45
MW-1A	12/28/10		68.32	73.75	5.43	3699.20
MW-1A	03/16/11		68.42	73.85	5.43	3699.10
MW-1A	06/28/11		68.75	73.79	5.04	3698.83
MW-1A	09/21/11		69.09	73.76	4.67	3698.55
MW-1A	12/29/11		69.83	73.78	3.95	3697.92



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOC D REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-1	09/22/04	3766.03	56.74	67.29	10.55	3707.55
MW-1	10/08/04		52.27	75.25	22.98	3709.97
MW-1	10/14/04		53.67	71.20	17.53	3709.47
MW-1	10/20/04		54.64	68.31	13.67	3709.13
MW-1	10/29/04		56.08	63.66	7.58	3708.70
MW-1	11/04/04		57.49	58.46	0.97	3708.38
MW-1	11/10/04		57.69	58.40	0.71	3708.22
MW-1	11/17/04		57.88	58.22	0.34	3708.09
MW-1	11/24/04		57.91	58.13	0.22	3708.08
MW-1	12/02/04		57.75	58.67	0.92	3708.13
MW-1	12/08/04		57.70	58.64	0.94	3708.17
MW-1	12/15/04		57.89	59.15	1.26	3707.93
MW-1	12/27/04		58.20	58.64	0.44	3707.76
MW-1	12/29/04		58.17	58.60	0.43	3707.79
MW-1	01/06/05		58.29	58.72	0.43	3707.67
MW-1	01/13/05		58.40	58.72	0.32	3707.58
MW-1	01/19/05		58.42	58.71	0.29	3707.56
MW-1	01/26/05		58.48	58.83	0.35	3707.49
MW-1	02/02/05		58.49	58.81	0.32	3707.49
MW-1	02/09/05		58.48	58.80	0.32	3707.50
MW-1	02/16/05		58.54	58.86	0.32	3707.44
MW-1	02/24/05		58.57	58.89	0.32	3707.41
MW-1	03/03/05		58.62	58.89	0.27	3707.37
MW-1	03/11/05		58.54	58.63	0.09	3707.48
MW-1	03/18/05		58.63	59.08	0.45	3707.33
MW-1	04/01/05		58.60	59.07	0.47	3707.35
MW-1	04/07/05		58.65	59.17	0.52	3707.29
MW-1	05/18/05		58.77	59.30	0.53	3707.17
MW-1	05/23/05		58.88	58.94	0.06	3707.14
MW-1	05/26/05		58.89	58.91	0.02	3707.14
MW-1	06/01/05		58.89	58.97	0.08	3707.13
MW-1	06/03/05		58.86	58.98	0.12	3707.15
MW-1	06/07/05		58.90	59.03	0.13	3707.11
MW-1	06/10/05		58.90	59.02	0.12	3707.11
MW-1	06/13/05		58.90	59.12	0.22	3707.09
MW-1	06/16/05		58.91	59.02	0.11	3707.10
MW-1	06/20/05		58.95	59.12	0.17	3707.05
MW-1	06/22/05		58.94	59.14	0.20	3707.06
MW-1	06/29/05		58.95	59.08	0.13	3707.06
MW-1	07/01/05		58.97	59.09	0.12	3707.04
MW-1	07/06/05		58.99	59.08	0.09	3707.03
MW-1	07/08/05		58.90	59.02	0.12	3707.11
MW-1	07/12/05		59.02	59.11	0.09	3707.00
MW-1	07/14/05		58.99	59.22	0.23	3707.00
MW-1	07/19/05		59.01	59.18	0.17	3706.99
MW-1	07/21/05		59.04	59.38	0.34	3706.93
MW-1	07/26/05		59.04	59.13	0.09	3706.98



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-1	07/28/05		59.17	59.65	0.48	3706.78
MW-1	08/02/05		59.04	59.23	0.19	3706.96
MW-1	08/04/05		59.05	59.28	0.23	3706.94
MW-1	08/09/05		59.04	59.33	0.29	3706.94
MW-1	08/11/05		59.04	59.37	0.33	3706.94
MW-1	08/16/05		59.05	59.46	0.41	3706.91
MW-1	08/18/05		59.04	59.48	0.44	3706.92
MW-1	08/24/05		59.03	59.56	0.53	3706.91
MW-1	08/26/05		59.04	59.61	0.57	3706.90
MW-1	08/30/05		58.91	59.71	0.80	3706.99
MW-1	09/01/05		58.82	60.17	1.35	3706.99
MW-1	09/06/05		58.85	59.63	0.78	3707.05
MW-1	09/08/05		59.02	59.38	0.36	3706.95
MW-1	09/13/05		58.92	59.92	1.00	3706.95
MW-1	09/16/05		59.07	59.37	0.30	3706.91
MW-1	09/20/05		59.05	59.67	0.62	3706.88
MW-1	09/23/05		59.03	59.82	0.79	3706.87
MW-1	09/27/05		58.98	59.98	1.00	3706.89
MW-1	09/29/05		59.15	59.25	0.10	3706.86
MW-1	10/04/05		59.11	59.44	0.33	3706.87
MW-1	10/06/05		59.14	59.56	0.42	3706.82
MW-1	10/11/05		59.08	59.78	0.70	3706.83
MW-1	10/13/05		59.06	59.92	0.86	3706.83
MW-1	10/18/05		59.04	60.42	1.38	3706.76
MW-1	10/21/05		59.03	60.24	1.21	3706.80
MW-1	10/26/05		58.94	60.40	1.46	3706.85
MW-1	10/28/05		59.18	59.50	0.32	3706.80
MW-1	11/01/05		59.16	59.70	0.54	3706.78
MW-1	11/04/05		59.14	59.81	0.67	3706.78
MW-1	11/09/05		59.26	59.54	0.28	3706.72
MW-1	11/11/05		59.26	59.54	0.28	3706.72
MW-1	11/16/05		59.21	59.84	0.63	3706.72
MW-1	11/18/05		59.26	59.86	0.60	3706.67
MW-1	11/22/05		59.17	60.10	0.93	3706.71
MW-1	11/30/05		59.11	60.46	1.35	3706.70
MW-1	12/02/05		59.11	60.46	1.35	3706.70
MW-1	12/06/05		59.05	60.75	1.70	3706.70
MW-1	12/14/05		59.27	60.04	0.77	3706.63
MW-1	12/16/05		59.28	60.04	0.76	3706.62
MW-1	12/21/05		59.28	60.04	0.76	3706.62
MW-1	12/23/05		59.19	59.53	0.34	3706.78
MW-1	12/27/05		59.19	59.53	0.34	3706.78
MW-1	12/30/05		59.03	59.91	0.88	3706.85
MW-1	01/03/06		59.11	61.18	2.07	3706.58
MW-1	01/05/06		59.16	59.43	0.27	3706.83
MW-1	01/11/06		59.38	60.03	0.65	3706.54
MW-1	01/13/06		59.40	60.18	0.78	3706.50
MW-1	01/18/06		59.28	60.45	1.17	3706.56



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCDF REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-1	01/20/06		59.29	60.61	1.32	3706.52
MW-1	01/24/06		59.24	60.87	1.63	3706.52
MW-1	01/26/06		59.23	60.82	1.59	3706.54
MW-1	02/02/06		59.08	61.49	2.41	3706.55
MW-1	02/08/06		59.00	61.90	2.90	3706.55
MW-1	02/10/06		58.97	61.83	2.86	3706.59
MW-1	02/14/06		59.44	60.11	0.67	3706.48
MW-1	02/16/06		59.55	59.76	0.21	3706.45
MW-1	02/21/06		57.45	60.15	2.70	3708.13
MW-1	02/24/06		59.52	60.00	0.48	3706.43
MW-1	02/28/06		59.40	60.32	0.92	3706.48
MW-1	03/03/06		59.37	60.61	1.24	3706.46
MW-1	03/06/06		59.45	60.84	1.39	3706.35
MW-1	03/08/06		59.30	61.05	1.75	3706.44
MW-1	03/15/06		59.39	60.30	0.91	3706.49
MW-1	03/17/06		59.38	60.30	0.92	3706.50
MW-1	03/21/06		59.52	60.28	0.76	3706.38
MW-1	03/23/06		59.39	60.33	0.94	3706.48
MW-1	03/28/06		59.45	60.60	1.15	3706.39
MW-1	03/30/06		59.49	60.65	1.16	3706.35
MW-1	04/04/06		59.38	60.98	1.60	3706.39
MW-1	04/07/06		59.35	61.30	1.95	3706.36
MW-1	04/12/06		59.23	61.80	2.57	3706.38
MW-1	04/14/06		59.55	60.47	0.92	3706.33
MW-1	04/18/06		59.43	60.82	1.39	3706.37
MW-1	04/21/06		59.41	61.18	1.77	3706.33
MW-1	04/26/06		59.25	61.65	2.40	3706.38
MW-1	04/28/06		59.50	60.80	1.30	3706.32
MW-1	05/04/06		59.41	61.25	1.84	3706.32
MW-1	05/05/06		59.41	60.37	0.96	3706.46
MW-1	05/10/06		59.35	60.95	1.60	3706.42
MW-1	05/12/06		59.27	62.15	2.88	3706.28
MW-1	05/16/06		59.37	61.82	2.45	3706.26
MW-1	05/18/06		59.41	61.55	2.14	3706.27
MW-1	05/23/06		59.35	61.87	2.52	3706.26
MW-1	05/26/06		59.38	61.75	2.37	3706.26
MW-1	05/30/06		59.43	61.62	2.19	3706.24
MW-1	06/01/06		59.41	60.80	1.39	3706.39
MW-1	06/06/06		59.28	62.40	3.12	3706.24
MW-1	06/09/06		59.18	62.74	3.56	3706.26
MW-1	06/13/06		59.27	62.50	3.23	3706.23
MW-1	06/16/06		59.30	62.25	2.95	3706.24
MW-1	06/20/06		59.46	61.59	2.13	3706.22
MW-1	06/23/06		59.38	62.02	2.64	3706.21
MW-1	06/27/06		59.74	62.08	2.34	3705.90
MW-1	06/30/06		59.65	60.92	1.27	3706.17
MW-1	07/05/06		59.54	61.50	1.96	3706.17
MW-1	07/07/06		59.59	61.80	2.21	3706.08



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-1	07/11/06		59.62	61.31	1.69	3706.13
MW-1	07/13/06		59.58	61.51	1.93	3706.13
MW-1	07/18/06		59.58	61.55	1.97	3706.12
MW-1	07/21/06		59.78	60.59	0.81	3706.12
MW-1	07/25/06		59.67	61.20	1.53	3706.11
MW-1	07/27/06		59.65	61.31	1.66	3706.11
MW-1	08/01/06		59.71	61.15	1.44	3706.08
MW-1	08/03/06		59.65	61.46	1.81	3706.08
MW-1	08/09/06		59.62	61.74	2.12	3706.06
MW-1	08/11/06		59.27	61.12	1.85	3706.45
MW-1	08/15/06		59.65	61.82	2.17	3706.02
MW-1	08/18/06		59.52	62.35	2.83	3706.04
MW-1	08/25/06		59.67	61.80	2.13	3706.01
MW-1	08/30/06		59.68	61.81	2.13	3706.00
MW-1	09/12/06		NM	NM	#VALUE!	#VALUE!
MW-1	09/15/06		58.27	61.35	3.08	3707.25
MW-1	09/20/06		58.88	65.01	6.13	3706.14
MW-1	09/26/06		59.08	64.38	5.30	3706.08
MW-1	09/29/06		59.61	62.10	2.49	3706.01
MW-1	10/04/06		59.26	63.81	4.55	3706.02
MW-1	10/06/06		59.81	61.34	1.53	3705.97
MW-1	10/12/06		59.44	63.14	3.70	3705.98
MW-1	10/17/06		59.88	61.21	1.33	3705.93
MW-1	10/24/06		59.88	61.21	1.33	3705.93
MW-1	10/26/06		59.44	62.97	3.53	3706.01
MW-1	11/22/06		58.91	66.21	7.30	3705.92
MW-1	11/28/06		58.96	66.12	7.16	3705.89
MW-1	12/06/06		58.93	66.70	7.77	3705.82
MW-1	12/08/06		58.06	66.02	7.96	3706.66
MW-1	12/12/06		59.34	64.75	5.41	3705.80
MW-1	12/15/06		59.48	62.95	3.47	3705.98
MW-1	12/20/06		NM	NM		
MW-1	12/22/06		59.19	65.57	6.38	3705.79
MW-1	12/27/06		59.04	66.32	7.28	3705.79
MW-1	01/03/07		58.79	66.93	8.14	3705.90
MW-1	01/05/07		58.96	66.98	8.02	3705.75
MW-1	01/12/07		58.96	67.16	8.20	3705.72
MW-1	01/15/07		59.76	63.69	3.93	3705.62
MW-1	01/18/07		59.35	65.54	6.19	3705.66
MW-1	01/31/07		59.10	66.88	7.78	3705.65
MW-1	02/07/07		58.91	67.12	8.21	3705.77
MW-1	02/09/07		59.84	63.81	3.97	3705.53
MW-1	02/13/07		59.64	64.67	5.03	3705.56
MW-1	02/16/07		59.86	63.61	3.75	3705.55
MW-1	02/19/07		59.78	63.93	4.15	3705.57
MW-1	03/09/07		66.68	73.94	7.26	3698.15
MW-1	03/13/04		65.05	73.54	8.49	3699.58
MW-1	03/14/07	Plugged Well				



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-2	10/29/04	3770.91				
MW-2	11/04/04		61.70	65.44	3.74	3708.59
MW-2	11/10/04		61.48	67.15	5.67	3708.49
MW-2	11/17/04		61.72	66.74	5.02	3708.36
MW-2	11/24/04		61.81	67.10	5.29	3708.23
MW-2	12/02/04		61.44	68.41	6.97	3708.32
MW-2	12/08/04		61.38	68.39	7.01	3708.37
MW-2	12/15/04		61.52	68.86	7.34	3708.18
MW-2	12/27/04		61.65	69.09	7.44	3708.03
MW-2	12/29/04		61.66	69.08	7.42	3708.03
MW-2	01/06/05		61.72	69.18	7.46	3707.96
MW-2	01/13/05		61.81	69.21	7.40	3707.88
MW-2	01/19/05		61.85	69.25	7.40	3707.84
MW-2	01/26/05		61.89	69.41	7.52	3707.78
MW-2	02/02/05		61.93	69.45	7.52	3707.74
MW-2	02/09/05		61.92	69.48	7.56	3707.74
MW-2	02/16/05		61.96	69.57	7.61	3707.69
MW-2	02/24/05		62.01	69.59	7.58	3707.65
MW-2	03/03/05		62.00	69.65	7.65	3707.65
MW-2	03/11/05		62.18	67.69	5.51	3707.82
MW-2	03/18/05		62.04	69.69	7.65	3707.61
MW-2	04/01/05		62.08	69.79	7.71	3707.56
MW-2	04/07/05		62.08	69.74	7.66	3707.57
MW-2	05/18/05		62.16	69.89	7.73	3707.47
MW-2	05/23/05		62.19	69.90	7.71	3707.45
MW-2	05/26/05		62.24	69.80	7.56	3707.42
MW-2	06/01/05		62.21	69.91	7.70	3707.43
MW-2	06/03/05		62.30	69.50	7.20	3707.42
MW-2	06/07/05		62.24	69.91	7.67	3707.40
MW-2	06/10/05		62.26	69.81	7.55	3707.40
MW-2	06/13/05		62.26	69.90	7.64	3707.39
MW-2	06/16/05		62.28	69.80	7.52	3707.39
MW-2	06/20/05		62.29	69.95	7.66	3707.36
MW-2	06/22/05		62.36	69.57	7.21	3707.36
MW-2	06/29/05		62.28	69.96	7.68	3707.36
MW-2	07/01/05		62.35	69.61	7.26	3707.36
MW-2	07/06/05		62.31	69.99	7.68	3707.33
MW-2	07/08/05		62.41	69.54	7.13	3707.32
MW-2	07/12/05		62.33	70.29	7.96	3707.27
MW-2	07/14/05		62.40	69.68	7.28	3707.31



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-2	07/19/05		62.35	70.04	7.69	3707.29
MW-2	07/21/05		62.44	69.69	7.25	3707.27
MW-2	07/26/05		62.38	70.02	7.64	3707.27
MW-2	07/28/05		62.49	69.74	7.25	3707.22
MW-2	08/02/05		62.40	70.03	7.63	3707.25
MW-2	08/04/05		62.47	69.76	7.29	3707.24
MW-2	08/09/05		62.41	70.05	7.64	3707.24
MW-2	08/11/05		62.48	69.82	7.34	3707.22
MW-2	08/16/05		62.45	70.09	7.64	3707.20
MW-2	08/18/05		62.50	69.85	7.35	3707.20
MW-2	08/24/05		62.41	70.11	7.70	3707.23
MW-2	08/26/05		62.51	69.89	7.38	3707.18
MW-2	08/30/05		62.46	70.08	7.62	3707.19
MW-2	09/01/05		62.52	69.83	7.31	3707.18
MW-2	09/06/05		62.47	70.08	7.61	3707.18
MW-2	09/08/05		62.51	69.81	7.30	3707.20
MW-2	09/13/05		62.48	70.07	7.59	3707.18
MW-2	09/16/05		62.51	70.04	7.53	3707.16
MW-2	09/20/05		62.50	70.09	7.59	3707.16
MW-2	09/23/05		62.53	70.03	7.50	3707.14
MW-2	09/27/05		62.50	70.15	7.65	3707.15
MW-2	09/29/05		62.56	69.94	7.38	3707.13
MW-2	10/04/05		62.52	70.12	7.60	3707.14
MW-2	10/06/05		62.61	69.98	7.37	3707.08
MW-2	10/11/05		62.53	70.14	7.61	3707.12
MW-2	10/13/05		62.55	70.08	7.53	3707.12
MW-2	10/18/05		62.56	70.18	7.62	3707.09
MW-2	10/21/05		62.58	70.17	7.59	3707.08
MW-2	10/26/05		62.57	70.20	7.63	3707.08
MW-2	10/28/05		62.61	70.07	7.46	3707.07
MW-2	11/01/05		62.59	70.21	7.62	3707.06
MW-2	11/04/05		62.60	70.20	7.60	3707.06
MW-2	11/09/05		62.64	70.28	7.64	3707.01
MW-2	11/11/05		62.64	70.29	7.65	3707.01
MW-2	11/16/05		62.63	70.27	7.64	3707.02
MW-2	11/18/05		62.68	70.17	7.49	3706.99
MW-2	11/22/05		62.65	70.29	7.64	3707.00
MW-2	11/30/05		62.66	70.33	7.67	3706.98
MW-2	12/02/05		62.71	70.22	7.51	3706.96
MW-2	12/06/05		62.70	70.36	7.66	3706.95
MW-2	12/14/05		62.72	70.39	7.67	3706.92



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCDF REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-2	12/16/05		62.73	70.38	7.65	3706.92
MW-2	12/21/05		62.75	70.25	7.50	3706.92
MW-2	12/23/05		62.78	70.23	7.45	3706.90
MW-2	12/27/05		62.75	70.39	7.64	3706.90
MW-2	12/30/05		62.78	70.39	7.61	3706.87
MW-2	01/03/06		62.76	70.39	7.63	3706.89
MW-2	01/05/06		62.80	70.34	7.54	3706.87
MW-2	01/11/06		62.81	70.44	7.63	3706.84
MW-2	01/13/06		62.83	70.37	7.54	3706.84
MW-2	01/18/06		62.80	70.43	7.63	3706.85
MW-2	01/20/06		62.85	70.36	7.51	3706.82
MW-2	01/24/06		62.85	72.50	9.65	3706.47
MW-2	01/26/06		62.80	72.43	9.63	3706.52
MW-2	02/02/06		62.82	70.51	7.69	3706.82
MW-2	02/08/06		62.85	70.50	7.65	3706.80
MW-2	02/10/06		62.81	70.48	7.67	3706.83
MW-2	02/14/06		62.87	70.55	7.68	3706.77
MW-2	02/16/06		62.91	70.46	7.55	3706.75
MW-2	02/21/06		62.95	70.51	7.56	3706.71
MW-2	02/24/06		62.92	70.54	7.62	3706.73
MW-2	02/28/06		62.90	72.50	9.60	3706.43
MW-2	03/03/06		62.92	69.60	6.68	3706.89
MW-2	03/06/06		62.93	70.57	7.64	3706.72
MW-2	03/08/06		62.95	69.52	6.57	3706.88
MW-2	03/15/06		62.97	70.63	7.66	3706.68
MW-2	03/17/06		63.00	70.54	7.54	3706.67
MW-2	03/21/06		62.90	70.60	7.70	3706.74
MW-2	03/23/06		62.90	70.40	7.50	3706.77
MW-2	03/28/06		63.30	70.60	7.30	3706.41
MW-2	03/30/06		63.03	70.60	7.57	3706.63
MW-2	04/04/06		63.01	70.65	7.64	3706.64
MW-2	04/07/06		63.05	70.65	7.60	3706.61
MW-2	04/12/06		63.02	70.29	7.27	3706.69
MW-2	04/14/06		63.06	70.60	7.54	3706.61
MW-2	04/18/06		63.01	70.61	7.60	3706.65
MW-2	04/21/06		63.08	70.66	7.58	3706.58
MW-2	04/26/06		63.03	70.62	7.59	3706.63
MW-2	04/28/06		63.07	70.60	7.53	3706.60
MW-2	05/04/06		63.08	70.68	7.60	3706.58
MW-2	05/05/06		63.10	70.69	7.59	3706.56
MW-2	05/10/06		63.13	70.74	7.61	3706.52



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-2	05/12/06		63.13	70.67	7.54	3706.54
MW-2	05/16/06		63.46	70.71	7.25	3706.25
MW-2	05/18/06		63.14	70.69	7.55	3706.52
MW-2	05/23/06		63.14	70.73	7.59	3706.52
MW-2	05/26/06		63.15	70.73	7.58	3706.51
MW-2	05/30/06		63.16	70.37	7.21	3706.56
MW-2	06/01/06		63.18	70.74	7.56	3706.48
MW-2	06/06/06		63.17	70.28	7.11	3706.57
MW-2	06/09/06		63.16	70.77	7.61	3706.49
MW-2	06/13/06		63.19	70.80	7.61	3706.46
MW-2	06/16/06		63.20	70.77	7.57	3706.46
MW-2	06/20/06		63.20	70.77	7.57	3706.46
MW-2	06/23/06		63.19	70.79	7.60	3706.47
MW-2	06/27/06		63.22	70.81	7.59	3706.44
MW-2	06/30/06		63.21	70.78	7.57	3706.45
MW-2	07/05/06		63.22	70.80	7.58	3706.44
MW-2	07/07/06		63.26	70.77	7.51	3706.41
MW-2	07/11/06		63.25	70.81	7.56	3706.41
MW-2	07/13/06		63.27	70.75	7.48	3706.41
MW-2	07/18/06		63.28	70.84	7.56	3706.38
MW-2	07/21/06		63.28	70.80	7.52	3706.39
MW-2	07/25/06		63.30	70.84	7.54	3706.37
MW-2	07/27/06		63.30	70.84	7.54	3706.37
MW-2	08/01/06		63.33	70.87	7.54	3706.34
MW-2	08/03/06		63.34	70.84	7.50	3706.33
MW-2	08/09/06		63.35	70.89	7.54	3706.32
MW-2	08/11/06		63.35	70.83	7.48	3706.33
MW-2	08/15/06		63.38	70.91	7.53	3706.29
MW-2	08/18/06		63.38	70.90	7.52	3706.29
MW-2	08/25/06		63.40	70.95	7.55	3706.26
MW-2	08/30/06		62.44	71.40	8.96	3706.99
MW-2	09/15/06		63.40	70.98	7.58	3706.26
MW-2	09/20/06		63.43	71.01	7.58	3706.23
MW-2	09/29/06		63.45	71.00	7.55	3706.21
MW-2	10/04/06		63.46	71.02	7.56	3706.20
MW-2	10/06/06		63.49	71.97	8.48	3706.02
MW-2	10/12/06		63.49	71.05	7.56	3706.17
MW-2	10/17/06		63.52	71.07	7.55	3706.14
MW-2	10/20/06		63.51	71.07	7.56	3706.15
MW-2	10/24/06		63.48	71.07	7.59	3706.18
MW-2	10/26/06		63.59	71.07	7.48	3706.09



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-2	11/22/06		63.60	71.19	7.59	3706.06
MW-2	11/28/06		63.62	71.20	7.58	3706.04
MW-2	12/06/06		63.71	71.28	7.57	3705.95
MW-2	12/08/06		63.48	71.05	7.57	3706.18
MW-2	12/12/06		63.68	71.26	7.58	3705.98
MW-2	12/15/06		63.62	71.07	7.45	3706.06
MW-2	12/22/06		63.72	71.25	7.53	3705.95
MW-2	12/27/06		63.78	71.29	7.51	3705.89
MW-2	01/03/07		63.78	71.38	7.60	3705.88
MW-2	01/05/07		63.82	71.36	7.54	3705.85
MW-2	01/12/07		63.82	71.42	7.60	3705.84
MW-2	01/15/07		63.88	71.40	7.52	3705.79
MW-2	01/18/07		63.86	71.43	7.57	3705.80
MW-2	01/31/07		63.88	71.46	7.58	3705.78
MW-2	02/07/07		63.75	71.50	7.75	3705.88
MW-2	02/09/07		63.90	71.48	7.58	3705.76
MW-2	02/13/07		63.89	76.48	12.59	3704.94
MW-2	02/16/07		63.89	74.46	10.57	3705.28
MW-2	02/19/07		63.87	71.48	7.61	3705.78
MW-2	02/21/07		63.90	71.49	7.59	3705.76
MW-2	02/26/07		63.95	71.53	7.58	3705.71
MW-2	03/01/07		63.96	71.55	7.59	3705.70
MW-2	03/06/07		63.90	71.49	7.59	3705.76
MW-2	03/09/07		63.91	71.65	7.74	3705.72
MW-2	03/13/07		63.95	71.53	7.58	3705.71
MW-2	03/23/07		63.97	71.53	7.56	3705.69
MW-2	03/27/07	3768.35	63.86	71.54	7.68	3703.22
MW-2	04/06/07		64.03	71.59	7.56	3703.07
MW-2	04/11/07		64.03	71.57	7.54	3703.08
MW-2	04/17/07		64.03	71.50	7.47	3703.09
MW-2	04/19/07		64.04	71.50	7.46	3703.08
MW-2	04/24/07		64.05	71.61	7.56	3703.05
MW-2	05/01/07		64.05	71.67	7.62	3703.04
MW-2	05/21/07		64.11	71.67	7.56	3702.99
MW-2	05/24/07		64.15	73.84	9.69	3702.60
MW-2	06/28/07		64.28	71.82	7.54	3702.83
MW-2	08/07/07		64.21	71.26	7.05	3702.98
MW-2	08/17/07		65.34	73.88	8.54	3701.60
MW-2	08/23/07		64.27	71.75	7.48	3702.85
MW-2	08/31/07		64.28	71.76	7.48	3702.84
MW-2	09/21/07		64.37	71.84	7.47	3702.75



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-2	09/28/07		64.36	71.84	7.48	3702.76
MW-2	10/11/07		64.42	71.87	7.45	3702.70
MW-2	10/18/07		64.44	71.89	7.45	3702.68
MW-2	11/13/07		65.40	71.98	6.58	3701.86
MW-2	11/27/07		64.57	72.05	7.48	3702.55
MW-2	12/13/07		64.65	72.12	7.47	3702.47
MW-2	12/17/07		64.67	72.12	7.45	3702.45
MW-2	12/31/07		64.42	72.18	7.76	3702.65
MW-2	01/16/08		64.47	72.21	7.74	3702.60
MW-2	03/05/08		64.92	72.36	7.44	3702.20
MW-2	03/26/08		64.99	72.40	7.41	3702.14
MW-2	04/02/08		65.04	72.47	7.43	3702.08
MW-2	04/04/08		65.03	72.48	7.45	3702.09
MW-2	04/24/08		65.08	72.53	7.45	3702.04
MW-2	05/06/08		65.16	72.59	7.43	3701.96
MW-2	05/27/08		65.32	72.32	7.00	3701.88
MW-2	06/04/08		65.32	72.73	7.41	3701.81
MW-2	06/24/08		65.49	72.90	7.41	3701.64
MW-2	07/02/08		65.56	72.95	7.39	3701.57
MW-2	07/15/08		65.65	73.04	7.39	3701.48
MW-2	07/22/08		65.71	73.06	7.35	3701.43
MW-2	07/31/08		66.82	73.17	6.35	3700.48
MW-2	08/07/08		65.91	73.25	7.34	3701.23
MW-2	08/29/08		65.30	72.63	7.33	3701.84
MW-2	09/16/08		65.33	72.69	7.36	3701.81
MW-2	12/16/08		66.02	70.54	4.52	3701.58
MW-2	01/29/09		65.80	72.45	6.65	3701.45
MW-2	02/04/09		66.27	70.44	4.17	3701.39
MW-2	05/26/09		66.02	73.15	7.13	3701.15
MW-2	08/12/09		66.52	72.49	5.97	3700.84
MW-2	11/19/09		67.63	70.09	2.46	3700.31
MW-2	02/17/10		67.33	73.76	6.43	3699.96
MW-2	06/02/10		67.80	74.25	6.45	3699.56
MW-2	09/23/10		67.95	74.29	6.34	3699.42
MW-2	12/28/10		67.97	74.44	6.47	3699.38
MW-2	03/16/11		68.33	74.88	6.55	3699.01
MW-2	06/28/11		68.57	75.45	6.88	3698.72
MW-2	09/21/11		68.87	75.76	6.89	3698.42
MW-2	12/29/11		69.26	75.64	6.38	3698.11
MW-3	10/29/04	3769.96	62.90	72.15	9.25	3705.53



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-3	11/04/04		60.05	70.21	10.16	3708.23
MW-3	11/10/04		60.19	70.25	10.06	3708.11
MW-3	11/17/04		60.34	70.26	9.92	3707.98
MW-3	11/24/04		60.50	70.26	9.76	3707.85
MW-3	12/02/04		60.52	70.10	9.58	3707.86
MW-3	12/08/04		60.48	70.02	9.54	3707.91
MW-3	12/15/04		60.68	70.22	9.54	3707.71
MW-3	12/27/04		60.81	70.39	9.58	3707.57
MW-3	12/29/04		60.78	70.39	9.61	3707.59
MW-3	01/06/05		60.91	70.40	9.49	3707.48
MW-3	01/13/05		61.04	70.46	9.42	3707.37
MW-3	01/19/05		61.04	70.46	9.42	3707.37
MW-3	01/26/05		61.11	70.56	9.45	3707.29
MW-3	02/02/05		61.17	70.58	9.41	3707.24
MW-3	02/09/05		61.28	70.55	9.27	3707.15
MW-3	02/16/05		61.19	70.54	9.35	3707.23
MW-3	02/24/05		61.21	70.55	9.34	3707.21
MW-3	03/03/05		61.21	70.57	9.36	3707.21
MW-3	03/11/05		61.19	70.45	9.26	3707.24
MW-3	03/18/05		61.31	70.55	9.24	3707.13
MW-3	04/01/05		61.38	70.58	9.20	3707.06
MW-3	04/07/05		61.35	70.54	9.19	3707.09
MW-3	05/18/05		61.45	70.60	9.15	3707.00
MW-3	05/23/05		61.49	70.60	9.11	3706.97
MW-3	05/26/05		61.53	70.64	9.11	3706.93
MW-3	06/01/05		61.51	70.90	9.39	3706.90
MW-3	06/03/05		61.51	70.59	9.08	3706.95
MW-3	06/07/05		61.55	70.65	9.10	3706.91
MW-3	06/10/05		61.54	70.61	9.07	3706.92
MW-3	06/13/05		61.55	70.63	9.08	3706.91
MW-3	06/16/05		61.56	70.60	9.04	3706.91
MW-3	06/20/05		61.58	70.66	9.08	3706.88
MW-3	06/22/05		61.60	70.75	9.15	3706.85
MW-3	06/29/05		61.59	70.69	9.10	3706.87
MW-3	07/01/05		61.62	70.74	9.12	3706.84
MW-3	07/06/05		61.65	70.66	9.01	3706.82
MW-3	07/08/05		61.63	70.64	9.01	3706.84
MW-3	07/12/05		61.65	70.85	9.20	3706.79
MW-3	07/14/05		61.64	70.67	9.03	3706.83
MW-3	07/19/05		61.65	70.71	9.06	3706.82
MW-3	07/21/05		61.68	70.74	9.06	3706.79



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCDF REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-3	07/26/05		61.69	70.73	9.04	3706.78
MW-3	07/28/05		61.70	70.71	9.01	3706.77
MW-3	08/02/05		60.70	70.75	10.05	3707.60
MW-3	08/04/05		61.72	70.73	9.01	3706.75
MW-3	08/09/05		61.72	70.77	9.05	3706.75
MW-3	08/11/05		61.73	70.75	9.02	3706.74
MW-3	08/16/05		61.75	70.79	9.04	3706.72
MW-3	08/18/05		61.74	70.76	9.02	3706.73
MW-3	08/24/05		61.76	70.86	9.10	3706.70
MW-3	08/26/05		61.68	70.79	9.11	3706.78
MW-3	08/30/05		61.74	70.77	9.03	3706.73
MW-3	09/01/05		61.66	70.76	9.10	3706.80
MW-3	09/06/05		61.75	70.81	9.06	3706.72
MW-3	09/08/05		61.76	70.79	9.03	3706.71
MW-3	09/13/05		61.76	70.83	9.07	3706.70
MW-3	09/16/05		61.79	70.85	9.06	3706.68
MW-3	09/20/05		61.81	70.80	8.99	3706.67
MW-3	09/23/05		61.82	70.88	9.06	3706.65
MW-3	09/27/05		61.80	70.88	9.08	3706.66
MW-3	09/29/05		61.81	70.86	9.05	3706.66
MW-3	10/04/05		61.81	70.83	9.02	3706.66
MW-3	10/06/05		61.87	70.91	9.04	3706.60
MW-3	10/11/05		61.84	70.91	9.07	3706.62
MW-3	10/13/05		61.84	70.90	9.06	3706.63
MW-3	10/18/05		61.84	70.92	9.08	3706.62
MW-3	10/21/05		61.88	70.95	9.07	3706.58
MW-3	10/26/05		61.86	70.97	9.11	3706.60
MW-3	10/28/05		61.86	70.95	9.09	3706.60
MW-3	11/01/05		61.89	70.98	9.09	3706.57
MW-3	11/04/05		61.90	70.97	9.07	3706.56
MW-3	11/09/05		61.93	71.02	9.09	3706.53
MW-3	11/11/05		61.90	71.03	9.13	3706.55
MW-3	11/16/05		61.96	71.04	9.08	3706.50
MW-3	11/18/05		61.66	71.01	9.35	3706.76
MW-3	11/22/05		61.96	71.04	9.08	3706.50
MW-3	11/30/05		62.00	71.06	9.06	3706.47
MW-3	12/02/05		62.00	71.05	9.05	3706.47
MW-3	12/06/05		61.97	71.06	9.09	3706.49
MW-3	12/14/05		62.02	71.08	9.06	3706.45
MW-3	12/16/05		62.03	71.05	9.02	3706.44
MW-3	12/21/05		62.03	71.07	9.04	3706.44



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-3	12/23/05		62.06	71.06	9.00	3706.42
MW-3	12/27/05		62.07	71.11	9.04	3706.40
MW-3	12/30/05		62.09	71.06	8.97	3706.39
MW-3	01/03/06		62.10	71.11	9.01	3706.37
MW-3	01/05/06		62.09	71.10	9.01	3706.38
MW-3	01/11/06		62.10	71.14	9.04	3706.37
MW-3	01/13/06		62.17	71.15	8.98	3706.31
MW-3	01/18/06		62.11	71.13	9.02	3706.36
MW-3	01/20/06		62.18	71.14	8.96	3706.30
MW-3	01/24/06		62.20	71.20	9.00	3706.28
MW-3	01/26/06		62.19	71.21	9.02	3706.28
MW-3	02/02/06		62.15	71.15	9.00	3706.33
MW-3	02/08/06		62.17	71.15	8.98	3706.31
MW-3	02/10/06		62.16	71.13	8.97	3706.32
MW-3	02/14/06		62.20	71.20	9.00	3706.28
MW-3	02/16/06		62.23	71.20	8.97	3706.25
MW-3	02/21/06		62.23	71.21	8.98	3706.25
MW-3	02/24/06		62.26	71.21	8.95	3706.22
MW-3	02/28/06		62.21	71.50	9.29	3706.22
MW-3	03/03/06		62.25	71.25	9.00	3706.23
MW-3	03/06/06		62.22	71.20	8.98	3706.26
MW-3	03/08/06		62.24	71.20	8.96	3706.24
MW-3	03/15/06		62.28	71.23	8.95	3706.20
MW-3	03/17/06		62.33	71.25	8.92	3706.16
MW-3	03/21/06		62.30	71.27	8.97	3706.18
MW-3	03/23/06		62.18	71.00	8.82	3706.32
MW-3	03/28/06		62.30	71.25	8.95	3706.18
MW-3	03/30/06		62.32	71.21	8.89	3706.17
MW-3	04/04/06		62.34	71.27	8.93	3706.15
MW-3	04/07/06		62.35	71.28	8.93	3706.14
MW-3	04/12/06		62.35	71.29	8.94	3706.13
MW-3	04/14/06		62.38	71.28	8.90	3706.11
MW-3	04/18/06		62.23	71.27	9.04	3706.24
MW-3	04/21/06		62.40	71.31	8.91	3706.09
MW-3	04/26/06		62.34	71.28	8.94	3706.14
MW-3	04/28/06		62.38	71.26	8.88	3706.11
MW-3	05/04/06		62.38	71.30	8.92	3706.11
MW-3	05/05/06		62.42	71.31	8.89	3706.07
MW-3	05/10/06		62.45	71.35	8.90	3706.04
MW-3	05/12/06		62.44	71.31	8.87	3706.06
MW-3	05/16/06		62.46	71.35	8.89	3706.03



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOC D REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-3	05/18/06		62.45	71.33	8.88	3706.04
MW-3	05/23/06		62.45	71.38	8.93	3706.04
MW-3	05/26/06		62.49	71.36	8.87	3706.01
MW-3	05/30/06		62.48	71.37	8.89	3706.01
MW-3	06/01/06		62.49	71.35	8.86	3706.01
MW-3	06/06/06		62.50	71.37	8.87	3706.00
MW-3	06/09/06		62.48	71.38	8.90	3706.01
MW-3	06/13/06		62.50	71.40	8.90	3705.99
MW-3	06/16/06		62.57	71.43	8.86	3705.93
MW-3	06/20/06		62.51	71.39	8.88	3705.98
MW-3	06/23/06		62.19	70.78	8.59	3706.35
MW-3	06/27/06		62.54	71.40	8.86	3705.96
MW-3	06/30/06		62.54	71.40	8.86	3705.96
MW-3	07/05/06		62.53	71.41	8.88	3705.96
MW-3	07/07/06		62.58	71.43	8.85	3705.92
MW-3	07/11/06		62.57	71.42	8.85	3705.93
MW-3	07/13/06		62.59	71.43	8.84	3705.91
MW-3	07/18/06		62.60	71.45	8.85	3705.90
MW-3	07/21/06		62.60	71.43	8.83	3705.90
MW-3	07/25/06		62.60	71.45	8.85	3705.90
MW-3	07/27/06		62.61	71.44	8.83	3705.89
MW-3	08/01/06		62.74	71.48	8.74	3705.78
MW-3	08/03/06		62.66	71.47	8.81	3705.85
MW-3	08/09/06		62.67	71.50	8.83	3705.83
MW-3	08/11/06		62.66	71.47	8.81	3705.85
MW-3	08/15/06		62.70	71.55	8.85	3705.80
MW-3	08/18/06		62.70	71.52	8.82	3705.80
MW-3	08/25/06		62.73	71.58	8.85	3705.77
MW-3	08/30/06		62.44	71.60	9.16	3706.01
MW-3	09/15/06		62.70	71.65	8.95	3705.78
MW-3	09/20/06		62.72	71.63	8.91	3705.77
MW-3	09/26/06		62.75	71.65	8.90	3705.74
MW-3	09/29/06		62.77	71.68	8.91	3705.72
MW-3	10/04/06		62.71	71.72	9.01	3705.76
MW-3	10/06/06		62.81	71.68	8.87	3705.69
MW-3	10/12/06		62.82	71.71	8.89	3705.67
MW-3	10/17/06		62.82	71.73	8.91	3705.67
MW-3	10/20/06		62.82	71.73	8.91	3705.67
MW-3	10/24/06		62.80	71.71	8.91	3705.69
MW-3	10/26/06		62.80	71.74	8.94	3705.68
MW-3	11/22/06		62.95	71.83	8.88	3705.54



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-3	11/28/06		62.95	71.80	8.85	3705.55
MW-3	12/06/06		63.05	71.90	8.85	3705.45
MW-3	12/08/06		62.82	71.00	8.18	3705.79
MW-3	12/12/06		63.02	71.80	8.78	3705.49
MW-3	12/15/06		62.80	71.74	8.94	3705.68
MW-3	12/20/06		NM	NM		
MW-3	12/22/06		63.06	71.90	8.84	3705.44
MW-3	12/27/06		63.02	71.92	8.90	3705.47
MW-3	01/03/07		63.12	71.98	8.86	3705.38
MW-3	01/05/07		63.09	71.04	7.95	3705.56
MW-3	01/12/07		63.16	72.02	8.86	3705.34
MW-3	01/15/07		63.18	71.80	8.62	3705.36
MW-3	01/18/07		63.18	72.04	8.86	3705.32
MW-3	01/31/07		63.19	72.04	8.85	3705.31
MW-3	02/07/07		63.10	71.45	8.35	3705.48
MW-3	02/09/07		63.21	72.07	8.86	3705.29
MW-3	02/13/07		63.22	72.07	8.85	3705.28
MW-3	02/16/07		62.23	72.07	9.84	3706.11
MW-3	02/19/07		63.22	72.08	8.86	3705.28
MW-3	02/21/07		63.22	72.11	8.89	3705.27
MW-3	02/26/07		65.23	72.11	6.88	3703.59
MW-3	03/01/07		63.27	72.08	8.81	3705.24
MW-3	03/06/07		63.23	72.24	9.01	3705.24
MW-3	03/09/07		63.25	72.09	8.84	3705.25
MW-3	03/23/07		63.30	72.12	8.82	3705.20
MW-3	03/27/07	3767.24	63.31	72.31	9.00	3702.45
MW-3	04/06/07		63.35	72.18	8.83	3702.43
MW-3	04/11/07		66.13	73.17	7.04	3699.95
MW-3	04/17/07		63.35	72.18	8.83	3702.43
MW-3	04/19/07		63.38	72.18	8.80	3702.41
MW-3	04/24/07		63.36	72.19	8.83	3702.42
MW-3	05/01/07		63.41	72.21	8.80	3702.38
MW-3	05/21/07		63.43	72.25	8.82	3702.35
MW-3	05/24/07		63.48	72.26	8.78	3702.31
MW-3	06/28/07		63.58	72.40	8.82	3702.20
MW-3	08/07/07		63.52	72.36	8.84	3702.26
MW-3	08/17/07		63.61	72.38	8.77	3702.18
MW-3	08/23/07		63.58	72.34	8.76	3702.21
MW-3	08/31/07		63.92	72.36	8.44	3701.93
MW-3	09/21/07		63.71	72.44	8.73	3702.09
MW-3	09/28/07		63.69	72.43	8.74	3702.11



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-3	10/11/07		63.43	72.48	9.05	3702.32
MW-3	10/18/07		63.77	72.48	8.71	3702.03
MW-3	11/13/07		63.83	72.56	8.73	3701.97
MW-3	11/27/07		63.87	72.61	8.74	3701.93
MW-3	12/13/07		63.98	72.70	8.72	3701.82
MW-3	12/17/07		64.00	72.72	8.72	3701.80
MW-3	12/31/07		64.05	72.73	8.68	3701.76
MW-3	01/16/08		64.08	72.77	8.69	3701.73
MW-3	03/05/08		64.25	72.93	8.68	3701.56
MW-3	03/26/08		64.30	72.96	8.66	3701.51
MW-3	04/02/08		64.34	73.03	8.69	3701.47
MW-3	04/04/08		64.36	73.05	8.69	3701.45
MW-3	04/24/08		64.40	73.01	8.61	3701.42
MW-3	05/06/08		64.45	73.04	8.59	3701.37
MW-3	05/27/08		64.63	73.29	8.66	3701.18
MW-3	06/04/08		64.75	73.32	8.57	3701.08
MW-3	06/24/08		64.79	73.45	8.66	3701.02
MW-3	07/02/08		64.87	73.52	8.65	3700.94
MW-3	07/15/08		64.47	73.61	9.14	3701.26
MW-3	07/22/08		65.04	73.66	8.62	3700.78
MW-3	07/31/08		65.12	73.75	8.63	3700.70
MW-3	08/07/08		65.23	73.83	8.60	3700.59
MW-3	08/29/08		64.61	73.22	8.61	3701.21
MW-3	09/16/08		64.71	72.97	8.26	3701.17
MW-3	12/16/08		64.90	73.13	8.23	3700.98
MW-3	01/29/09		65.07	73.04	7.97	3700.85
MW-3	02/04/09		65.04	73.47	8.43	3700.81
MW-3	05/26/09		65.32	73.75	8.43	3700.53
MW-3	08/12/09		65.73	73.31	7.58	3700.26
MW-3	11/19/09		66.55	72.65	6.10	3699.68
MW-3	02/17/10		66.61	74.33	7.72	3699.36
MW-3	06/02/10		67.09	74.80	7.71	3698.96
MW-3	09/23/10		67.63	74.95	7.32	3698.48
MW-3	12/28/10		67.29	74.78	7.49	3698.80
MW-3	03/16/11		67.69	75.04	7.35	3698.42
MW-3	06/28/11		67.95	75.52	7.57	3698.12
MW-3	09/21/11		68.91	72.87	3.96	3697.72
MW-3	12/29/11		68.69	75.65	6.96	3697.48
MW-4	10/29/04	3772.74	59.80	71.07	11.27	3711.08
MW-4	11/04/04		63.06	72.51	9.45	3708.12



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**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
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**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-4	11/10/04		63.12	72.78	9.66	3708.03
MW-4	11/17/04		63.21	73.09	9.88	3707.90
MW-4	11/24/04		63.30	73.31	10.01	3707.79
MW-4	12/02/04		63.31	73.30	9.99	3707.78
MW-4	12/08/04		63.27	73.29	10.02	3707.82
MW-4	12/15/04		63.39	73.52	10.13	3707.68
MW-4	12/27/04		63.53	73.71	10.18	3707.53
MW-4	12/29/04		63.54	73.61	10.07	3707.54
MW-4	01/06/05		63.57	73.70	10.13	3707.50
MW-4	01/13/05		63.71	73.79	10.08	3707.37
MW-4	01/19/05		63.72	73.76	10.04	3707.36
MW-4	01/26/05		61.89	69.41	7.52	3709.61
MW-4	02/02/05		63.82	73.76	9.94	3707.28
MW-4	02/09/05		63.86	73.77	9.91	3707.24
MW-4	02/16/05		63.86	73.73	9.87	3707.25
MW-4	02/24/05		63.93	73.76	9.83	3707.19
MW-4	03/03/05		63.92	73.74	9.82	3707.20
MW-4	03/11/05		63.79	73.26	9.47	3707.39
MW-4	03/18/05		63.97	73.74	9.77	3707.16
MW-4	04/01/05		64.02	73.76	9.74	3707.11
MW-4	04/07/05		64.05	73.73	9.68	3707.09
MW-4	05/18/05		64.11	73.76	9.65	3707.04
MW-4	05/23/05		64.18	73.76	9.58	3706.98
MW-4	05/26/05		64.20	73.73	9.53	3706.97
MW-4	06/01/05		64.20	73.70	9.50	3706.97
MW-4	06/03/05		64.20	73.64	9.44	3706.98
MW-4	06/07/05		64.22	73.43	9.21	3707.00
MW-4	06/10/05		64.23	73.69	9.46	3706.95
MW-4	06/13/05		64.21	73.75	9.54	3706.96
MW-4	06/16/05		64.24	73.66	9.42	3706.95
MW-4	06/20/05		64.26	73.72	9.46	3706.92
MW-4	06/22/05		64.28	73.64	9.36	3706.92
MW-4	06/29/05		64.27	73.74	9.47	3706.91
MW-4	07/01/05		64.29	73.62	9.33	3706.91
MW-4	07/06/05		64.30	73.74	9.44	3706.88
MW-4	07/08/05		64.33	73.63	9.30	3706.88
MW-4	07/12/05		64.34	73.72	9.38	3706.85
MW-4	07/14/05		64.34	73.66	9.32	3706.86
MW-4	07/19/05		64.34	73.80	9.46	3706.84
MW-4	07/21/05		64.38	73.73	9.35	3706.82
MW-4	07/26/05		62.39	70.02	7.63	3709.09



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**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-4	07/28/05		64.41	73.69	9.28	3706.80
MW-4	08/02/05		64.40	73.74	9.34	3706.80
MW-4	08/04/05		64.43	73.64	9.21	3706.79
MW-4	08/09/05		64.42	73.75	9.33	3706.78
MW-4	08/11/05		64.45	73.64	9.19	3706.77
MW-4	08/16/05		64.44	73.75	9.31	3706.76
MW-4	08/18/05		64.47	73.62	9.15	3706.76
MW-4	08/24/05		64.47	73.74	9.27	3706.74
MW-4	08/26/05		64.48	73.65	9.17	3706.75
MW-4	08/30/05		64.46	73.67	9.21	3706.76
MW-4	09/01/05		64.51	73.52	9.01	3706.74
MW-4	09/06/05		64.43	73.64	9.21	3706.79
MW-4	09/08/05		64.51	73.53	9.02	3706.74
MW-4	09/13/05		64.49	73.68	9.19	3706.73
MW-4	09/16/05		64.54	73.66	9.12	3706.70
MW-4	09/20/05		64.50	73.65	9.15	3706.73
MW-4	09/23/05		64.56	73.72	9.16	3706.67
MW-4	09/27/05		64.55	74.73	10.18	3706.51
MW-4	09/29/05		64.56	73.63	9.07	3706.68
MW-4	10/04/05		64.56	73.74	9.18	3706.67
MW-4	10/06/05		64.64	73.65	9.01	3706.61
MW-4	10/11/05		64.57	73.76	9.19	3706.65
MW-4	10/13/05		64.58	73.64	9.06	3706.67
MW-4	10/18/05		64.61	73.78	9.17	3706.62
MW-4	10/21/05		64.63	73.44	8.81	3706.66
MW-4	10/26/05		64.62	73.77	9.15	3706.61
MW-4	10/28/05		64.62	73.67	9.05	3706.63
MW-4	11/01/05		64.63	73.78	9.15	3706.60
MW-4	11/04/05		64.64	73.75	9.11	3706.60
MW-4	11/09/05		64.70	73.85	9.15	3706.53
MW-4	11/11/05		64.72	73.83	9.11	3706.52
MW-4	11/16/05		64.68	73.81	9.13	3706.55
MW-4	11/18/05		64.73	73.71	8.98	3706.53
MW-4	11/22/05		64.71	73.82	9.11	3706.53
MW-4	11/30/05		64.71	73.85	9.14	3706.52
MW-4	12/02/05		64.76	73.76	9.00	3706.50
MW-4	12/06/05		64.75	73.87	9.12	3706.49
MW-4	12/14/05		64.77	73.88	9.11	3706.47
MW-4	12/16/05		64.80	73.86	9.06	3706.45
MW-4	12/21/05		64.80	73.89	9.09	3706.44
MW-4	12/23/05		64.83	73.72	8.89	3706.44



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**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-4	12/27/05		64.82	73.88	9.06	3706.43
MW-4	12/30/05		64.86	73.88	9.02	3706.39
MW-4	01/03/06		64.82	73.83	9.01	3706.43
MW-4	01/05/06		64.85	73.80	8.95	3706.41
MW-4	01/11/06		64.84	73.92	9.08	3706.40
MW-4	01/13/06		64.91	73.81	8.90	3706.36
MW-4	01/18/06		64.86	73.92	9.06	3706.39
MW-4	01/20/06		64.95	73.80	8.85	3706.33
MW-4	01/24/06		64.94	73.98	9.04	3706.31
MW-4	01/26/06		64.90	73.93	9.03	3706.35
MW-4	02/02/06		64.87	73.90	9.03	3706.38
MW-4	02/08/06		64.90	73.98	9.08	3706.34
MW-4	02/10/06		64.87	73.97	9.10	3706.37
MW-4	02/14/06		64.93	74.00	9.07	3706.31
MW-4	02/16/06		65.00	73.90	8.90	3706.27
MW-4	02/21/06		65.00	74.10	9.10	3706.24
MW-4	02/24/06		65.00	74.00	9.00	3706.26
MW-4	02/28/06		64.96	73.98	9.02	3706.29
MW-4	03/03/06		64.80	74.04	9.24	3706.42
MW-4	03/06/06		64.95	74.00	9.05	3706.30
MW-4	03/08/06		65.02	73.93	8.91	3706.25
MW-4	03/15/06		65.02	74.05	9.03	3706.23
MW-4	03/17/06		65.07	73.95	8.88	3706.20
MW-4	03/21/06		65.02	74.00	8.98	3706.24
MW-4	03/23/06		64.96	73.81	8.85	3706.32
MW-4	03/28/06		65.05	74.04	8.99	3706.21
MW-4	03/30/06		65.08	73.95	8.87	3706.20
MW-4	04/04/06		65.05	74.05	9.00	3706.21
MW-4	04/07/06		65.10	74.05	8.95	3706.16
MW-4	04/12/06		65.09	74.07	8.98	3706.17
MW-4	04/14/06		65.11	74.00	8.89	3706.16
MW-4	04/18/06		65.10	74.03	8.93	3706.17
MW-4	04/21/06		65.15	74.05	8.90	3706.12
MW-4	04/26/06		65.07	74.03	8.96	3706.19
MW-4	04/28/06		65.14	73.95	8.81	3706.15
MW-4	05/04/06		65.14	74.05	8.91	3706.13
MW-4	05/05/06		65.17	74.08	8.91	3706.10
MW-4	05/10/06		65.22	74.13	8.91	3706.05
MW-4	05/12/06		65.17	74.10	8.93	3706.10
MW-4	05/16/06		65.20	74.13	8.93	3706.07
MW-4	05/18/06		65.20	74.03	8.83	3706.08



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WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-4	05/23/06		65.20	74.13	8.93	3706.07
MW-4	05/26/06		65.20	74.07	8.87	3706.08
MW-4	05/30/06		65.32	74.14	8.82	3705.96
MW-4	06/01/06		65.23	74.05	8.82	3706.05
MW-4	06/06/06		65.25	74.10	8.85	3706.03
MW-4	06/09/06		65.21	74.13	8.92	3706.06
MW-4	06/13/06		65.23	74.15	8.92	3706.04
MW-4	06/16/06		65.25	74.15	8.90	3706.02
MW-4	06/20/06		65.24	74.16	8.92	3706.03
MW-4	06/23/06		65.23	74.18	8.95	3706.03
MW-4	06/27/06		65.29	74.20	8.91	3705.98
MW-4	06/30/06		65.28	74.17	8.89	3705.99
MW-4	07/05/06		65.27	74.18	8.91	3706.00
MW-4	07/07/06		65.33	74.16	8.83	3705.95
MW-4	07/11/06		65.31	74.21	8.90	3705.96
MW-4	07/13/06		65.34	74.11	8.77	3705.95
MW-4	07/18/06		65.35	74.21	8.86	3705.93
MW-4	07/21/06		65.34	74.20	8.86	3705.94
MW-4	07/25/06		65.36	74.25	8.89	3705.91
MW-4	07/27/06		65.33	74.14	8.81	3705.96
MW-4	08/01/06		65.38	74.25	8.87	3705.90
MW-4	08/03/06		65.66	74.17	8.51	3705.68
MW-4	08/09/06		65.40	74.27	8.87	3705.88
MW-4	08/11/06		65.74	74.15	8.41	3705.61
MW-4	08/15/06		65.45	74.32	8.87	3705.83
MW-4	08/18/06		65.45	74.28	8.83	3705.83
MW-4	08/25/06		65.46	74.35	8.89	3705.81
MW-4	08/30/06		65.48	74.37	8.89	3705.79
MW-4	09/12/06		NM	NM		
MW-4	09/15/06		65.48	74.40	8.92	3705.79
MW-4	09/20/06		65.48	74.38	8.90	3705.79
MW-4	09/26/06		65.51	74.40	8.89	3705.76
MW-4	09/29/06		65.52	74.39	8.87	3705.76
MW-4	10/04/06		65.54	74.46	8.92	3705.73
MW-4	10/06/06		65.57	74.37	8.80	3705.72
MW-4	10/12/06		65.57	74.48	8.91	3705.70
MW-4	10/17/06		65.59	74.50	8.91	3705.68
MW-4	10/20/06		65.59	74.46	8.87	3705.69
MW-4	10/24/06		65.55	74.50	8.95	3705.71
MW-4	10/26/06		65.59	74.48	8.89	3705.68
MW-4	11/22/06		65.65	74.66	9.01	3705.60



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCDF REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-4	11/28/06		65.66	74.66	9.00	3705.60
MW-4	12/06/06		65.78	74.78	9.00	3705.48
MW-4	12/08/06		65.57	74.48	8.91	3705.70
MW-4	12/12/06		65.72	74.72	9.00	3705.54
MW-4	12/15/06		65.55	74.48	8.93	3705.72
MW-4	12/20/06		NM	NM		
MW-4	12/22/06		65.78	74.82	9.04	3705.47
MW-4	12/27/06		65.8	74.82	9.02	3705.45
MW-4	01/03/07		65.85	74.89	9.04	3705.40
MW-4	01/05/07		65.85	74.84	8.99	3705.41
MW-4	01/12/07		65.88	74.88	9.00	3705.38
MW-4	01/15/07		65.92	74.88	8.96	3705.34
MW-4	01/18/07		65.90	74.92	9.02	3705.35
MW-4	01/31/07		65.90	74.98	9.08	3705.34
MW-4	02/07/07		65.81	74.84	9.03	3705.44
MW-4	02/09/07		66.03	74.84	8.81	3705.26
MW-4	02/13/07		65.98	74.93	8.95	3705.28
MW-4	02/16/07		65.97	74.87	8.90	3705.30
MW-4	02/19/07		65.97	74.84	8.87	3705.31
MW-4	02/21/07		66.02	74.44	8.42	3705.33
MW-4	02/26/07		66.28	75.19	8.91	3704.99
MW-4	03/13/07		63.27	72.09	8.82	3708.01
MW-4	03/14/07	Plugged Well				
MW-4A	11/08/07	Installed Well				
MW-4A	11/13/07	3770.64	68.70	68.94	0.24	3701.90
MW-4A	11/27/07		68.61	69.88	1.27	3701.82
MW-4A	12/13/07		68.38	80.20	11.82	3700.31
MW-4A	12/17/07		68.62	70.38	1.76	3701.73
MW-4A	12/31/07		68.16	72.71	4.55	3701.73
MW-4A	01/16/08		68.23	72.63	4.40	3701.68
MW-4A	03/05/08		67.58	76.52	8.94	3701.58
MW-4A	03/26/08		67.64	76.58	8.94	3701.52
MW-4A	04/02/08		67.72	76.63	8.91	3701.45
MW-4A	04/04/08		67.70	76.64	8.94	3701.46
MW-4A	04/24/08		67.76	76.66	8.90	3701.41
MW-4A	05/06/08		67.84	76.72	8.88	3701.33
MW-4A	05/27/08		67.94	76.84	8.90	3701.23
MW-4A	06/24/08		68.11	76.99	8.88	3701.06
MW-4A	07/02/08		68.19	77.08	8.89	3700.98
MW-4A	07/15/08		68.67	75.45	6.78	3700.85



**TABLE 1**  
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**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-4A	07/22/08		69.28	72.85	3.57	3700.77
MW-4A	07/31/08		69.45	72.68	3.23	3700.66
MW-4A	08/07/08		69.54	72.42	2.88	3700.62
MW-4A	08/29/08		64.78	74.41	9.63	3704.27
MW-4A	09/16/08		68.12	76.21	8.09	3701.19
MW-4A	12/16/08		68.32	76.38	8.06	3700.99
MW-4A	01/29/09		68.48	76.48	8.00	3700.84
MW-4A	02/04/09		68.51	76.51	8.00	3700.81
MW-4A	05/26/09		68.74	77.02	8.28	3700.53
MW-4A	08/12/09		69.59	74.62	5.03	3700.22
MW-4A	08/17/09		69.45	75.35	5.90	3700.22
MW-4A	11/19/09		70.29	74.54	4.25	3699.65
MW-4A	02/17/10		70.11	77.25	7.14	3699.35
MW-4A	06/02/10		70.55	77.81	7.26	3698.97
MW-4A	09/23/10		70.65	77.93	7.28	3698.87
MW-4A	12/28/10		70.79	77.78	6.99	3698.77
MW-4A	03/16/11					
MW-4A	06/28/11		71.47	78.35	6.88	3698.11
MW-4A	09/21/11		71.73	78.81	7.08	3697.82
MW-4A	12/29/11		72.22	78.56	6.34	3697.44
MW-5	11/06/07	Installed Well				
MW-5	11/13/07	3768.85	66.26	67.62	1.36	3702.37
MW-5	11/27/07		65.36	70.91	5.55	3702.57
MW-5	12/13/07		65.26	72.21	6.95	3702.44
MW-5	12/17/07		65.20	72.17	6.97	3702.50
MW-5	12/31/07		65.21	72.29	7.08	3702.47
MW-5	01/16/08		65.28	72.37	7.09	3702.40
MW-5	03/05/08		65.41	72.50	7.09	3702.27
MW-5	03/26/08		65.48	72.52	7.04	3702.21
MW-5	04/02/08		65.55	72.61	7.06	3702.14
MW-5	04/04/08		65.56	72.63	7.07	3702.12
MW-5	04/24/08		65.61	72.64	7.03	3702.08
MW-5	05/06/08		65.67	72.69	7.02	3702.02
MW-5	05/27/08		65.81	72.86	7.05	3701.88
MW-5	06/04/08		65.82	72.88	7.06	3701.87
MW-5	06/24/08		65.99	73.02	7.03	3701.70
MW-5	07/02/08		66.04	73.08	7.04	3701.65
MW-5	07/15/08		66.14	73.18	7.04	3701.55
MW-5	07/22/08		66.21	73.18	6.97	3701.49
MW-5	07/31/08		66.30	73.27	6.97	3701.40



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**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-5	08/07/08		66.39	73.34	6.95	3701.31
MW-5	08/29/08		65.79	72.74	6.95	3701.91
MW-5	10/07/08		66.26	70.89	4.63	3701.83
MW-5	12/16/08		66.18	72.42	6.24	3701.64
MW-5	01/29/09		66.26	72.67	6.41	3701.53
MW-5	02/04/09		66.38	72.28	5.90	3701.50
MW-5	05/26/09		66.53	73.24	6.71	3701.21
MW-5	08/12/09		66.92	73.05	6.13	3700.92
MW-5	11/19/09		67.35	73.74	6.39	3700.45
MW-5	02/17/10		67.75	74.13	6.38	3700.05
MW-5	06/02/10		68.48	73.41	4.93	3699.61
MW-5	09/23/10		68.42	74.20	5.78	3699.54
MW-5	12/28/10		68.49	73.39	4.90	3699.61
MW-5	03/16/11		68.85	74.79	5.94	3699.09
MW-5	06/28/11		69.11	75.35	6.24	3698.78
MW-5	09/21/11		69.39	75.65	6.26	3698.50
MW-5	12/29/11		69.82	75.42	5.60	3698.17
MW-6	11/06/07	Installed Well				
MW-6	11/13/07	3769.50	66.27	75.46	9.19	3701.71
MW-6	11/27/07		66.08	75.29	9.21	3701.90
MW-6	12/13/07		66.10	75.36	9.26	3701.87
MW-6	12/17/07		66.16	75.39	9.23	3701.82
MW-6	12/31/07		66.19	75.42	9.23	3701.79
MW-6	01/16/08		66.26	75.48	9.22	3701.72
MW-6	03/05/08		66.40	75.61	9.21	3701.58
MW-6	03/26/08		66.47	75.65	9.18	3701.52
MW-6	04/02/08		66.52	75.71	9.19	3701.46
MW-6	04/04/08		66.51	75.72	9.21	3701.47
MW-6	04/24/08		66.59	75.75	9.16	3701.40
MW-6	05/06/08		66.65	75.83	9.18	3701.34
MW-6	05/27/08		66.76	75.95	9.19	3701.22
MW-6	06/04/08		66.85	76.03	9.18	3701.14
MW-6	06/24/08		66.93	76.11	9.18	3701.06
MW-6	07/02/08		67.02	76.09	9.07	3700.98
MW-6	07/15/08		67.11	76.26	9.15	3700.88
MW-6	07/22/08		67.16	76.30	9.14	3700.83
MW-6	07/31/08		67.28	76.41	9.13	3700.71
MW-6	08/07/08		67.35	76.48	9.13	3700.64
MW-6	08/29/08		66.77	75.88	9.11	3701.23
MW-6	09/16/08		66.83	75.97	9.14	3701.16



**TABLE 1**  
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**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-6	12/16/08		67.08	75.77	8.69	3700.99
MW-6	01/29/09		67.27	75.61	8.34	3700.85
MW-6	02/04/09		67.30	75.93	8.63	3700.78
MW-6	05/26/09		67.47	76.46	8.99	3700.55
MW-6	08/12/09		67.82	76.34	8.52	3700.27
MW-6	11/19/09		68.73	75.31	6.58	3699.68
MW-6	02/17/10		68.74	77.19	8.45	3699.37
MW-6	06/02/10		69.20	77.6	8.40	3699.01
MW-6	09/23/10		69.43	77.25	7.82	3698.87
MW-6	12/28/10		69.42	77.67	8.25	3698.81
MW-6	03/16/11		69.85	77.94	8.09	3698.40
MW-6	06/28/11		70.25	77.72	7.47	3698.10
MW-6	09/21/11		70.49	78.18	7.69	3697.83
MW-6	12/29/11		71.04	77.51	6.47	3697.46
MW-7	11/06/07	Installed Well				
MW-7	11/13/07	3770.20	68.16	70.54	2.38	3701.65
MW-7	11/27/07		67.51	73.93	6.42	3701.63
MW-7	12/13/07		67.30	75.02	7.72	3701.63
MW-7	12/17/07		67.68	73.56	5.88	3701.55
MW-7	12/31/07		67.37	75.08	7.71	3701.56
MW-7	01/16/08		67.74	75.61	7.87	3701.16
MW-7	03/05/08		67.56	75.39	7.83	3701.35
MW-7	03/26/08		67.79	74.66	6.87	3701.28
MW-7	04/02/08		67.69	75.30	7.61	3701.25
MW-7	04/04/08		67.70	75.31	7.61	3701.24
MW-7	04/24/08		67.77	75.36	7.59	3701.18
MW-7	05/06/08		67.84	75.43	7.59	3701.11
MW-7	05/27/08		67.94	75.69	7.75	3700.98
MW-7	06/04/08		68.00	75.78	7.78	3700.92
MW-7	06/24/08		68.04	75.66	7.62	3700.90
MW-7	07/02/08		68.19	75.88	7.69	3700.74
MW-7	07/15/08		68.47	75.11	6.64	3700.63
MW-7	07/22/08		69.13	72.37	3.24	3700.54
MW-7	07/31/08		68.88	74.13	5.25	3700.45
MW-7	08/07/08		69.25	72.76	3.51	3700.37
MW-7	08/29/08		68.04	75.22	7.18	3700.98
MW-7	09/16/08		68.09	75.37	7.28	3700.91
MW-7	12/16/08		69.38	70.35	0.97	3700.66
MW-7	01/29/09		68.85	73.51	4.66	3700.58
MW-7	02/04/09		69.70	69.93	0.23	3700.46



**TABLE 1**  
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**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-7	05/26/09		68.68	76.03	7.35	3700.31
MW-7	08/12/09		70.20	70.59	0.39	3699.94
MW-7	08/17/09		70.20	70.82	0.62	3699.90
MW-7	11/19/09		70.79	71.96	1.17	3699.22
MW-7	02/17/10		70.87	72.75	1.88	3699.02
MW-7	06/02/10		71.61	71.87	0.26	3698.55
MW-7	09/23/10		71.43	73.23	1.80	3698.49
MW-7	12/28/10		71.32	74.19	2.87	3698.44
MW-7	03/16/11		71.50	75.33	3.83	3698.11
MW-7	06/28/11		71.40	77.34	5.94	3697.89
MW-7	09/21/11		71.69	77.75	6.06	3697.58
MW-7	12/29/11		72.09	77.82	5.73	3697.23
MW-8	11/06/07	Installed Well				
MW-8	11/13/07	3768.09	65.52	73.36	7.84	3701.28
MW-8	11/27/07		67.01	72.16	5.15	3700.23
MW-8	12/13/07		63.26	73.17	9.91	3703.19
MW-8	12/17/07		65.29	73.18	7.89	3701.50
MW-8	12/31/07		65.36	73.24	7.88	3701.43
MW-8	01/16/08		65.38	73.27	7.89	3701.41
MW-8	03/05/08		65.53	73.45	7.92	3701.25
MW-8	03/26/08		65.61	73.47	7.86	3701.18
MW-8	04/02/08		65.65	73.54	7.89	3701.14
MW-8	04/04/08		65.67	73.54	7.87	3701.12
MW-8	04/24/08		65.71	73.62	7.91	3701.07
MW-8	05/06/08		65.79	73.7	7.91	3700.99
MW-8	05/27/08		65.90	73.83	7.93	3700.88
MW-8	06/04/08		65.94	73.87	7.93	3700.84
MW-8	06/24/08		66.06	73.98	7.92	3700.72
MW-8	07/02/08		66.15	74.09	7.94	3700.63
MW-8	07/15/08		66.24	74.16	7.92	3700.54
MW-8	07/22/08		66.29	74.19	7.90	3700.50
MW-8	07/31/08		66.41	74.31	7.90	3700.38
MW-8	08/07/08		66.48	74.37	7.89	3700.31
MW-8	08/29/08		65.90	73.80	7.90	3700.89
MW-8	09/16/08		66.04	74.68	8.64	3700.62
MW-8	12/16/08		66.15	73.92	7.77	3700.66
MW-8	01/29/09		66.29	73.91	7.62	3700.54
MW-8	02/04/09		66.30	74.13	7.83	3700.50
MW-8	05/26/09		66.58	74.51	7.93	3700.20
MW-8	08/12/09		66.90	74.23	7.33	3699.98



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**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-8	11/19/09		67.50	74.52	7.02	3699.43
MW-8	02/17/10		67.82	75.41	7.59	3699.02
MW-8	06/02/10		68.28	75.78	7.50	3698.66
MW-8	09/23/10		68.41	75.86	7.45	3698.53
MW-8	12/28/10		68.48	75.86	7.38	3698.47
MW-8	03/16/11		68.90	76.13	7.23	3698.08
MW-8	06/28/11		69.17	76.5	7.33	3697.79
MW-8	09/21/11		69.50	76.21	6.71	3697.56
MW-8	12/29/11		69.84	76.89	7.05	3697.16
MW-9	11/07/07	Installed Well				
MW-9	11/13/07	3767.64	64.07	72.74	8.67	3702.14
MW-9	11/27/07		65.72	72.38	6.66	3700.82
MW-9	12/13/07		64.17	73.11	8.94	3701.99
MW-9	12/17/07		64.21	73.06	8.85	3701.97
MW-9	12/31/07		64.23	73.06	8.83	3701.95
MW-9	01/16/08		64.28	73.16	8.88	3701.89
MW-9	03/05/08		64.44	73.30	8.86	3701.74
MW-9	03/26/08		64.49	73.31	8.82	3701.69
MW-9	04/02/08		64.54	73.39	8.85	3701.64
MW-9	04/04/08		64.56	73.40	8.84	3701.62
MW-9	04/24/08		64.59	73.44	8.85	3701.59
MW-9	05/06/08		64.66	73.51	8.85	3701.52
MW-9	05/27/08		64.80	73.63	8.83	3701.38
MW-9	06/04/08		64.82	73.68	8.86	3701.36
MW-9	06/24/08		64.97	73.81	8.84	3701.21
MW-9	07/02/08		65.05	73.89	8.84	3701.13
MW-9	07/15/08		65.14	73.98	8.84	3701.04
MW-9	07/22/08		65.21	74.03	8.82	3700.97
MW-9	07/31/08		65.32	74.12	8.80	3700.87
MW-9	08/07/08		65.41	74.21	8.80	3700.78
MW-9	08/29/08		64.78	73.59	8.81	3701.41
MW-9	09/16/08		64.80	73.64	8.84	3701.38
MW-9	12/16/08		65.06	73.48	8.42	3701.19
MW-9	01/29/09		65.21	73.65	8.44	3701.04
MW-9	02/04/09		65.25	73.66	8.41	3701.00
MW-9	05/26/09		65.46	74.18	8.72	3700.74
MW-9	08/12/09		65.89	73.89	8.00	3700.43
MW-9	11/19/09		66.46	74.14	7.68	3699.91
MW-9	02/17/10		66.71	75.05	8.34	3699.55
MW-9	06/02/10		67.20	75.50	8.30	3699.16



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**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-9	09/23/10		67.36	75.15	7.79	3699.08
MW-9	12/28/10		67.41	75.52	8.11	3698.98
MW-9	03/16/11		67.77	75.68	7.91	3698.65
MW-9	06/28/11		68.06	76.03	7.97	3698.35
MW-9	09/21/11		68.74	74.76	6.02	3697.97
MW-9	12/29/11		68.82	76.15	7.33	3697.69
MW-10	11/07/07	Installed Well				
MW-10	11/13/07	3767.51	64.94	66.57	1.63	3702.30
MW-10	11/27/07		64.05	71.04	6.99	3702.31
MW-10	12/13/07		63.92	72.03	8.11	3702.25
MW-10	12/17/07		63.96	72.02	8.06	3702.22
MW-10	12/31/07		63.94	72.09	8.15	3702.23
MW-10	01/16/08		64.03	72.17	8.14	3702.14
MW-10	03/05/08		64.19	72.32	8.13	3701.98
MW-10	03/26/08		64.24	72.35	8.11	3701.93
MW-10	04/02/08		64.29	72.42	8.13	3701.88
MW-10	04/04/08		64.30	72.41	8.11	3701.87
MW-10	04/24/08		64.33	72.47	8.14	3701.84
MW-10	05/06/08		64.41	72.55	8.14	3701.76
MW-10	05/27/08		64.57	72.69	8.12	3701.60
MW-10	06/04/08		64.58	72.73	8.15	3701.59
MW-10	06/24/08		64.73	72.85	8.12	3701.44
MW-10	07/02/08		64.81	72.92	8.11	3701.36
MW-10	07/15/08		64.90	73.02	8.12	3701.27
MW-10	07/22/08		64.97	73.08	8.11	3701.20
MW-10	07/31/08		65.07	73.15	8.08	3701.11
MW-10	08/07/08		65.17	73.22	8.05	3701.01
MW-10	08/29/08		64.53	72.67	8.14	3701.64
MW-10	09/16/08		64.57	72.74	8.17	3701.59
MW-10	12/16/08		65.06	71.39	6.33	3701.41
MW-10	01/29/09		65.00	72.51	7.51	3701.27
MW-10	02/04/09		65.16	72.00	6.84	3701.22
MW-10	05/26/09		65.26	73.03	7.77	3700.97
MW-10	08/12/09		65.64	72.86	7.22	3700.68
MW-10	11/19/09		66.31	72.59	6.28	3700.16
MW-10	02/17/10		66.53	73.95	7.42	3699.76
MW-10	06/02/10		66.99	74.24	7.25	3699.40
MW-10	09/23/10		67.12	74.08	6.96	3699.32
MW-10	12/28/10		67.20	74.44	7.24	3699.20
MW-10	03/16/11		67.58	74.66	7.08	3698.84



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-10	06/28/11		67.82	75.05	7.23	3698.58
MW-10	09/21/11		68.16	75.28	7.12	3698.25
MW-10	12/29/11		68.54	75.31	6.77	3697.93
MW-11	11/07/07	<b>Installed Well</b>				
MW-11	11/13/07	3769.37	66.58	68.13	1.55	3702.53
MW-11	11/27/07		65.36	72.38	7.02	3702.85
MW-11	12/13/07		65.39	72.82	7.43	3702.75
MW-11	12/17/07		64.46	72.84	8.38	3703.53
MW-11	12/31/07		65.77	72.90	7.13	3702.42
MW-11	01/16/08		65.86	72.99	7.13	3702.33
MW-11	03/05/08		65.98	73.10	7.12	3702.22
MW-11	03/26/08		66.04	73.17	7.13	3702.15
MW-11	04/02/08		66.10	73.24	7.14	3702.09
MW-11	04/04/08		66.10	73.25	7.15	3702.09
MW-11	04/24/08		66.14	73.26	7.12	3702.06
MW-11	05/06/08		66.22	73.33	7.11	3701.98
MW-11	05/27/08		66.37	73.37	7.00	3701.85
MW-11	06/24/08		66.54	73.64	7.10	3701.66
MW-11	07/02/08		66.61	73.69	7.08	3701.59
MW-11	07/15/08		66.72	73.77	7.05	3701.49
MW-11	07/22/08		66.77	73.80	7.03	3701.44
MW-11	07/31/08		66.86	73.89	7.03	3701.35
MW-11	08/07/08		66.97	73.98	7.01	3701.24
MW-11	08/29/08		66.35	73.29	6.94	3701.87
MW-11	09/16/08		66.40	73.28	6.88	3701.83
MW-11	12/16/08		66.67	73.35	6.68	3701.60
MW-11	01/29/09		66.85	73.24	6.39	3701.47
MW-11	02/04/09		67.07	72.40	5.33	3701.42
MW-11	05/26/09		67.16	73.90	6.74	3701.10
MW-11	08/12/09		67.50	73.55	6.05	3700.87
MW-11	11/19/09		68.52	71.42	2.90	3700.37
MW-11	02/17/10		68.33	74.66	6.33	3700.00
MW-11	06/02/10		68.78	75.28	6.50	3699.59
MW-11	09/23/10		68.88	75.18	6.30	3699.52
MW-11	12/28/10		68.96	75.43	6.47	3699.41
MW-11	03/16/11		69.34	75.72	6.38	3699.05
MW-11	06/28/11		69.61	76.23	6.62	3698.74
MW-11	09/21/11		70.27	74.87	4.60	3698.39
MW-11	12/29/11		70.36	76.62	6.26	3698.05



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-12	11/07/07	Installed Well				
MW-12	11/13/07	3769.68	67.36	68.13	0.77	3702.19
MW-12	11/27/07		66.41	72.84	6.43	3702.21
MW-12	12/13/08		66.16	73.31	7.15	3702.34
MW-12	12/17/07		66.22	74.29	8.07	3702.13
MW-12	12/31/07		66.23	74.36	8.13	3702.11
MW-12	01/16/08		66.41	74.53	8.12	3701.93
MW-12	03/05/08		66.44	74.58	8.14	3701.90
MW-12	03/26/08		66.49	74.63	8.14	3701.85
MW-12	04/02/08		66.57	74.71	8.14	3701.77
MW-12	04/04/08		66.59	74.7	8.11	3701.75
MW-12	04/24/08		66.61	74.73	8.12	3701.73
MW-12	05/06/08		66.68	74.8	8.12	3701.66
MW-12	05/27/08		66.82	74.92	8.10	3701.52
MW-12	06/24/08		67.00	75.09	8.09	3701.35
MW-12	07/02/08		67.07	75.17	8.10	3701.27
MW-12	07/15/08		67.17	75.23	8.06	3701.18
MW-12	07/22/08		67.22	75.24	8.02	3701.14
MW-12	07/31/08		67.33	75.33	8.00	3701.03
MW-12	08/07/08		67.42	75.4	7.98	3700.94
MW-12	08/29/08		66.82	74.78	7.96	3701.55
MW-12	09/16/08		66.88	73.40	6.52	3701.72
MW-12	12/16/08		67.12	74.78	7.66	3701.30
MW-12	01/29/09		67.31	74.75	7.44	3701.14
MW-12	02/04/09		67.27	75.05	7.78	3701.13
MW-12	05/26/09		67.54	75.38	7.84	3700.85
MW-12	08/12/09		67.93	75.09	7.16	3700.57
MW-12	11/19/09		68.85	73.79	4.94	3700.01
MW-12	02/17/10		68.79	76.15	7.36	3699.68
MW-12	06/02/10		69.25	76.63	7.38	3699.29
MW-12	09/23/10		69.36	76.68	7.32	3699.19
MW-12	12/28/10		69.44	76.82	7.38	3699.10
MW-12	03/16/11		69.84	77.14	7.30	3698.72
MW-12	06/28/11		70.10	77.51	7.41	3698.44
MW-12	09/21/11		70.41	77.81	7.40	3698.13
MW-12	12/29/11		70.81	77.67	6.86	3697.81
MW-13	11/08/07	Installed Well				
MW-13	11/13/07	3771.14		69.50		3701.64
MW-13	11/27/07			69.61		3701.53
MW-13	12/17/07			69.66		3701.48



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-13	12/19/07			69.65		3701.49
MW-13	03/05/08		69.74	70.88		3700.26
MW-13	03/26/08		69.73	71.22	1.49	3701.16
MW-13	04/02/08		69.45	71.37	1.92	3701.37
MW-13	04/04/08		69.46	71.36	1.90	3701.37
MW-13	04/24/08		69.74	71.81	2.07	3701.06
MW-13	05/06/08		69.79	71.88	2.09	3701.01
MW-13	05/27/08		69.82	72.53	2.71	3700.87
MW-13	06/04/08		69.85	73.73	3.88	3700.65
MW-13	06/24/08		70.25	71.40	1.15	3700.70
MW-13	07/02/08		70.29	72.66	2.37	3700.46
MW-13	07/15/08		70.53	71.11	0.58	3700.51
MW-13	07/22/08		70.60	70.99	0.39	3700.48
MW-13	07/31/08		70.69	71.13	0.44	3700.38
MW-13	08/07/08		70.75	71.31	0.56	3700.30
MW-13	08/29/08		70.13	71.04	0.91	3700.86
MW-13	09/16/08		70.10	71.11	1.01	3700.87
MW-13	12/16/08		70.48	70.70	0.22	3700.62
MW-13	01/29/09		70.38	72.01	1.63	3700.49
MW-13	02/04/09		70.68	70.80	0.12	3700.44
MW-13	05/26/09		70.72	72.06	1.34	3700.20
MW-13	08/12/09		71.18	71.38	0.20	3699.93
MW-13	08/17/09		71.23	71.50	0.27	3699.87
MW-13	11/19/10		71.73	71.86	0.13	3699.39
MW-13	02/17/10		72.07	72.55	0.48	3698.99
MW-13	06/02/10		72.58	72.79	0.21	3698.53
MW-13	09/23/10		72.58	73.38	0.80	3698.44
MW-13	12/28/10		72.38	74.66	2.28	3698.41
MW-13	03/16/11		72.81	74.87	2.06	3698.01
MW-13	06/28/11		73.26	74.44	1.18	3697.70
MW-13	09/21/11		73.71	73.99	0.28	3697.39
MW-13	12/29/11		73.97	74.83	0.86	3697.04
MW-14	11/08/07	Installed Well	TD=95.25			
MW-14	11/13/07	3771.62		70.34		3701.28
MW-14	11/27/07			70.44		3701.18
MW-14	12/17/07			70.48		3701.14
MW-14	12/19/07			70.48		3701.14
MW-14	03/05/08			70.78		3700.84
MW-14	03/26/08			70.85		3700.77
MW-14	04/02/08			70.74		3700.88



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-14	04/24/08			70.81		3700.81
MW-14	05/27/08			70.87		3700.75
MW-14	06/24/08			70.91		3700.71
MW-14	08/29/08			71.12		3700.50
MW-14	09/16/08			71.17		3700.45
MW-14	12/16/08			71.35		3700.27
MW-14	01/29/09			71.52		3700.10
MW-14	02/04/09			71.54		3700.08
MW-14	05/26/09			71.80		3699.82
MW-14	08/12/09			72.03		3699.59
MW-14	11/19/10			72.40		3699.22
MW-14	02/17/10			72.67		3698.95
MW-14	06/02/10			72.99		3698.63
MW-14	09/23/10			73.58		3698.04
MW-14	12/28/10			73.64	sheen	3697.98
MW-14	03/16/11			73.92		3697.70
MW-14	06/29/11			74.28		3697.34
MW-14	09/21/11			74.67		3696.95
MW-14	12/29/11			75.09		3696.53
MW-15	11/08/07	Installed Well				
MW-15	11/13/07	3771.49		69.94	0.00	3701.55
MW-15	11/27/07		69.70	70.07	0.37	3701.73
MW-15	12/13/07		68.08	69.74	1.66	3703.14
MW-15	12/17/07		69.67	70.59	0.92	3701.67
MW-15	12/31/08		69.68	71.07	1.39	3701.58
MW-15	01/16/08		69.82	71.42	1.60	3701.41
MW-15	03/05/08		68.97	75.52	6.55	3701.44
MW-15	03/26/08		68.85	76.27	7.42	3701.42
MW-15	04/02/08		68.88	76.37	7.49	3701.37
MW-15	04/04/08		68.89	76.36	7.47	3701.37
MW-15	04/24/08		68.92	76.56	7.64	3701.31
MW-15	05/06/08		68.98	76.63	7.65	3701.25
MW-15	05/27/08		69.09	76.82	7.73	3701.12
MW-15	06/04/08		69.05	76.92	7.87	3701.14
MW-15	06/24/08		69.31	76.67	7.36	3700.97
MW-15	07/02/08		69.35	77.00	7.65	3700.88
MW-15	07/15/08		69.50	76.85	7.35	3700.78
MW-15	07/22/08		70.00	74.73	4.73	3700.71
MW-15	07/31/08		70.02	75.22	5.20	3700.61
MW-15	08/07/08		70.24	74.63	4.39	3700.53



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCDF REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-15	08/29/08		69.15	76.49	7.34	3701.13
MW-15	09/16/08		69.19	76.51	7.32	3701.09
MW-15	12/16/08		70.47	71.82	1.35	3700.80
MW-15	01/29/09		69.55	76.77	7.22	3700.75
MW-15	02/04/09		70.69	71.77	1.08	3700.62
MW-15	05/26/09		69.78	77.37	7.59	3700.46
MW-15	08/12/09		70.88	73.71	2.83	3700.14
MW-15	08/17/09		70.35	76.48	6.13	3700.13
MW-15	11/19/10		71.88	72.28	0.40	3699.54
MW-15	02/17/10		71.14	77.81	6.67	3699.25
MW-15	06/02/10		71.61	78.29	6.68	3698.85
MW-15	09/23/10		71.85	77.92	6.07	3698.71
MW-15	12/28/10		71.91	77.89	5.98	3698.66
MW-15	03/16/11		72.46	77.47	5.01	3698.26
MW-15	06/29/11		72.65	78.25	5.60	3697.98
MW-15	09/21/11		73.74	74.93	1.19	3697.57
MW-15	12/29/11		73.83	77.30	3.47	3697.13
MW-16	11/09/07	Installed Well				
MW-16	11/13/07	3769.23		68.22		3701.01
MW-16	11/27/07			68.23		3701.00
MW-16	12/17/07			68.32		3700.91
MW-16	12/19/07			68.31		3700.92
MW-16	03/05/08			68.63		3700.60
MW-16	03/26/08			66.58		3702.65
MW-16	04/02/08			68.59		3700.64
MW-16	04/24/08			68.64		3700.59
MW-16	05/27/08			68.71		3700.52
MW-16	06/24/08			68.85		3700.38
MW-16	08/29/08			68.96		3700.27
MW-16	09/16/08			69.02		3700.21
MW-16	12/16/08			69.17		3700.06
MW-16	01/29/09			69.35		3699.88
MW-16	02/04/09			69.36		3699.87
MW-16	05/26/09			69.63		3699.60
MW-16	08/12/09			69.88		3699.35
MW-16	11/19/09			70.22		3699.01
MW-16	06/02/10			70.82		3698.41
MW-16	09/23/10			71.37		3697.86
MW-16	12/28/10			71.47	sheen	3697.76
MW-16	03/16/11			71.77		3697.46



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-16	06/29/11			72.12		3697.11
MW-16	09/21/11			72.45		3696.78
MW-16	12/29/11			72.93		3696.30
MW-17	11/13/07	Installed Well	TD=87.80			
MW-17	11/14/07	3767.45		64.61		3702.84
MW-17	11/27/07			64.67		3702.78
MW-17	12/17/07			64.41		3703.04
MW-17	12/20/07			64.40		3703.05
MW-17	03/05/08			65.02		3702.43
MW-17	03/26/08			64.97		3702.48
MW-17	04/02/08			64.99		3702.46
MW-17	04/24/08			65.04		3702.41
MW-17	05/27/08			70.87		3696.58
MW-17	06/10/08			65.18		3702.27
MW-17	06/24/08			65.19		3702.26
MW-17	08/29/08			65.46		3701.99
MW-17	09/16/08			65.41		3702.04
MW-17	12/16/08			65.59		3701.86
MW-17	01/29/09			65.75		3701.70
MW-17	02/04/09			65.77		3701.68
MW-17	05/26/09			66.06		3701.39
MW-17	08/12/09			66.30		3701.15
MW-17	11/19/09			66.59		3700.86
MW-17	02/17/10			66.90		3700.55
MW-17	06/02/10			67.22		3700.23
MW-17	09/23/10			67.82		3699.63
MW-17	12/28/10			67.86		3699.59
MW-17	03/16/11			68.21		3699.24
MW-17	06/29/11			68.50		3698.95
MW-17	09/21/11			68.78		3698.67
MW-17	12/29/11			69.28		3698.17
MW-18	11/13/07	Installed Well	TD=82.22			
MW-18	11/14/07	3769.79		71.39		3698.40
MW-18	11/27/07			67.03		3702.76
MW-18	12/17/07			67.05		3702.74
MW-18	12/20/07			67.03		3702.76
MW-18	03/05/08			67.36		3702.43
MW-18	03/26/08			67.31		3702.48
MW-18	04/02/08			67.33		3702.46



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-18	04/24/08			67.38		3702.41
MW-18	05/27/08			67.44		3702.35
MW-18	06/24/08			67.49		3702.30
MW-18	08/29/08			67.69		3702.10
MW-18	09/16/08			67.74		3702.05
MW-18	12/16/08			67.94		3701.85
MW-18	01/29/09			68.11		3701.68
MW-18	02/04/09			68.13		3701.66
MW-18	05/26/09			68.39		3701.40
MW-18	08/12/09			68.64		3701.15
MW-18	11/19/09			68.95		3700.84
MW-18	02/17/10			69.25		3700.54
MW-18	06/02/10			69.56		3700.23
MW-18	09/23/10			70.18		3699.61
MW-18	12/28/10			70.22		3699.57
MW-18	03/16/11			70.52		3699.27
MW-18	06/29/11			70.88		3698.91
MW-18	09/21/11			71.16		3698.63
MW-18	12/29/11			71.68		3698.11
MW-19	11/13/07	Installed Well	TD=88.38			
MW-19	11/14/07	3773.35		71.49		3701.86
MW-19	11/27/07			71.32		3702.03
MW-19	12/17/07			71.39		3701.96
MW-19	12/20/07			71.38		3701.97
MW-19	03/05/08			71.74		3701.61
MW-19	03/26/08			71.67		3701.68
MW-19	04/02/08			71.65		3701.70
MW-19	04/24/08			71.69		3701.66
MW-19	05/27/08			71.81		3701.54
MW-19	06/24/08			71.82		3701.53
MW-19	08/29/08			72.03		3701.32
MW-19	09/16/08			72.11		3701.24
MW-19	12/16/08			70.30		3703.05
MW-19	12/22/08			72.26		3701.09
MW-19	01/29/09			72.49		3700.86
MW-19	02/04/09			72.50		3700.85
MW-19	05/26/09			72.76		3700.59
MW-19	08/12/09			72.95		3700.40
MW-19	11/19/09			73.33		3700.02
MW-19	02/17/10			73.62		3699.73



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-19	06/02/10			73.92		3699.43
MW-19	09/23/10			74.55		3698.80
MW-19	12/28/10			74.60		3698.75
MW-19	03/16/11			74.92		3698.43
MW-19	06/29/11			75.24		3698.11
MW-19	09/21/11			75.54		3697.81
MW-19	12/29/11			76.08		3697.27
MW-20	11/13/07	Installed Well	TD=93.63			
MW-20	11/14/07	3773.11		67.03		3706.08
MW-20	11/27/07			71.64		3701.47
MW-20	12/17/07			71.67		3701.44
MW-20	12/20/07			71.66		3701.45
MW-20	03/05/08			72.01		3701.10
MW-20	03/26/08			71.93		3701.18
MW-20	04/02/08			74.93		3698.18
MW-20	04/24/08			71.99		3701.12
MW-20	05/27/08			72.08		3701.03
MW-20	06/24/08			72.09		3701.02
MW-20	08/29/08			72.30		3700.81
MW-20	09/16/08			72.38		3700.73
MW-20	12/16/08			72.57		3700.54
MW-20	01/29/09			72.75		3700.36
MW-20	02/04/09			72.76		3700.35
MW-20	05/26/09			73.02		3700.09
MW-20	08/12/09			73.22		3699.89
MW-20	11/19/09			73.59		3699.52
MW-20	02/17/10			73.89		3699.22
MW-20	06/02/10			74.20		3698.91
MW-20	09/23/10			74.79		3698.32
MW-20	12/28/10			74.86		3698.25
MW-20	03/16/11			75.25		3697.86
MW-20	06/29/11			75.48		3697.63
MW-20	09/21/11			68.46		3704.65
MW-20	12/29/11			76.35		3696.76
MW-21	03/02/10	Installed Well	TD=100.00			
MW-21	04/15/10	3767.35		66.71		3700.64
MW-21	06/02/10			66.84		3700.51
MW-21	09/23/10			67.45		3699.90
MW-21	12/28/10			67.49	sheen	3699.86



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-21	03/16/11			67.81		3699.54
MW-21	06/29/11			68.14		3699.21
MW-21	09/21/11			68.46		3698.89
MW-21	12/29/11			68.87		3698.48
MW-22	03/02/10	Installed Well	TD=90			
MW-22	04/15/10	3769.17		68.36		3700.81
MW-22	06/02/10			68.51		3700.66
MW-22	09/23/10			69.12		3700.05
MW-22	12/28/10			69.18		3699.99
MW-22	03/16/11			69.50		3699.67
MW-22	06/29/11			69.82		3699.35
MW-22	09/21/11			70.15		3699.02
MW-22	12/29/11			70.53		3698.64
MW-23	02/25/10	Installed Well	TD=92.79			
MW-23	04/15/10	3771.00		70.45		3700.55
MW-23	06/02/10			70.08		3700.92
MW-23	09/23/10			71.21		3699.79
MW-23	12/28/10			71.21		3699.79
MW-23	03/16/11			72.60		3698.40
MW-23	06/29/11			71.91		3699.09
MW-23	09/21/11			72.27		3698.73
MW-23	12/29/11			72.65		3698.35
MW-24	03/02/10	Installed Well				
MW-24	04/15/10	3770.97	70.63	77.97	7.34	3699.18
MW-24	06/02/10		70.76	78.19	7.43	3699.07
MW-24	09/23/10		NM	NM	???	???
MW-24	12/28/10		71.04	77.83	6.79	3698.88
MW-24	03/16/11		71.45	78.26	6.81	3698.47
MW-24	06/29/11		71.68	78.80	7.12	3698.19
MW-24	09/21/11		72.84	74.97	2.13	3697.80
MW-24	12/29/11		72.46	78.49	6.03	3697.58
MW-25	03/02/10	Installed Well				
MW-25	04/15/10	3770.54	70.06	77.25	7.19	3699.34
MW-25	06/02/10		70.21	77.39	7.18	3699.22
MW-25	09/23/10		70.25	77.40	7.15	3699.19
MW-25	12/28/10		70.48	77.19	6.71	3699.03
MW-25	03/16/11		70.85	77.57	6.72	3698.66



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-25	06/29/11		71.10	78.10	7.00	3698.36
MW-25	09/21/11		71.59	77.36	5.77	3698.06
MW-25	12/29/11		71.86	78.14	6.28	3697.71
MW-26	02/25/10	Installed Well	TD=94.75			
MW-26	04/15/10	3772.89		72.91		3699.98
MW-26	06/02/10			73.05		3699.84
MW-26	09/23/10			73.78		3699.11
MW-26	12/28/10			73.72		3699.17
MW-26	03/16/11			74.03		3698.86
MW-26	06/29/11			74.35		3698.54
MW-26	09/21/11			74.69		3698.20
MW-26	12/29/11			75.13		3697.76
MW-27	02/25/10	Installed Well	TD=90.78			
MW-27	04/15/10	3774.53		75.85		3698.68
MW-27	06/02/10			76.03		3698.50
MW-27	09/23/10			76.62		3697.91
MW-27	12/28/10			76.69		3697.84
MW-27	03/16/11			76.99		3697.54
MW-27	06/29/11			77.33		3697.20
MW-27	09/21/11			77.70		3696.83
MW-27	12/29/11			78.12		3696.41
MW-28	02/24/10	Installed Well				
MW-28	04/15/10	3772.18		73.85		3698.33
MW-28	06/02/10			74.00		3698.18
MW-28	09/23/10			74.56		3697.62
MW-28	12/28/10		74.65	74.66	0.01	3697.52
MW-28	03/16/11			74.97		3697.21
MW-28	06/29/11			75.30		3696.88
MW-28	09/21/11			75.67		3696.51
MW-28	12/29/11			76.12		3696.06
MW-29	02/25/10	Installed Well				
MW-29	04/15/10	3769.79		71.67		3698.12
MW-29	06/02/10			71.82		3697.97
MW-29	09/23/10			72.39		3697.40
MW-29	12/28/10			72.47	sheen	3697.32
MW-29	03/16/11			72.79		3697.00
MW-29	06/29/11			73.15		3696.64



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-29	09/21/11			73.48		3696.31
MW-29	12/29/11			73.95		3695.84
MW-30	08/10/10	Installed Well				
MW-30	09/28/10	3766.52				
MW-30	09/23/10		66.10	73.35	7.25	3699.30
MW-30	12/28/10		66.21	73.45	7.24	3699.20
MW-30	03/16/11		67.57	73.79	6.22	3697.99
MW-30	06/29/11		66.88	74.04	7.16	3698.54
MW-30	09/21/11		67.21	74.34	7.13	3698.21
MW-30	12/29/11		67.66	74.77	7.11	3697.77
MW-31	08/10/10	Installed Well				
MW-31	09/28/10	3766.45				
MW-31	09/23/10		66.23	74.10	7.87	3699.01
MW-31	12/28/10		66.30	74.21	7.91	3698.93
MW-31	03/16/11		66.68	74.64	7.96	3698.54
MW-31	06/29/11		66.97	74.94	7.97	3698.25
MW-31	09/21/11		67.27	75.20	7.93	3697.96
MW-31	12/29/11		67.73	75.68	7.95	3697.50
MW-32	08/10/10	Installed Well				
MW-32	09/28/10	3766.75				
MW-32	09/23/10		66.95	74.60	7.65	3698.62
MW-32	12/28/10		67.01	74.65	7.64	3698.56
MW-32	03/16/11		67.39	75.02	7.63	3698.18
MW-32	06/29/11		67.68	75.32	7.64	3697.89
MW-32	09/21/11		67.99	75.62	7.63	3697.58
MW-32	12/29/11		68.45	76.15	7.70	3697.11
MW-33	08/10/10	Installed Well				
MW-33	09/28/10	3767.44				
MW-33	09/23/10		67.95	75.43	7.48	3698.34
MW-33	12/28/10		68.04	75.52	7.48	3698.25
MW-33	03/16/11		68.41	75.72	7.31	3697.90
MW-33	06/29/11		68.70	76.26	7.56	3697.58
MW-33	09/21/11		69.00	76.62	7.62	3697.27
MW-33	12/29/11		69.35	77.13	7.78	3696.89
MW-34	08/19/10	Installed Well				
MW-34	09/28/10	3766.32				



**TABLE 1**  
**SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

WELL ID	DATE GAUGED	Top of Casing Elevation (ft amsl)*	Depth to PSH Below Top of Casing (Feet)	Depth to Water Below Top of Casing (Feet)	PSH Thickness (feet)	Corrected Potentiometric Surface (ft amsl)*
MW-34	09/23/10			67.49		3698.83
MW-34	12/28/10			67.58		3698.74
MW-34	03/16/11			67.91		3698.41
MW-34	06/29/11			68.25		3698.07
MW-34	09/21/11			68.56		3697.76
MW-34	12/29/11			69.08		3697.24
MW-35	08/19/10	Installed Well				
MW-35	09/28/10	3765.67				
MW-35	09/23/10			67.38		3698.29
MW-35	12/28/10		67.44	67.45	0.01	3698.22
MW-35	03/16/11			67.80		3765.67
MW-35	06/29/11			68.12		3697.55
MW-35	09/21/11			68.41		3697.26
MW-35	12/29/11			68.88		3696.79
MW-36	08/19/10	Installed Well				
MW-36	09/28/10	3765.37				
MW-36	09/23/10			67.54		3697.83
MW-36	12/28/10		67.64	67.66	0.02	3697.71
MW-36	03/16/11			67.99		3697.38
MW-36	06/29/11			68.31		3697.06
MW-36	09/21/11			68.59		3696.78
MW-36	12/29/11			69.07		3696.30

ft amsl - feet above mean sea level

Corrected Potentiometric Surface = Top of casing elevation - [depth to water + (PSH thickness x specific gravity of PSH)]

Specific gravity of PSH = 0.846

NM - not measured



**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: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
MW-1A	03/27/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	06/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	09/21/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	12/17/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	03/26/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	06/25/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	09/16/08	Not sampled Due to Not Enough Water				
MW-1A	12/16/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	02/04/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	05/27/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	08/18/09	Not Sampled Due to Not Enough Water				
MW-1A	11/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	02/17/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	06/02/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	06/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-1A	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	03/27/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	06/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	09/21/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	12/17/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	03/26/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	06/25/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	09/18/08	6.29	3.21	0.592	1.28	11.37
MW-2	12/16/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	02/04/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	05/27/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	08/18/09	14.5	12.1	1.80	4.34	32.7
MW-2	11/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	02/17/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	06/02/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	12/29/10	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: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
MW-2	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	06/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	03/27/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	06/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	09/21/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	12/17/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	03/26/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	06/25/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	09/18/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	12/16/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	02/04/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	05/27/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	08/18/09	35.1	8.96	2.44	5.86	52.4
MW-3	11/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	02/17/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	12/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	06/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4A	11/08/07	Well Installation				
MW-4A	12/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4A	03/26/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4A	06/25/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4A	09/17/08	4.95	4.14	0.501	1.02	10.611
MW-4A	12/16/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4A	02/04/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4A	05/27/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4A	08/18/09	19.7	16.5	2.52	6.02	44.74
MW-4A	11/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4A	02/17/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4A	06/02/10	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: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
MW-4A	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4A	12/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4A	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4A	06/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4A	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4A	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	11/06/07	Well Installation				
MW-5	12/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	03/26/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	06/25/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	09/16/08	Not sampled Due to Not Enough Water				
MW-5	12/16/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	02/04/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	05/27/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	08/18/09	20.3	20.4	4.26	10.3	55.26
MW-5	11/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	02/17/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	06/02/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	12/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	06/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	11/06/07	Well Installation				
MW-6	12/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	03/26/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	06/25/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	09/18/08	38.9	3.80	1.50	1.96	46.16
MW-6	12/16/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	02/04/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	05/27/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	08/18/09	31.6	14.7	2.25	4.88	53.43
MW-6	11/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	02/17/10	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**  
**NMOCDF REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
MW-6	06/02/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	12/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	06/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	11/06/07	Well Installation				
MW-7	12/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	03/26/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	06/25/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	09/17/08	38.6	10.3	1.80	3.59	
MW-7	12/16/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	02/04/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	05/27/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	08/18/09	35.7	18.8	4.03	10.6	
MW-7	11/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	02/17/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	06/02/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	06/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	11/06/07	Well Installation				
MW-8	12/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	03/26/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	06/25/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	09/18/08	26.1	5.35	0.983	1.37	33.803
MW-8	12/16/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	02/04/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	05/27/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	08/18/09	27.6	10.1	1.84	3.63	43.17
MW-8	11/19/09	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: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
MW-8	02/17/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	06/02/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	12/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	06/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
Well Installation						
MW-9	11/07/07	Well Installation				
MW-9	12/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-9	03/26/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-9	06/25/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-9	09/20/08	25.4	7.58	1.65	3.70	38.33
MW-9	12/16/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-9	02/04/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-9	05/27/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-9	08/18/09	29.5	15.0	2.61	5.52	52.63
MW-9	11/19/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-9	02/17/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-9	06/02/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-9	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-9	12/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-9	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-9	06/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-9	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-9	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
Well Installation						
MW-10	11/07/07	Well Installation				
MW-10	12/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-10	03/26/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-10	06/25/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-10	09/18/08	11.0	5.25	1.10	2.05	19.4
MW-10	12/16/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-10	02/04/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-10	05/27/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-10	08/18/09	29.3	25.9	5.44	13.0	73.6



**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: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
MW-10	11/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-10	02/17/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-10	06/02/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-10	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-10	12/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-10	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-10	06/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-10	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-10	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	11/07/07	Well Installation				
MW-11	12/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	03/26/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	06/25/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	09/18/08	4.06	1.70	0.308	0.575	6.643
MW-11	12/16/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	02/04/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	05/27/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	08/18/09	5.52	5.37	1.04	2.64	14.57
MW-11	11/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	02/17/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	06/02/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	12/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	06/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-11	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-12	11/07/07	Well Installation				
MW-12	12/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-12	03/26/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-12	06/25/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-12	09/17/08	4.44	2.92	0.401	0.711	8.472
MW-12	12/16/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-12	02/04/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-12	05/27/09	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: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
MW-12	08/18/09	7.67	6.80	1.28	3.40	19.15
MW-12	11/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-12	02/17/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-12	06/02/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-12	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-12	12/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-12	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-12	06/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-12	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-12	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	11/08/07	Well Installation				
MW-13	12/19/07	5.79	0.683	1.64	4.98	13.09
MW-13	03/26/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	06/25/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	09/17/08	4.04	4.48	0.550	1.05	1.05
MW-13	12/16/08	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	02/04/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	05/27/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	08/13/09	5.22	6.39	1.24	2.44	15.29
MW-13	11/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	02/17/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	06/02/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	12/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	06/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-14	11/08/07	Well Installation				
MW-14	12/19/07	0.0301	<0.00500	0.0158	<0.00500	0.0459
MW-14	03/26/08	0.470	<0.00500	<0.00500	0.0449	0.0449
MW-14	06/25/08	1.23	0.0493	<0.00500	0.199	1.4783
MW-14	09/17/08	3.69	0.196	0.0929	0.740	4.7189
MW-14	12/16/08	4.99	0.0537	<0.0500	0.505	5.55
MW-14	02/04/09	11.0	<0.0500	<0.0500	0.683	11.68



**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOCDF REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
MW-14	05/27/09	8.14	0.140	0.208	0.715	9.203
MW-14	08/13/09	1.79	<0.0200	0.0838	0.174	2.0478
MW-14	11/19/09	3.46	0.783	0.088	0.213	4.544
MW-14	02/17/10	16.6	8.18	1.40	4.07	30.25
MW-14	06/02/10	12.2	4.82	0.5150	1.28	18.815
MW-14	09/27/10	3.06	1.34	<0.100	1.83	6.23
MW-14	12/29/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-14	03/16/11	4.36	2.08	0.7660	2.18	9.386
MW-14	06/29/11	3.7	1.48	<0.100	<0.100	5.18
MW-14	09/21/11	5.62	1.58	0.2920	0.543	8.035
MW-14	12/29/11	4.65	1.44	0.1960	0.305	6.591
MW-15	11/08/07	<b>Well Installation</b>				
MW-15	12/19/07	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-15	03/26/08	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-15	06/25/08	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-15	09/17/08	3.76	2.58	0.397	0.664	7.401
MW-15	12/16/08	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-15	02/04/09	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-15	05/27/09	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-15	08/13/09	<b>Not sampled Due to Not Enough Water</b>				
MW-15	11/19/09	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-15	02/17/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-15	06/02/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-15	09/24/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-15	12/29/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-15	03/16/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-15	06/29/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-15	09/21/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-15	12/29/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-16	11/09/07	<b>Well Installation</b>				
MW-16	12/19/07	15.1	0.605	1.66	6.60	24.0
MW-16	03/26/08	26.8	11.1	0.891	2.18	40.971
MW-16	06/25/08	25.6	8.52	0.850	2.07	37.0
MW-16	09/17/08	36.8	9.55	1.12	2.16	49.63
MW-16	12/16/08	30.4	5.28	1.12	2.58	39.4



**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: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	
MW-16	02/04/09	18.3	2.74	0.521	1.02	22.581	
MW-16	05/27/09	26.9	4.35	1.17	2.52	34.94	
MW-16	08/13/09	22.7	3.04	1.05	1.99	28.78	
MW-16	11/19/09	26.5	1.28	0.648	0.771	29.199	
MW-16	02/17/10	39.6	6.16	1.31	2.65	49.72	
MW-16	06/02/10	42.4	7.28	1.18	2.44	53.3	
MW-16	09/27/10	29.7	4.29	0.996	1.90	36.886	
MW-16	01/03/11	25.4	1.50	1.05	2.24	30.19	
MW-16	03/16/11	26.3	0.693	1.31	2.12	30.423	
MW-16	06/28/11	39.6	<0.100	1.92	<0.100	41.52	
MW-16	09/21/11	47.6	0.225	1.50	<0.200	49.325	
MW-16	12/29/11	33.2	0.320	0.772	<0.200	34.292	
MW-17	11/13/07	Well Installation					
MW-17	12/20/07	0.00120	<0.00100	<0.00100	<0.00100	0.0012	
MW-17	03/26/08	0.131	0.0767	0.00700	0.0170	0.2077	
MW-17	06/25/08	0.150	0.0566	0.00480	0.0113	0.218	
MW-17	09/17/08	0.0299	0.0117	0.00200	0.00380	0.0474	
MW-17	12/16/08	0.0388	0.00710	<0.00100	0.00540	0.0513	
MW-17	02/04/09	0.00120	<0.00100	<0.00100	<0.00100	0.0012	
MW-17	05/27/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-17	08/13/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-17	11/19/09	0.0100	0.00330	<0.00100	<0.00100	0.0100	
MW-17	02/17/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-17	06/02/10	0.00570	0.00250	0.00130	0.00300	0.01250	
MW-17	09/24/10	<0.00100	0.0012	<0.00100	<0.00100	0.00120	
MW-17	12/29/10	0.0064	<0.00100	0.00320	0.00810	0.01770	
MW-17	03/22/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-17	06/28/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-17	12/29/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-18	11/13/07	Well Installation					
MW-18	12/20/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-18	03/26/08	0.112	0.0856	0.00980	0.0244	0.222	
MW-18	06/25/08	0.113	0.0483	0.00420	0.0100	0.1713	
MW-18	09/17/08	0.0383	0.0141	0.00220	0.00430	0.00650	
MW-18	12/16/08	0.0315	0.00500	0.00250	0.00370	0.00620	



**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: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
MW-18	02/04/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-18	05/27/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-18	08/13/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-18	11/19/09	<b>0.0123</b>	0.0037	0.00140	<0.00100	0.0174
MW-18	02/17/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-18	06/02/10	0.00740	0.00320	<0.00100	0.00320	0.01380
MW-18	09/24/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-18	12/29/10	0.00490	<0.00100	0.00300	<0.00100	0.00790
MW-18	03/22/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-18	06/28/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-18	09/21/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-18	12/29/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-19	11/13/07	<b>Well Installation</b>				
MW-19	12/20/07	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-19	03/26/08	<b>0.0711</b>	0.0434	0.00470	0.0119	0.1264
MW-19	06/25/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-19	09/17/08	<b>0.0604</b>	0.0214	0.00300	0.00580	0.0906
MW-19	12/16/08	<b>0.0514</b>	0.00670	0.00280	0.00590	0.0668
MW-19	02/04/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-19	05/27/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-19	08/13/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-19	11/19/09	0.00570	0.00200	<0.00100	<0.00100	0.00770
MW-19	02/17/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-19	06/02/10	0.00830	0.00310	<0.00100	0.00300	0.01440
MW-19	09/24/10	0.00120	0.00280	<0.00100	<0.00100	0.00400
MW-19	12/29/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-19	03/22/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-19	06/28/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-19	09/21/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-19	12/29/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-20	11/13/07	<b>Well Installation</b>				
MW-20	12/20/07	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
MW-20	03/26/08	<b>0.0431</b>	0.0226	0.00230	0.00590	0.0657
MW-20	06/25/08	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-20	09/17/08	<b>0.108</b>	0.0290	0.00370	0.00710	0.1188



**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOCDF REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
MW-20	12/16/08	0.0483	0.00670	0.00400	0.00870	0.0677
MW-20	02/04/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-20	05/27/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-20	08/13/09	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-20	11/19/09	0.0049	0.0016	<0.00100	<0.00100	0.0065
MW-20	02/17/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-20	06/02/10	0.01070	0.00390	0.00160	0.00330	0.01950
MW-20	09/27/10	<0.00100	0.0016	<0.00100	<0.00100	0.00160
MW-20	12/29/10	0.0036	<0.00100	<0.00100	<0.00100	0.00360
MW-20	03/22/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-20	06/28/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-20	09/21/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-20	12/29/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-21	03/02/10	Well Installation				
MW-21	04/21/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-21	06/03/10	0.00210	0.00140	<0.00100	<0.00100	0.00350
MW-21	09/24/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-21	12/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-21	03/16/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-21	06/28/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-21	09/22/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-21	12/29/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-22	03/02/10	Well Installation				
MW-22	04/21/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-22	06/03/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-22	09/24/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-22	12/29/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-22	03/16/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-22	06/28/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-22	09/22/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-22	12/29/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-23	02/25/10	Well Installation				
MW-23	04/21/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-23	06/03/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100



**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**PLAINS MARKETING, L.P. - SRS # 2002-10270**  
**8" MOORE TO JAL #1**  
**NMOCDF REF. # 1R-0380**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
MW-23	09/24/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-23	12/29/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-23	03/16/11	Not Sampled				
MW-23	06/28/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-23	09/22/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-23	12/29/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
<b>Well Installation</b>						
MW-24	03/02/10	Well Installation				
MW-24	04/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-24	06/02/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-24	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-24	12/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-24	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-24	06/28/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-24	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-24	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
<b>Well Installation</b>						
MW-25	03/02/10	Well Installation				
MW-25	04/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-25	06/02/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-25	09/24/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-25	12/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-25	03/16/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-25	06/28/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-25	09/21/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-25	12/29/11	Not sampled Due to Presence of Phase Separated Hydrocarbons				
<b>Well Installation</b>						
MW-26	02/25/10	Well Installation				
MW-26	04/29/10	0.00400	0.00250	<0.00100	<0.00100	0.00650
MW-26	06/02/10	0.00550	0.00180	<0.00100	<0.00100	0.00730
MW-26	09/24/10	0.00210	0.00150	<0.00100	<0.00100	0.00360
MW-26	12/29/10	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-26	03/16/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-26	06/28/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-26	09/21/11	0.00400	<0.00100	<0.00100	<0.00100	0.00400
MW-26	12/29/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100



**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: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
MW-27	02/25/10	<b>Well Installation</b>				
MW-27	04/29/10	0.00720	0.00340	<0.00100	<0.00100	0.04280
MW-27	06/02/10	0.01530	0.00350	<0.00100	<0.00100	0.01880
MW-27	09/27/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-27	12/29/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-27	03/16/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-27	06/28/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-27	09/21/11	0.00760	0.00100	<0.00100	<0.00100	0.00860
MW-27	12/29/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-28	02/24/10	<b>Well Installation</b>				
MW-28	04/29/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-28	06/02/10	0.0180	0.00290	<0.00100	<0.00100	0.0209
MW-28	09/27/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-28	12/29/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-28	03/16/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-28	06/28/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-28	09/21/11	<b>0.0184</b>	<0.00100	0.00100	<0.00100	0.0194
MW-28	12/29/11	<b>0.0412</b>	<0.00100	0.00100	<0.00100	0.0412
MW-29	02/25/10	<b>Well Installation</b>				
MW-29	04/29/10	<b>10.7</b>	<b>3.00</b>	0.437	<b>1.29</b>	15.427
MW-29	06/02/10	<b>11.8</b>	<b>2.42</b>	0.434	<b>0.962</b>	15.616
MW-29	09/27/10	<b>11.8</b>	<b>1.96</b>	0.518	<b>0.812</b>	15.09
MW-29	12/29/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-29	03/16/11	<b>13.4</b>	<0.0500	<b>0.814</b>	<b>1.44</b>	15.654
MW-29	06/28/11	<b>28.6</b>	<0.200	<b>2.08</b>	<b>4.19</b>	34.87
MW-29	09/21/11	<b>41.1</b>	<0.200	<b>1.30</b>	<b>1.22</b>	43.62
MW-29	12/29/11	<b>32.5</b>	<0.200	<b>0.99</b>	<b>0.298</b>	33.789
MW-30	08/10/10	<b>Well Installation</b>				
MW-30	09/24/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-30	12/29/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-30	03/16/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-30	06/28/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-30	09/21/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-30	12/29/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				



**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: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
		<b>Well Installation</b>				
MW-31	08/10/10	<b>Well Installation</b>				
MW-31	09/24/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-31	12/29/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-31	03/16/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-31	06/28/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-31	09/21/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-31	12/29/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
		<b>Well Installation</b>				
MW-32	08/10/10	<b>Well Installation</b>				
MW-32	09/24/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-32	12/29/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-32	03/16/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-32	06/28/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-32	09/21/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-32	12/29/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
		<b>Well Installation</b>				
MW-33	08/10/10	<b>Well Installation</b>				
MW-33	09/24/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-33	12/29/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-33	03/16/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-33	06/28/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-33	09/21/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-33	12/29/11	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
		<b>Well Installation</b>				
MW-34	08/19/10	<b>Well Installation</b>				
MW-34	09/28/10	0.00600	0.00130	<0.00100	<0.00100	0.00730
MW-34	12/29/10	0.00790	<0.00100	<0.00100	<0.00100	0.00790
MW-34	03/16/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-34	06/28/11	0.0067	<0.00100	<0.00100	<0.00100	0.0067
MW-34	09/22/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-34	12/29/11	0.0011	<0.00100	<0.00100	<0.00100	<0.00100
		<b>Well Installation</b>				
MW-35	08/19/10	<b>Well Installation</b>				
MW-35	09/28/10	0.0019	<0.00100	<0.00100	<0.00100	0.0019
MW-35	12/29/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-35	03/16/11	0.0149	<0.00100	<0.00100	<0.00100	0.0149



**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: 700376.044.01**

*All concentrations are in mg/L*

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
MW-35	06/28/11	<b>0.0187</b>	<0.00100	<0.00100	<0.00100	0.0187
MW-35	09/22/11	0.00610	0.00130	<0.00100	<0.00100	0.0074
MW-35	12/29/11	0.00420	0.00130	<0.00100	<0.00100	0.0055
MW-36	08/19/10	<b>Well Installation</b>				
MW-36	09/28/10	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-36	12/29/10	<b>Not sampled Due to Presence of Phase Separated Hydrocarbons</b>				
MW-36	03/16/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-36	06/28/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-36	09/22/11	0.0011	<0.00100	<0.00100	<0.00100	<0.00600
MW-36	12/29/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
<b>NMWQCC Remedial Limits</b>		<b>0.010</b>	<b>0.750</b>	<b>0.750</b>	<b>0.620</b>	<b>NA</b>

***Bolded** values are in excess of the NMWQCC Remediation Limits*  
*BTEX analyzed by EPA Method 8021B*



**TABLE 3**  
**SUMMARY OF GROUNDWATER POLYNUCLEAR AROMATIC**  
**HYDROCARBON (PAH) ANALYTICAL RESULTS**  
**PLAINS PIPELINE, L.P.**  
**8" MOORE TO JAL #1 - SRS# 2002-10270**  
**NMOCD REF. # AP-91**  
**LEA COUNTY, NEW MEXICO**  
**TALON/LPE PROJECT NUMBER 700376.044.01**

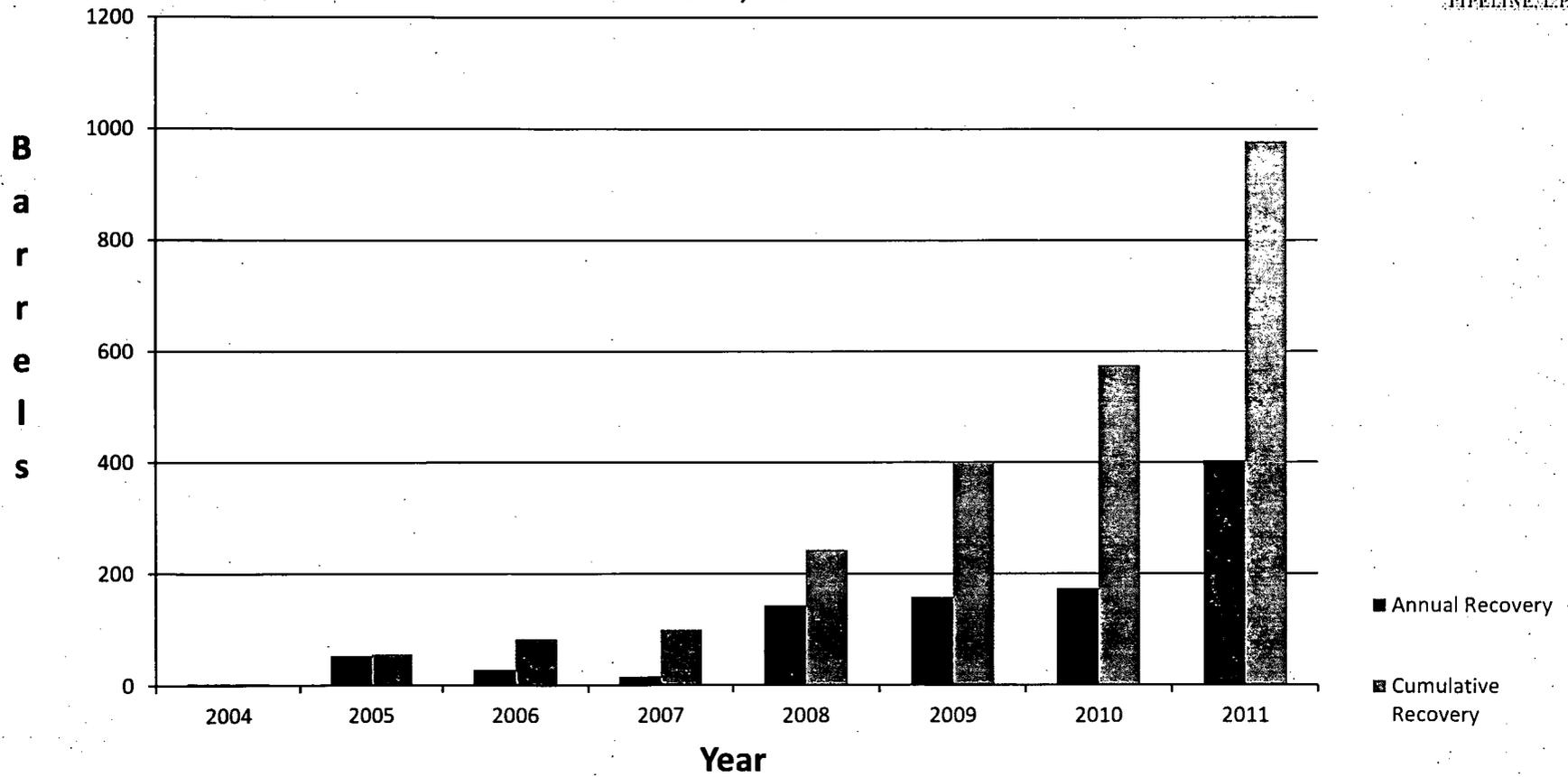
*All concentrations are in mg/L*

Sample Location	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]-anthracene	Benzo[a]-pyrene	Benzo[b]-fluoranthene	Benzo[g,h,i]-perylene	Benzo[k]-fluoranthene	Chrysene	Dibenz[a,h]-anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno[1,2,3-cd]-pyrene	2-Methylnaphthalene	1-Methylnaphthalene	Naphthalene	Total Naphthalenes	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	0.000759	<0.000200	<b>0.000606</b>	<0.000200	<b>0.00203</b>	<b>0.00995</b>	<b>0.00204</b>	<b>0.01402</b>	<b>0.000274</b>	<0.000200
	08/13/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<b>0.000773</b>	<b>0.000527</b>	<b>0.000895</b>	<b>0.002195</b>	<0.000184	<0.000184
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	0.002440	<0.000200	<b>0.000557</b>	<0.000200	<b>0.0441</b>	<b>0.0390</b>	<b>0.0765</b>	<b>0.1596</b>	<b>0.00144</b>	<0.000200
	08/13/09	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<b>0.00110</b>	<0.000186	<b>&lt;0.000186</b>	<0.000186	<b>0.0171</b>	<b>0.0183</b>	<b>0.0272</b>	<b>0.0626</b>	<b>0.00110</b>	<0.000186
	01/03/11	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<b>0.00128</b>	<0.000184	<b>0.002500</b>	<0.000184	<b>0.0228</b>	<b>0.0204</b>	<b>0.0394</b>	<b>0.0826</b>	<b>0.00156</b>	<0.000184
	01/29/11	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<b>0.00324</b>	<b>0.00470</b>	<b>0.0139</b>	<b>0.0218</b>	<0.000201	<0.000201
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	<0.000200	<0.000200	<0.000200	<0.000200
	08/13/09	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186
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	<0.000200	<0.000200	<b>0.000405</b>	<b>0.000405</b>	<0.000200	<0.000200
	08/13/09	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<b>0.000246</b>	<b>0.000246</b>	<0.000185	<0.000185
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	<0.000200	<0.000200	<b>0.00103</b>	<b>0.00103</b>	<b>0.000268</b>	<0.000200
	08/13/09	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<b>0.000205</b>	<b>0.000205</b>	<0.000188	<0.000188
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	<0.000200	<0.000200	<b>0.000256</b>	<b>0.000256</b>	<0.000200	<0.000200
	08/13/09	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<b>0.000362</b>	<b>0.000362</b>	<0.000186	<0.000186
MW-27	01/29/11	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
NMWQCC Remedial Limits						0.007													0.030		

<sup>1</sup>**Bolded values in red** are in excess of the NMWQCC Remediation Limits  
<sup>2</sup>**Bolded values in black** exceed the Reporting Limit  
 PAH Analyzed by EPA Method 8270



CHART 1 - PRODUCT RECOVERY  
PLAINS PIPELINE, L.P. - SRS# 2002-10720  
8" MOORE TO JAL #1  
NMOCD REF. # AP-91  
LEA COUNTY, NEW MEXICO



## **APPENDIX C**

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

## Summary Report

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

Report Date: March 28, 2011

Work Order: 11031727



Project Location: Lovington, NM  
Project Name: Moore to Jal #1  
Project Number: 700376.044.01  
SRS #: 2002-10270

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
260861	MW 14	water	2011-03-16	15:30	2011-03-17
260862	MW 16	water	2011-03-16	15:44	2011-03-17
260863	MW 21	water	2011-03-16	14:35	2011-03-17
260864	MW 22	water	2011-03-16	13:25	2011-03-17
260865	MW 18	water	2011-03-16	13:45	2011-03-17
260866	MW 26	water	2011-03-16	14:10	2011-03-17
260867	MW 27	water	2011-03-16	14:50	2011-03-17
260868	MW 28	water	2011-03-16	15:10	2011-03-17
260869	MW 29	water	2011-03-16	16:00	2011-03-17
260870	MW 34	water	2011-03-16	12:45	2011-03-17
260871	MW 35	water	2011-03-16	12:32	2011-03-17
260872	MW 36	water	2011-03-16	12:20	2011-03-17

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
260861 - MW 14	4.36	2.08	0.766	2.18
260862 - MW 16	26.3	0.693	1.31	2.12
260863 - MW 21	<0.00100	<0.00100	<0.00100	<0.00100
260864 - MW 22	<0.00100	<0.00100	<0.00100	<0.00100
260865 - MW 18	<0.00100	<0.00100	<0.00100	<0.00100
260866 - MW 26	<0.00100	<0.00100	<0.00100	<0.00100
260867 - MW 27	<0.00100	<0.00100	<0.00100	<0.00100
260868 - MW 28	<0.00100	<0.00100	<0.00100	<0.00100
260869 - MW 29	13.4	<0.0500	0.814	1.44
260870 - MW 34	<0.00100	<0.00100	<0.00100	<0.00100
260871 - MW 35	0.0149	<0.00100	<0.00100	<0.00100
260872 - MW 36	<0.00100	<0.00100	<0.00100	<0.00100



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

### Certifications

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

### NELAP Certifications

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

## Analytical and Quality Control Report

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

Report Date: March 28, 2011

Work Order: 11031727



Project Location: Lovington, NM  
 Project Name: Moore to Jal #1  
 Project Number: 700376.044.01  
 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
260861	MW 14	water	2011-03-16	15:30	2011-03-17
260862	MW 16	water	2011-03-16	15:44	2011-03-17
260863	MW 21	water	2011-03-16	14:35	2011-03-17
260864	MW 22	water	2011-03-16	13:25	2011-03-17
260865	MW 18	water	2011-03-16	13:45	2011-03-17
260866	MW 26	water	2011-03-16	14:10	2011-03-17
260867	MW 27	water	2011-03-16	14:50	2011-03-17
260868	MW 28	water	2011-03-16	15:10	2011-03-17
260869	MW 29	water	2011-03-16	16:00	2011-03-17

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
260870	MW 34	water	2011-03-16	12:45	2011-03-17
260871	MW 35	water	2011-03-16	12:32	2011-03-17
260872	MW 36	water	2011-03-16	12:20	2011-03-17

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



---

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

**Standard Flags**

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

## Case Narrative

Samples for project Moore to Jal #1 were received by TraceAnalysis, Inc. on 2011-03-17 and assigned to work order 11031727. Samples for work order 11031727 were received intact without headspace and at a temperature of 2.7 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	67698	2011-03-25 at 16:03	79789	2011-03-26 at 07:25

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11031727 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: 260861 - MW 14

Laboratory: Midland  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B  
 QC Batch: 79789 Date Analyzed: 2011-03-26 Analyzed By: ME  
 Prep Batch: 67698 Sample Preparation: 2011-03-25 Prepared By: ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		4.36	mg/L	100	0.00100
Toluene		2.08	mg/L	100	0.00100
Ethylbenzene		0.766	mg/L	100	0.00100
Xylene		2.18	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		9.08	mg/L	100	10.0	91	67.8 - 129
4-Bromofluorobenzene (4-BFB)		7.71	mg/L	100	10.0	77	51.1 - 128

### Sample: 260862 - MW 16

Laboratory: Midland  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B  
 QC Batch: 79789 Date Analyzed: 2011-03-26 Analyzed By: ME  
 Prep Batch: 67698 Sample Preparation: 2011-03-25 Prepared By: ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		26.3	mg/L	100	0.00100
Toluene		0.693	mg/L	100	0.00100
Ethylbenzene		1.31	mg/L	100	0.00100
Xylene		2.12	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		9.47	mg/L	100	10.0	95	67.8 - 129
4-Bromofluorobenzene (4-BFB)		8.06	mg/L	100	10.0	81	51.1 - 128

### Sample: 260863 - MW 21

Laboratory: Midland  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B  
 QC Batch: 79789 Date Analyzed: 2011-03-26 Analyzed By: ME  
 Prep Batch: 67698 Sample Preparation: 2011-03-25 Prepared By: ME

Report Date: March 28, 2011  
700376.044.01

Work Order: 11031727  
Moore to Jal #1

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Lovington, NM

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0972	mg/L	1	0.100	97	67.8 - 129
4-Bromofluorobenzene (4-BFB)		0.0903	mg/L	1	0.100	90	51.1 - 128

**Sample: 260864 - MW 22**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 79789  
Prep Batch: 67698

Analytical Method: S 8021B  
Date Analyzed: 2011-03-26  
Sample Preparation: 2011-03-25

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.103	mg/L	1	0.100	103	67.8 - 129
4-Bromofluorobenzene (4-BFB)		0.0902	mg/L	1	0.100	90	51.1 - 128

**Sample: 260865 - MW 18**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 79789  
Prep Batch: 67698

Analytical Method: S 8021B  
Date Analyzed: 2011-03-26  
Sample Preparation: 2011-03-25

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0967	mg/L	1	0.100	97	67.8 - 129
4-Bromofluorobenzene (4-BFB)		0.0835	mg/L	1	0.100	84	51.1 - 128

**Sample: 260866 - MW 26**

Laboratory: Midland  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B  
 QC Batch: 79789 Date Analyzed: 2011-03-26 Analyzed By: ME  
 Prep Batch: 67698 Sample Preparation: 2011-03-25 Prepared By: ME

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0945	mg/L	1	0.100	94	67.8 - 129
4-Bromofluorobenzene (4-BFB)		0.0828	mg/L	1	0.100	83	51.1 - 128

**Sample: 260867 - MW 27**

Laboratory: Midland  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B  
 QC Batch: 79789 Date Analyzed: 2011-03-26 Analyzed By: ME  
 Prep Batch: 67698 Sample Preparation: 2011-03-25 Prepared By: ME

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0999	mg/L	1	0.100	100	67.8 - 129
4-Bromofluorobenzene (4-BFB)		0.0868	mg/L	1	0.100	87	51.1 - 128

Report Date: March 28, 2011  
700376.044.01

Work Order: 11031727  
Moore to Jal #1

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Lovington, NM

**Sample: 260868 - MW 28**

Laboratory: Midland  
Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B  
QC Batch: 79789 Date Analyzed: 2011-03-26 Analyzed By: ME  
Prep Batch: 67698 Sample Preparation: 2011-03-25 Prepared By: ME

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0995	mg/L	1	0.100	100	67.8 - 129
4-Bromofluorobenzene (4-BFB)		0.0856	mg/L	1	0.100	86	51.1 - 128

**Sample: 260869 - MW 29**

Laboratory: Midland  
Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B  
QC Batch: 79789 Date Analyzed: 2011-03-26 Analyzed By: ME  
Prep Batch: 67698 Sample Preparation: 2011-03-25 Prepared By: ME

Parameter	Flag	RL		Dilution	RL
		Result	Units		
Benzene		13.4	mg/L	50	0.00100
Toluene		<0.0500	mg/L	50	0.00100
Ethylbenzene		0.814	mg/L	50	0.00100
Xylene		1.44	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.64	mg/L	50	5.00	93	67.8 - 129
4-Bromofluorobenzene (4-BFB)		3.94	mg/L	50	5.00	79	51.1 - 128

**Sample: 260870 - MW 34**

Laboratory: Midland  
Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B  
QC Batch: 79789 Date Analyzed: 2011-03-26 Analyzed By: ME  
Prep Batch: 67698 Sample Preparation: 2011-03-25 Prepared By: ME

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0984	mg/L	1	0.100	98	67.8 - 129
4-Bromofluorobenzene (4-BFB)		0.0832	mg/L	1	0.100	83	51.1 - 128

**Sample: 260871 - MW 35**

Laboratory: Midland  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B  
 QC Batch: 79789 Date Analyzed: 2011-03-26 Analyzed By: ME  
 Prep Batch: 67698 Sample Preparation: 2011-03-25 Prepared By: ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<b>0.0149</b>	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0877	mg/L	1	0.100	88	67.8 - 129
4-Bromofluorobenzene (4-BFB)		0.0759	mg/L	1	0.100	76	51.1 - 128

**Sample: 260872 - MW 36**

Laboratory: Midland  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B  
 QC Batch: 79789 Date Analyzed: 2011-03-26 Analyzed By: ME  
 Prep Batch: 67698 Sample Preparation: 2011-03-25 Prepared By: ME

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

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0992	mg/L	1	0.100	99	67.8 - 129
4-Bromofluorobenzene (4-BFB)		0.0843	mg/L	1	0.100	84	51.1 - 128

Method Blank (1) QC Batch: 79789

QC Batch: 79789  
Prep Batch: 67698

Date Analyzed: 2011-03-26  
QC Preparation: 2011-03-25

Analyzed By: ME  
Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000400	mg/L	0.001
Toluene		<0.000300	mg/L	0.001
Ethylbenzene		<0.000300	mg/L	0.001
Xylene		<0.000333	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0813	mg/L	1	0.100	81	70.2 - 118
4-Bromofluorobenzene (4-BFB)		0.0752	mg/L	1	0.100	75	47.3 - 116

Laboratory Control Spike (LCS-1)

QC Batch: 79789  
Prep Batch: 67698

Date Analyzed: 2011-03-26  
QC Preparation: 2011-03-25

Analyzed By: ME  
Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0903	mg/L	1	0.100	<0.000400	90	76.8 - 110
Toluene	0.0938	mg/L	1	0.100	<0.000300	94	81 - 108
Ethylbenzene	0.0982	mg/L	1	0.100	<0.000300	98	78.8 - 118
Xylene	0.306	mg/L	1	0.300	<0.000333	100	80.3 - 119

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.0907	mg/L	1	0.100	<0.000400	91	76.8 - 110	0	20
Toluene	0.0940	mg/L	1	0.100	<0.000300	94	81 - 108	0	20
Ethylbenzene	0.102	mg/L	1	0.100	<0.000300	102	78.8 - 118	4	20
Xylene	0.306	mg/L	1	0.300	<0.000333	102	80.3 - 119	2	20

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

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Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0822	0.0894	mg/L	1	0.100	82	89	66.6 - 114
4-Bromofluorobenzene (4-BFB)	0.0814	0.0895	mg/L	1	0.100	81	90	68.2 - 124

**Matrix Spike (MS-1)** Spiked Sample: 260869

QC Batch: 79789 Date Analyzed: 2011-03-26 Analyzed By: ME  
Prep Batch: 67698 QC Preparation: 2011-03-25 Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	18.2	mg/L	50	5.00	13.4125	96	77.9 - 114
Toluene	4.46	mg/L	50	5.00	<0.0150	89	78.3 - 111
Ethylbenzene	5.45	mg/L	50	5.00	0.814	93	75.3 - 110
Xylene	15.0	mg/L	50	15.0	1.4383	90	75.7 - 109

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	18.1	mg/L	50	5.00	13.4125	94	77.9 - 114	1	20
Toluene	4.57	mg/L	50	5.00	<0.0150	91	78.3 - 111	2	20
Ethylbenzene	5.57	mg/L	50	5.00	0.814	95	75.3 - 110	2	20
Xylene	15.4	mg/L	50	15.0	1.4383	93	75.7 - 109	3	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	4.75	4.61	mg/L	50	5	95	92	68.3 - 107
4-Bromofluorobenzene (4-BFB)	4.31	4.21	mg/L	50	5	86	84	60.1 - 135

**Standard (CCV-1)**

QC Batch: 79789 Date Analyzed: 2011-03-26 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0847	85	80 - 120	2011-03-26
Toluene		mg/L	0.100	0.0884	88	80 - 120	2011-03-26
Ethylbenzene		mg/L	0.100	0.0955	96	80 - 120	2011-03-26
Xylene		mg/L	0.300	0.286	95	80 - 120	2011-03-26

Report Date: March 28, 2011  
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**Standard (CCV-2)**

QC Batch: 79789

Date Analyzed: 2011-03-26

Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0889	89	80 - 120	2011-03-26
Toluene		mg/L	0.100	0.0916	92	80 - 120	2011-03-26
Ethylbenzene		mg/L	0.100	0.0986	99	80 - 120	2011-03-26
Xylene		mg/L	0.300	0.292	97	80 - 120	2011-03-26

**Standard (CCV-3)**

QC Batch: 79789

Date Analyzed: 2011-03-26

Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0898	90	80 - 120	2011-03-26
Toluene		mg/L	0.100	0.0922	92	80 - 120	2011-03-26
Ethylbenzene		mg/L	0.100	0.0976	98	80 - 120	2011-03-26
Xylene		mg/L	0.300	0.291	97	80 - 120	2011-03-26



## Summary Report

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

Report Date: March 30, 2011

Work Order: 11032301



Project Location: Lovington, NM  
Project Name: Moore to Jal #1  
Project Number: 700376.044.01  
SRS #: 2002-10270

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
261283	MW-17	water	2011-03-22	11:00	2011-03-23
261284	MW-18	water	2011-03-22	11:15	2011-03-23
261285	MW-19	water	2011-03-22	11:25	2011-03-23
261286	MW-20	water	2011-03-22	11:40	2011-03-23

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
261283 - MW-17	<0.00100	<0.00100	<0.00100	<0.00100
261284 - MW-18	<0.00100	<0.00100	<0.00100	<0.00100
261285 - MW-19	<0.00100	<0.00100	<0.00100	<0.00100
261286 - MW-20	<0.00100	<0.00100	<0.00100	<0.00100



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

## Analytical and Quality Control Report

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

Report Date: March 30, 2011

Work Order: 11032301



Project Location: Lovington, NM  
 Project Name: Moore to Jal #1  
 Project Number: 700376.044.01  
 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
261283	MW-17	water	2011-03-22	11:00	2011-03-23
261284	MW-18	water	2011-03-22	11:15	2011-03-23
261285	MW-19	water	2011-03-22	11:25	2011-03-23
261286	MW-20	water	2011-03-22	11:40	2011-03-23

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.

*Michael Abel*

---

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

**Standard Flags**

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

## Case Narrative

Samples for project Moore to Jal #1 were received by TraceAnalysis, Inc. on 2011-03-23 and assigned to work order 11032301. Samples for work order 11032301 were received intact without headspace and at a temperature of 6.9 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	67776	2011-03-29 at 09:25	79873	2011-03-29 at 09:58

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11032301 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

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

Report Date: March 30, 2011  
700376.044.01

Work Order: 11032301  
Moore to Jal #1

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## Analytical Report

### Sample: 261283 - MW-17

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 79873  
Prep Batch: 67776

Analytical Method: S 8021B  
Date Analyzed: 2011-03-29  
Sample Preparation: 2011-03-29

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0998	mg/L	1	0.100	100	67.8 - 129
4-Bromofluorobenzene (4-BFB)		0.0772	mg/L	1	0.100	77	51.1 - 128

### Sample: 261284 - MW-18

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 79873  
Prep Batch: 67776

Analytical Method: S 8021B  
Date Analyzed: 2011-03-29  
Sample Preparation: 2011-03-29

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.103	mg/L	1	0.100	103	67.8 - 129
4-Bromofluorobenzene (4-BFB)		0.0815	mg/L	1	0.100	82	51.1 - 128

### Sample: 261285 - MW-19

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 79873  
Prep Batch: 67776

Analytical Method: S 8021B  
Date Analyzed: 2011-03-29  
Sample Preparation: 2011-03-29

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

Report Date: March 30, 2011  
700376.044.01

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.107	mg/L	1	0.100	107	67.8 - 129
4-Bromofluorobenzene (4-BFB)		0.0871	mg/L	1	0.100	87	51.1 - 128

**Sample: 261286 - MW-20**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 79873  
Prep Batch: 67776

Analytical Method: S 8021B  
Date Analyzed: 2011-03-29  
Sample Preparation: 2011-03-29

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.107	mg/L	1	0.100	107	67.8 - 129
4-Bromofluorobenzene (4-BFB)		0.0873	mg/L	1	0.100	87	51.1 - 128

**Method Blank (1)      QC Batch: 79873**

QC Batch: 79873  
Prep Batch: 67776

Date Analyzed: 2011-03-29  
QC Preparation: 2011-03-29

Analyzed By: ME  
Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000400	mg/L	0.001
Toluene		<0.000300	mg/L	0.001
Ethylbenzene		<0.000300	mg/L	0.001
Xylene		<0.000333	mg/L	0.001

Report Date: March 30, 2011  
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Work Order: 11032301  
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	70.2 - 118
4-Bromofluorobenzene (4-BFB)		0.0922	mg/L	1	0.100	92	47.3 - 116

Laboratory Control Spike (LCS-1)

QC Batch: 79873  
Prep Batch: 67776

Date Analyzed: 2011-03-29  
QC Preparation: 2011-03-29

Analyzed By: ME  
Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0881	mg/L	1	0.100	<0.000400	88	76.8 - 110
Toluene	0.0939	mg/L	1	0.100	<0.000300	94	81 - 108
Ethylbenzene	0.100	mg/L	1	0.100	<0.000300	100	78.8 - 118
Xylene	0.305	mg/L	1	0.300	<0.000333	102	80.3 - 119

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.0929	mg/L	1	0.100	<0.000400	93	76.8 - 110	5	20
Toluene	0.0977	mg/L	1	0.100	<0.000300	98	81 - 108	4	20
Ethylbenzene	0.107	mg/L	1	0.100	<0.000300	107	78.8 - 118	7	20
Xylene	0.322	mg/L	1	0.300	<0.000333	107	80.3 - 119	5	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.107	0.0993	mg/L	1	0.100	107	99	66.6 - 114
4-Bromofluorobenzene (4-BFB)	0.103	0.0955	mg/L	1	0.100	103	96	68.2 - 124

Matrix Spike (MS-1) Spiked Sample: 260949

QC Batch: 79873  
Prep Batch: 67776

Date Analyzed: 2011-03-29  
QC Preparation: 2011-03-29

Analyzed By: ME  
Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	10.0	mg/L	100	10.0	1.5131	85	77.9 - 114
Toluene	9.30	mg/L	100	10.0	<0.0300	93	78.3 - 111
Ethylbenzene	9.79	mg/L	100	10.0	<0.0300	98	75.3 - 110
Xylene	29.3	mg/L	100	30.0	<0.0333	98	75.7 - 109

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	10.4	mg/L	100	10.0	1.5131	89	77.9 - 114	4	20
Toluene	9.70	mg/L	100	10.0	<0.0300	97	78.3 - 111	4	20
Ethylbenzene	10.2	mg/L	100	10.0	<0.0300	102	75.3 - 110	4	20
Xylene	30.6	mg/L	100	30.0	<0.0333	102	75.7 - 109	4	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	10.3	10.3	mg/L	100	10	103	103	68.3 - 107
4-Bromofluorobenzene (4-BFB)	9.09	9.19	mg/L	100	10	91	92	60.1 - 135

**Standard (CCV-2)**

QC Batch: 79873

Date Analyzed: 2011-03-29

Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0903	90	80 - 120	2011-03-29
Toluene		mg/L	0.100	0.0945	94	80 - 120	2011-03-29
Ethylbenzene		mg/L	0.100	0.0997	100	80 - 120	2011-03-29
Xylene		mg/L	0.300	0.300	100	80 - 120	2011-03-29

**Standard (CCV-3)**

QC Batch: 79873

Date Analyzed: 2011-03-29

Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0873	87	80 - 120	2011-03-29
Toluene		mg/L	0.100	0.0910	91	80 - 120	2011-03-29
Ethylbenzene		mg/L	0.100	0.0981	98	80 - 120	2011-03-29
Xylene		mg/L	0.300	0.291	97	80 - 120	2011-03-29

LAB Order ID # 11032301

Page 1 of 1

# Trace Analysis, Inc.

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

Company Name: **Talon LPE** Phone #: **432-230-9181**

Address: **2901 (Street, City, ZIP) St Hwy 349** Fax #:

Contact Person: **Steve Killingsworth** Email: **S.Killingsworth@talonlpe.com**

Invoice to: **2002-10270** Project Name: **5-1 #1**

(If different from above) **700376.044.01** Project Location (including state): **Robbs/NM** Sampler Signature: **B. Killingsworth**

LAB # (LAB USE) (ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD				DATE	TIME	ANALYSIS REQUEST (Circle or Specify Method No.)	REMARKS
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH				
Q61283	MW14	MW17	3	X				X				3/24/11	1100	MTBE 8021 / 602 / 8260 / 624 BTX 8021 / 602 / 8260 / 624 TPH 418.1 / TX1005 / TX1005 Ext(C35) TPH 8015 GRO / DRO / TVHC PAH 8270 / 625 Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles TCLP Semi Volatiles TCLP Pesticides RCI GC/MS Vol. 8260 / 624 GC/MS Semi. Vol. 8270 / 625 PCB's 8082 / 608 Pesticides 8081 / 608 BOD, TSS, pH Moisture Content Cl, F, S04, NO3, NO2, Alkalinity Na, Ca, Mg, K, TDS, EC	X 1 VOA Broken on MW18
Q84	MW16	MW18	1					X					1115		
Q86	MW17	MW19	1					X					1125		
Q86	MW19	MW20	1					X					1140		
	MW19														
	MW20														
	MW21														
	MW22														
	MW23														

Relinquished by: **Talon** Company: **Talon** Date: **3/23/11** Time: **0845** Received by: **[Signature]** Company: **Trace** Date: **3/23/11** Time: **8:45**

Relinquished by: **[Signature]** Company: **[Signature]** Date: **[Signature]** Time: **[Signature]** Received by: **[Signature]** Company: **[Signature]** Date: **[Signature]** Time: **[Signature]**

LAB USE ONLY  
 INST 6.9%  
 OBS 6.9%  
 INST 6.9%  
 OBS 6.9%  
 COR  
 INST  
 OBS  
 COR  
 Log-In/Review  
 Dry Weight Basts Required  
 TRRP Report Required  
 Check If Special Reporting Limits Are Needed

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## Summary Report

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

Report Date: July 6, 2011

Work Order: 11063030



Project Location: Lovington, NM  
Project Name: Moore to Jal #1  
Project Number: 700376.044.01  
SRS #: 2002-10270

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
270851	MW 14	water	2011-06-29	11:00	2011-06-30
270852	MW 16	water	2011-06-29	14:30	2011-06-30
270853	MW 17	water	2011-06-29	11:40	2011-06-30
270854	MW 18	water	2011-06-29	11:50	2011-06-30
270855	MW 19	water	2011-06-29	12:00	2011-06-30
270856	MW 20	water	2011-06-29	12:10	2011-06-30
270857	MW 21	water	2011-06-29	12:20	2011-06-30
270858	MW 22	water	2011-06-29	12:40	2011-06-30
270859	MW 23	water	2011-06-29	13:00	2011-06-30
270860	MW 26	water	2011-06-29	11:30	2011-06-30
270861	MW 27	water	2011-06-29	11:15	2011-06-30
270862	MW 28	water	2011-06-29	14:00	2011-06-30
270863	MW 29	water	2011-06-29	14:15	2011-06-30
270864	MW 34	water	2011-06-28	11:40	2011-06-30
270865	MW 35	water	2011-06-28	11:20	2011-06-30
270866	MW 36	water	2011-06-28	11:00	2011-06-30

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
270851 - MW 14	3.70	1.48	<0.100	<0.100
270852 - MW 16	39.6	<0.100	1.92	<0.100
270853 - MW 17	<0.00100	<0.00100	<0.00100	<0.00100
270854 - MW 18	<0.00100	<0.00100	<0.00100	<0.00100
270855 - MW 19	<0.00100	<0.00100	<0.00100	<0.00100
270856 - MW 20	<0.00100	<0.00100	<0.00100	<0.00100
270857 - MW 21	<0.00100	<0.00100	<0.00100	<0.00100
270858 - MW 22	<0.00100	<0.00100	<0.00100	<0.00100

continued ...

... continued

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
270859 - MW 23	<0.00100	<0.00100	<0.00100	<0.00100
270860 - MW 26	<0.00100	<0.00100	<0.00100	<0.00100
270861 - MW 27	<0.00100	<0.00100	<0.00100	<0.00100
270862 - MW 28	<0.00100	<0.00100	<0.00100	<0.00100
270863 - MW 29	28.6	<0.200	2.08	4.19
270864 - MW 34	0.00670	<0.00100	<0.00100	<0.00100
270865 - MW 35	0.0187	<0.00100	<0.00100	<0.00100
270866 - MW 36	<0.00100	<0.00100	<0.00100	<0.00100



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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

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

## Analytical and Quality Control Report

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

Report Date: July 7, 2011

Work Order: 11063030



Project Location: Lovington, NM  
Project Name: Moore to Jal #1  
Project Number: 700376.044.01  
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
270851	MW 14	water	2011-06-29	11:00	2011-06-30
270852	MW 16	water	2011-06-29	14:30	2011-06-30
270853	MW 17	water	2011-06-29	11:40	2011-06-30
270854	MW 18	water	2011-06-29	11:50	2011-06-30
270855	MW 19	water	2011-06-29	12:00	2011-06-30
270856	MW 20	water	2011-06-29	12:10	2011-06-30
270857	MW 21	water	2011-06-29	12:20	2011-06-30
270858	MW 22	water	2011-06-29	12:40	2011-06-30
270859	MW 23	water	2011-06-29	13:00	2011-06-30
270860	MW 26	water	2011-06-29	11:30	2011-06-30
270861	MW 27	water	2011-06-29	11:15	2011-06-30
270862	MW 28	water	2011-06-29	14:00	2011-06-30
270863	MW 29	water	2011-06-29	14:15	2011-06-30
270864	MW 34	water	2011-06-28	11:40	2011-06-30
270865	MW 35	water	2011-06-28	11:20	2011-06-30
270866	MW 36	water	2011-06-28	11:00	2011-06-30

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



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

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## Case Narrative

Samples for project Moore to Jal #1 were received by TraceAnalysis, Inc. on 2011-06-30 and assigned to work order 11063030. Samples for work order 11063030 were received intact without headspace and at a temperature of 4.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	70284	2011-07-01 at 08:00	82748	2011-07-01 at 08:58
BTEX	S 8021B	70312	2011-07-05 at 15:30	82778	2011-07-05 at 16:45

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 11063030 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: 270851 - MW 14

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 82748  
Prep Batch: 70284

Analytical Method: S 8021B  
Date Analyzed: 2011-07-01  
Sample Preparation: 2011-07-01

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

Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene		1	3.70	mg/L	100	0.00100
Toluene		1	1.48	mg/L	100	0.00100
Ethylbenzene		1	<0.100	mg/L	100	0.00100
Xylene		1	<0.100	mg/L	100	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			8.62	mg/L	100	10.0	86	67.8 - 129
4-Bromofluorobenzene (4-BFB)			8.50	mg/L	100	10.0	85	51.1 - 128

## Sample: 270852 - MW 16

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 82748  
Prep Batch: 70284

Analytical Method: S 8021B  
Date Analyzed: 2011-07-01  
Sample Preparation: 2011-07-01

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

Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene		1	39.6	mg/L	100	0.00100
Toluene		1	<0.100	mg/L	100	0.00100
Ethylbenzene		1	1.92	mg/L	100	0.00100
Xylene		1	<0.100	mg/L	100	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			8.05	mg/L	100	10.0	80	67.8 - 129
4-Bromofluorobenzene (4-BFB)			8.09	mg/L	100	10.0	81	51.1 - 128

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700376.044.01

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Moore to Jal #1

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**Sample: 270853 - MW 17**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 82748  
Prep Batch: 70284

Analytical Method: S 8021B  
Date Analyzed: 2011-07-01  
Sample Preparation: 2011-07-01

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

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0902	mg/L	1	0.100	90	67.8 - 129
4-Bromofluorobenzene (4-BFB)			0.0882	mg/L	1	0.100	88	51.1 - 128

**Sample: 270854 - MW 18**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 82748  
Prep Batch: 70284

Analytical Method: S 8021B  
Date Analyzed: 2011-07-01  
Sample Preparation: 2011-07-01

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

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0997	mg/L	1	0.100	100	67.8 - 129
4-Bromofluorobenzene (4-BFB)			0.0963	mg/L	1	0.100	96	51.1 - 128

**Sample: 270855 - MW 19**

Laboratory: Midland  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B  
 QC Batch: 82748 Date Analyzed: 2011-07-01 Analyzed By: AG  
 Prep Batch: 70284 Sample Preparation: 2011-07-01 Prepared By: AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.103	mg/L	1	0.100	103	67.8 - 129
4-Bromofluorobenzene (4-BFB)			0.102	mg/L	1	0.100	102	51.1 - 128

**Sample: 270856 - MW 20**

Laboratory: Midland  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B  
 QC Batch: 82748 Date Analyzed: 2011-07-01 Analyzed By: AG  
 Prep Batch: 70284 Sample Preparation: 2011-07-01 Prepared By: AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0980	mg/L	1	0.100	98	67.8 - 129
4-Bromofluorobenzene (4-BFB)			0.0959	mg/L	1	0.100	96	51.1 - 128

Report Date: July 7, 2011  
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**Sample: 270857 - MW 21**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 82748  
Prep Batch: 70284

Analytical Method: S 8021B  
Date Analyzed: 2011-07-01  
Sample Preparation: 2011-07-01

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

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0905	mg/L	1	0.100	90	67.8 - 129
4-Bromofluorobenzene (4-BFB)			0.0898	mg/L	1	0.100	90	51.1 - 128

**Sample: 270858 - MW 22**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 82748  
Prep Batch: 70284

Analytical Method: S 8021B  
Date Analyzed: 2011-07-01  
Sample Preparation: 2011-07-01

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

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0994	mg/L	1	0.100	99	67.8 - 129
4-Bromofluorobenzene (4-BFB)			0.0997	mg/L	1	0.100	100	51.1 - 128

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**Sample: 270859 - MW 23**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 82748  
Prep Batch: 70284

Analytical Method: S 8021B  
Date Analyzed: 2011-07-01  
Sample Preparation: 2011-07-01

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

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0974	mg/L	1	0.100	97	67.8 - 129
4-Bromofluorobenzene (4-BFB)			0.0955	mg/L	1	0.100	96	51.1 - 128

**Sample: 270860 - MW 26**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 82748  
Prep Batch: 70284

Analytical Method: S 8021B  
Date Analyzed: 2011-07-01  
Sample Preparation: 2011-07-01

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

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.100	mg/L	1	0.100	100	67.8 - 129
4-Bromofluorobenzene (4-BFB)			0.0984	mg/L	1	0.100	98	51.1 - 128

Report Date: July 7, 2011  
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**Sample: 270861 - MW 27**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 82748  
Prep Batch: 70284

Analytical Method: S 8021B  
Date Analyzed: 2011-07-01  
Sample Preparation: 2011-07-01

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

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0996	mg/L	1	0.100	100	67.8 - 129
4-Bromofluorobenzene (4-BFB)			0.0977	mg/L	1	0.100	98	51.1 - 128

**Sample: 270862 - MW 28**

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 82748  
Prep Batch: 70284

Analytical Method: S 8021B  
Date Analyzed: 2011-07-01  
Sample Preparation: 2011-07-01

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

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0978	mg/L	1	0.100	98	67.8 - 129
4-Bromofluorobenzene (4-BFB)			0.0964	mg/L	1	0.100	96	51.1 - 128

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Sample: 270863 - MW 29

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 82778  
Prep Batch: 70312

Analytical Method: S 8021B  
Date Analyzed: 2011-07-05  
Sample Preparation: 2011-07-05

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	28.6	mg/L	200	0.00100
Toluene		1	<0.200	mg/L	200	0.00100
Ethylbenzene		1	2.08	mg/L	200	0.00100
Xylene		1	4.19	mg/L	200	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			17.9	mg/L	200	20.0	90	67.8 - 129
4-Bromofluorobenzene (4-BFB)			17.8	mg/L	200	20.0	89	51.1 - 128

Sample: 270864 - MW 34

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 82748  
Prep Batch: 70284

Analytical Method: S 8021B  
Date Analyzed: 2011-07-01  
Sample Preparation: 2011-07-01

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

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0924	mg/L	1	0.100	92	67.8 - 129
4-Bromofluorobenzene (4-BFB)			0.0924	mg/L	1	0.100	92	51.1 - 128

Report Date: July 7, 2011  
700376.044.01

Work Order: 11063030  
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Sample: 270865 - MW 35

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 82748  
Prep Batch: 70284

Analytical Method: S 8021B  
Date Analyzed: 2011-07-01  
Sample Preparation: 2011-07-01

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	0.0187	mg/L	1	0.00100
Toluene		1	<0.00100	mg/L	1	0.00100
Ethylbenzene		1	<0.00100	mg/L	1	0.00100
Xylene		1	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0904	mg/L	1	0.100	90	67.8 - 129
4-Bromofluorobenzene (4-BFB)			0.0932	mg/L	1	0.100	93	51.1 - 128

Sample: 270866 - MW 36

Laboratory: Midland  
Analysis: BTEX  
QC Batch: 82748  
Prep Batch: 70284

Analytical Method: S 8021B  
Date Analyzed: 2011-07-01  
Sample Preparation: 2011-07-01

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

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0969	mg/L	1	0.100	97	67.8 - 129
4-Bromofluorobenzene (4-BFB)			0.0999	mg/L	1	0.100	100	51.1 - 128

## Method Blanks

Method Blank (1)      QC Batch: 82748

QC Batch: 82748  
Prep Batch: 70284

Date Analyzed: 2011-07-01  
QC Preparation: 2011-07-01

Analyzed By: AG  
Prepared By: ME

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000400	mg/L	0.001
Toluene		1	<0.000300	mg/L	0.001
Ethylbenzene		1	<0.000300	mg/L	0.001
Xylene		1	<0.000333	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.103	mg/L	1	0.100	103	70.2 - 118
4-Bromofluorobenzene (4-BFB)			0.0970	mg/L	1	0.100	97	47.3 - 116

Method Blank (1)      QC Batch: 82778

QC Batch: 82778  
Prep Batch: 70312

Date Analyzed: 2011-07-05  
QC Preparation: 2011-07-05

Analyzed By: AG  
Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000400	mg/L	0.001
Toluene		1	<0.000300	mg/L	0.001
Ethylbenzene		1	<0.000300	mg/L	0.001
Xylene		1	<0.000333	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.102	mg/L	1	0.100	102	70.2 - 118
4-Bromofluorobenzene (4-BFB)			0.0992	mg/L	1	0.100	99	47.3 - 116

## Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 82748  
Prep Batch: 70284

Date Analyzed: 2011-07-01  
QC Preparation: 2011-07-01

Analyzed By: AG  
Prepared By: ME

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.103	mg/L	1	0.100	<0.000400	103	76.8 - 110
Toluene		1	0.103	mg/L	1	0.100	<0.000300	103	81 - 118
Ethylbenzene		1	0.102	mg/L	1	0.100	<0.000300	102	78.8 - 118
Xylene		1	0.311	mg/L	1	0.300	<0.000333	104	80.3 - 119

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.105	mg/L	1	0.100	<0.000400	105	76.8 - 110	2	20
Toluene		1	0.106	mg/L	1	0.100	<0.000300	106	81 - 118	3	20
Ethylbenzene		1	0.106	mg/L	1	0.100	<0.000300	106	78.8 - 118	4	20
Xylene		1	0.319	mg/L	1	0.300	<0.000333	106	80.3 - 119	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)	0.0950	0.102	mg/L	1	0.100	95	102	66.6 - 114
4-Bromofluorobenzene (4-BFB)	0.0955	0.104	mg/L	1	0.100	96	104	68.2 - 124

### Laboratory Control Spike (LCS-1)

QC Batch: 82778  
Prep Batch: 70312

Date Analyzed: 2011-07-05  
QC Preparation: 2011-07-05

Analyzed By: AG  
Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0966	mg/L	1	0.100	<0.000400	97	76.8 - 110
Toluene		1	0.102	mg/L	1	0.100	<0.000300	102	81 - 118
Ethylbenzene		1	0.102	mg/L	1	0.100	<0.000300	102	78.8 - 118
Xylene		1	0.309	mg/L	1	0.300	<0.000333	103	80.3 - 119

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

Report Date: July 7, 2011  
700376.044.01

Work Order: 11063030  
Moore to Jal #1

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Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Benzene		1	0.0994	mg/L	1	0.100	<0.000400	99	76.8 - 110	3	20
Toluene		1	0.106	mg/L	1	0.100	<0.000300	106	81 - 118	4	20
Ethylbenzene		1	0.108	mg/L	1	0.100	<0.000300	108	78.8 - 118	6	20
Xylene		1	0.322	mg/L	1	0.300	<0.000333	107	80.3 - 119	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
4-Bromofluorobenzene (4-BFB)	0.117	0.104	mg/L	1	0.100	117	104	68.2 - 124

**Matrix Spike (MS-1) Spiked Sample: 270852**

QC Batch: 82748  
Prep Batch: 70284

Date Analyzed: 2011-07-01  
QC Preparation: 2011-07-01

Analyzed By: AG  
Prepared By: ME

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Benzene		1	50.9	mg/L	100	10.0	39.5546	113	77.9 - 114
Toluene		1	10.3	mg/L	100	10.0	<0.0300	103	78.3 - 111
Ethylbenzene		1	11.8	mg/L	100	10.0	1.9177	99	75.3 - 110
Xylene		1	30.9	mg/L	100	30.0	<0.0333	103	75.7 - 109

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

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Benzene		1	51.1	mg/L	100	10.0	39.5546	115	77.9 - 114	0	20
Toluene		1	10.4	mg/L	100	10.0	<0.0300	104	78.3 - 111	1	20
Ethylbenzene		1	12.0	mg/L	100	10.0	1.9177	101	75.3 - 110	2	20
Xylene		1	31.2	mg/L	100	30.0	<0.0333	104	75.7 - 109	1	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	10.2	9.66	mg/L	100	10	102	97	60.1 - 135

Report Date: July 7, 2011  
700376.044.01

Work Order: 11063030  
Moore to Jal #1

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Lovington, NM

**Matrix Spike (MS-1) Spiked Sample: 270863**

QC Batch: 82778  
Prep Batch: 70312

Date Analyzed: 2011-07-05  
QC Preparation: 2011-07-05

Analyzed By: AG  
Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	46.9	mg/L	200	20.0	28.6494	91	77.9 - 114
Toluene		1	18.5	mg/L	200	20.0	<0.0600	92	78.3 - 111
Ethylbenzene		1	19.9	mg/L	200	20.0	2.0827	89	75.3 - 110
Xylene		1	57.4	mg/L	200	60.0	4.1922	89	75.7 - 109

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	49.6	mg/L	200	20.0	28.6494	105	77.9 - 114	6	20
Toluene		1	20.5	mg/L	200	20.0	<0.0600	102	78.3 - 111	10	20
Ethylbenzene		1	21.7	mg/L	200	20.0	2.0827	98	75.3 - 110	9	20
Xylene		1	62.8	mg/L	200	60.0	4.1922	98	75.7 - 109	9	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)	18.2	18.8	mg/L	200	20	91	94	68.3 - 107
4-Bromofluorobenzene (4-BFB)	19.1	19.6	mg/L	200	0	98	98	60.1 - 135

## Calibration Standards

### Standard (CCV-1)

QC Batch: 82748

Date Analyzed: 2011-07-01

Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.104	104	80 - 120	2011-07-01
Toluene		1	mg/L	0.100	0.103	103	80 - 120	2011-07-01
Ethylbenzene		1	mg/L	0.100	0.103	103	80 - 120	2011-07-01
Xylene		1	mg/L	0.300	0.310	103	80 - 120	2011-07-01

### Standard (CCV-2)

QC Batch: 82748

Date Analyzed: 2011-07-01

Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.111	111	80 - 120	2011-07-01
Toluene		1	mg/L	0.100	0.108	108	80 - 120	2011-07-01
Ethylbenzene		1	mg/L	0.100	0.108	108	80 - 120	2011-07-01
Xylene		1	mg/L	0.300	0.326	109	80 - 120	2011-07-01

### Standard (CCV-3)

QC Batch: 82748

Date Analyzed: 2011-07-01

Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.103	103	80 - 120	2011-07-01
Toluene		1	mg/L	0.100	0.102	102	80 - 120	2011-07-01
Ethylbenzene		1	mg/L	0.100	0.102	102	80 - 120	2011-07-01
Xylene		1	mg/L	0.300	0.306	102	80 - 120	2011-07-01

Report Date: July 7, 2011  
700376.044.01

Work Order: 11063030  
Moore to Jal #1

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**Standard (CCV-2)**

QC Batch: 82778

Date Analyzed: 2011-07-05

Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0927	93	80 - 120	2011-07-05
Toluene		1	mg/L	0.100	0.0974	97	80 - 120	2011-07-05
Ethylbenzene		1	mg/L	0.100	0.0980	98	80 - 120	2011-07-05
Xylene		1	mg/L	0.300	0.295	98	80 - 120	2011-07-05

**Standard (CCV-3)**

QC Batch: 82778

Date Analyzed: 2011-07-05

Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0896	90	80 - 120	2011-07-05
Toluene		1	mg/L	0.100	0.0938	94	80 - 120	2011-07-05
Ethylbenzene		1	mg/L	0.100	0.0942	94	80 - 120	2011-07-05
Xylene		1	mg/L	0.300	0.284	95	80 - 120	2011-07-05

## Appendix

### Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-10-TX	Midland

### Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

### Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.



LAB Order 110163030

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# Trace Analysis, Inc.

email: lab@traceanalysis.com

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

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

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

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

Company Name: Palou Phone #: \_\_\_\_\_

Address: 2901 State Hwy 349 Fax #: \_\_\_\_\_

Contact Person: Steve Kelly Email: skelly@palou.com

Invoice to: 2002-10270

Project #: 700376, 044, 01 Project Name: Waste to Del #1

Project Location (including state): Hobbs NM Sampler Signature: [Signature]

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING			
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE	DATE	TIME
803	MW 28	3	4oz	X				X						4/11/11	1400
804	MW 34	1	1											6/29/11	1140
805	MW 35	1	1											11/20	1120
806	MW 36	1	1											1/00	1100

- MTBE 8021 / 602 / 8260 / 624
- BTEX 8021 / 602 / 8260 / 624
- TPH 418.1 / TX1005 / TX1005 Ext(C35)
- TPH 8015 GRO / DRO / TVHC
- PAH 8270 / 625
- Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7
- TCLP Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Volatiles
- TCLP Semi Volatiles
- TCLP Pesticides
- RCI
- GC/MS Vol. 8260 / 624
- GC/MS Semi. Vol. 8270 / 625
- PCB's 8082 / 608
- Pesticides 8081 / 608
- BOD, TSS, pH
- Moisture Content
- Cl, F, SO<sub>4</sub>, NO<sub>3</sub>, NO<sub>2</sub>, Alkalinity
- Na, Ca, Mg, K, TDS, EC

ANALYSIS REQUEST  
(Circle or Specify Method No.)

Turn Around Time if different from standard  
Hold

Relinquished by: [Signature] Company: Talon Date: 6-30-11 Time: 0855

Received by: [Signature] Company: TR Date: 6/30/11 Time: 9:15

INST OBS COR

LAB USE ONLY

REMARKS: 2001 test Midland

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

## Summary Report

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

Report Date: September 28, 2011

Work Order: 11092302



Project Location: Lovington, NM  
 Project Name: Moore to Jal #1  
 Project Number: 700376.044.01  
 SRS #: 2002-10270

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
278196	MW-14	water	2011-09-21	11:40	2011-09-22
278197	MW-16	water	2011-09-21	16:15	2011-09-22
278198	MW-17	water	2011-09-21	15:00	2011-09-22
278199	MW-18	water	2011-09-21	14:42	2011-09-22
278200	MW-19	water	2011-09-21	14:25	2011-09-22
278201	MW-20	water	2011-09-21	14:00	2011-09-22
278202	MW-21	water	2011-09-22	11:20	2011-09-22
278203	MW-22	water	2011-09-22	11:00	2011-09-22
278204	MW-23	water	2011-09-22	10:45	2011-09-22
278205	MW-26	water	2011-09-21	12:15	2011-09-22
278206	MW-27	water	2011-09-21	12:00	2011-09-22
278207	MW-28	water	2011-09-21	11:20	2011-09-22
278208	MW-29	water	2011-09-21	10:30	2011-09-22
278209	MW-34	water	2011-09-22	13:20	2011-09-22
278210	MW-35	water	2011-09-22	13:40	2011-09-22
278211	MW-36	water	2011-09-22	14:00	2011-09-22

Sample - Field Code	BTEX				Total BTEX Total BTEX (mg/L)
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	
278196 - MW-14	5.62 Qr,Qs	1.58 Qr,Qs	0.292 Qr,Qs	0.543 Qr,Qs	8.04
278197 - MW-16	47.6	0.225	1.50	<0.200	49.3
278198 - MW-17	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00600
278199 - MW-18	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00600
278200 - MW-19	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00600
278201 - MW-20	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00600
278202 - MW-21	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00600
278203 - MW-22	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00600

continued ...

... continued

Sample - Field Code	BTEX				Total BTEX
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	Total BTEX (mg/L)
278204 - MW-23	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00600
278205 - MW-26	0.00400 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00600
278206 - MW-27	0.00760 Qr,Qs	0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	0.00860
278207 - MW-28	0.0184 Qr,Qs	<0.00100 Qr,Qs	0.00100 Qr,Qs	<0.00100 Qr,Qs	0.0199
278208 - MW-29	41.1	<0.200	1.30	1.22	43.6
278209 - MW-34	<0.00100	<0.00100	<0.00100	<0.00100	<0.00600
278210 - MW-35	0.00610 Qr,Qs	0.00130 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	0.00810
278211 - MW-36	0.00110 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00600



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

### Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

## Analytical and Quality Control Report

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

Report Date: September 28, 2011

Work Order: 11092302



Project Location: Lovington, NM  
 Project Name: Moore to Jal #1  
 Project Number: 700376.044.01  
 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
278196	MW-14	water	2011-09-21	11:40	2011-09-22
278197	MW-16	water	2011-09-21	16:15	2011-09-22
278198	MW-17	water	2011-09-21	15:00	2011-09-22
278199	MW-18	water	2011-09-21	14:42	2011-09-22
278200	MW-19	water	2011-09-21	14:25	2011-09-22
278201	MW-20	water	2011-09-21	14:00	2011-09-22
278202	MW-21	water	2011-09-22	11:20	2011-09-22
278203	MW-22	water	2011-09-22	11:00	2011-09-22
278204	MW-23	water	2011-09-22	10:45	2011-09-22
278205	MW-26	water	2011-09-21	12:15	2011-09-22
278206	MW-27	water	2011-09-21	12:00	2011-09-22
278207	MW-28	water	2011-09-21	11:20	2011-09-22
278208	MW-29	water	2011-09-21	10:30	2011-09-22
278209	MW-34	water	2011-09-22	13:20	2011-09-22
278210	MW-35	water	2011-09-22	13:40	2011-09-22
278211	MW-36	water	2011-09-22	14:00	2011-09-22

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



---

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

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## Case Narrative

Samples for project Moore to Jal #1 were received by TraceAnalysis, Inc. on 2011-09-22 and assigned to work order 11092302. Samples for work order 11092302 were received intact without headspace and at a temperature of 3.7 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	72159	2011-09-23 at 07:30	84973	2011-09-23 at 07:30
BTEX	S 8021B	72192	2011-09-26 at 10:58	85014	2011-09-26 at 10:58
Total BTEX	S 8021B	72159	2011-09-23 at 07:30	84973	2011-09-23 at 07:30
Total BTEX	S 8021B	72192	2011-09-26 at 10:58	85014	2011-09-26 at 10:58

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11092302 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: 278196 - MW-14**

Laboratory: Lubbock	Analytical Method: S 8021B	Prep Method: S 5030B
Analysis: BTEX, Total BTEX	Date Analyzed: 2011-09-23	Analyzed By: MT
QC Batch: 84973	Sample Preparation: 2011-09-23	Prepared By: MT
Prep Batch: 72159		

Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene	Qr, Qs	1	5.62	mg/L	50	0.00100
Toluene	Qr, Qs	1	1.58	mg/L	50	0.00100
Ethylbenzene	Qr, Qs	1	0.292	mg/L	50	0.00100
Xylene	Qr, Qs	1	0.543	mg/L	50	0.00100
Total BTEX			8.04	mg/L	50	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.60	mg/L	50	5.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)			4.71	mg/L	50	5.00	94	70 - 130

**Sample: 278197 - MW-16**

Laboratory: Lubbock	Analytical Method: S 8021B	Prep Method: S 5030B
Analysis: BTEX, Total BTEX	Date Analyzed: 2011-09-26	Analyzed By: MT
QC Batch: 85014	Sample Preparation: 2011-09-26	Prepared By: MT
Prep Batch: 72192		

Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene		1	47.6	mg/L	200	0.00100
Toluene		1	0.225	mg/L	200	0.00100
Ethylbenzene		1	1.50	mg/L	200	0.00100
Xylene	v	1	<0.200	mg/L	200	0.00100
Total BTEX			49.3	mg/L	200	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			16.9	mg/L	200	20.0	84	70 - 130
4-Bromofluorobenzene (4-BFB)			17.4	mg/L	200	20.0	87	70 - 130

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**Sample: 278198 - MW-17**

Laboratory: Lubbock  
Analysis: BTEX, Total BTEX      Analytical Method: S 8021B      Prep Method: S 5030B  
QC Batch: 84973      Date Analyzed: 2011-09-23      Analyzed By: MT  
Prep Batch: 72159      Sample Preparation: 2011-09-23      Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Toluene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0922	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0951	mg/L	1	0.100	95	70 - 130

**Sample: 278199 - MW-18**

Laboratory: Lubbock  
Analysis: BTEX, Total BTEX      Analytical Method: S 8021B      Prep Method: S 5030B  
QC Batch: 84973      Date Analyzed: 2011-09-23      Analyzed By: MT  
Prep Batch: 72159      Sample Preparation: 2011-09-23      Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Toluene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0870	mg/L	1	0.100	87	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0935	mg/L	1	0.100	94	70 - 130

**Sample: 278200 - MW-19**

Laboratory: Lubbock  
 Analysis: BTEX, Total BTEX      Analytical Method: S 8021B      Prep Method: S 5030B  
 QC Batch: 84973      Date Analyzed: 2011-09-23      Analyzed By: MT  
 Prep Batch: 72159      Sample Preparation: 2011-09-23      Prepared By: MT

Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Toluene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0874	mg/L	1	0.100	87	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0904	mg/L	1	0.100	90	70 - 130

**Sample: 278201 - MW-20**

Laboratory: Lubbock  
 Analysis: BTEX, Total BTEX      Analytical Method: S 8021B      Prep Method: S 5030B  
 QC Batch: 84973      Date Analyzed: 2011-09-23      Analyzed By: MT  
 Prep Batch: 72159      Sample Preparation: 2011-09-23      Prepared By: MT

Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene	J,Qr,Qs	1	<0.00100	mg/L	1	0.00100
Toluene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0864	mg/L	1	0.100	86	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0963	mg/L	1	0.100	96	70 - 130

**Sample: 278202 - MW-21**

Laboratory: Lubbock  
 Analysis: BTEX, Total BTEX      Analytical Method: S 8021B      Prep Method: S 5030B  
 QC Batch: 84973      Date Analyzed: 2011-09-23      Analyzed By: MT  
 Prep Batch: 72159      Sample Preparation: 2011-09-23      Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Toluene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0849	mg/L	1	0.100	85	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0886	mg/L	1	0.100	89	70 - 130

**Sample: 278203 - MW-22**

Laboratory: Lubbock  
 Analysis: BTEX, Total BTEX      Analytical Method: S 8021B      Prep Method: S 5030B  
 QC Batch: 84973      Date Analyzed: 2011-09-23      Analyzed By: MT  
 Prep Batch: 72159      Sample Preparation: 2011-09-23      Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Toluene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0925	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)			0.101	mg/L	1	0.100	101	70 - 130

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Sample: 278204 - MW-23

Laboratory: Lubbock  
Analysis: BTEX, Total BTEX      Analytical Method: S 8021B      Prep Method: S 5030B  
QC Batch: 84973      Date Analyzed: 2011-09-23      Analyzed By: MT  
Prep Batch: 72159      Sample Preparation: 2011-09-23      Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Toluene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0845	mg/L	1	0.100	84	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0884	mg/L	1	0.100	88	70 - 130

Sample: 278205 - MW-26

Laboratory: Lubbock  
Analysis: BTEX, Total BTEX      Analytical Method: S 8021B      Prep Method: S 5030B  
QC Batch: 84973      Date Analyzed: 2011-09-23      Analyzed By: MT  
Prep Batch: 72159      Sample Preparation: 2011-09-23      Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr, Qs	1	0.00400	mg/L	1	0.00100
Toluene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0904	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0856	mg/L	1	0.100	86	70 - 130

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**Sample: 278206 - MW-27**

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 84973

Prep Batch: 72159

Analytical Method: S 8021B

Date Analyzed: 2011-09-23

Sample Preparation: 2011-09-23

Prep Method: S 5030B

Analyzed By: MT

Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr, Qs	1	0.00760	mg/L	1	0.00100
Toluene	Qr, Qs	1	0.00100	mg/L	1	0.00100
Ethylbenzene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Total BTEX			0.00860	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0961	mg/L	1	0.100	96	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0962	mg/L	1	0.100	96	70 - 130

**Sample: 278207 - MW-28**

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 84973

Prep Batch: 72159

Analytical Method: S 8021B

Date Analyzed: 2011-09-23

Sample Preparation: 2011-09-23

Prep Method: S 5030B

Analyzed By: MT

Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr, Qs	1	0.0184	mg/L	1	0.00100
Toluene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr, Qs	1	0.00100	mg/L	1	0.00100
Xylene	Qr, Qs, U	1	<0.00100	mg/L	1	0.00100
Total BTEX			0.0199	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0929	mg/L	1	0.100	93	70 - 130
4-Bromofluorobenzene (4-BFB)			0.100	mg/L	1	0.100	100	70 - 130

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Sample: 278208 - MW-29

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 85014

Prep Batch: 72192

Analytical Method: S 8021B

Date Analyzed: 2011-09-26

Sample Preparation: 2011-09-26

Prep Method: S 5030B

Analyzed By: MT

Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	41.1	mg/L	200	0.00100
Toluene	u	1	<0.200	mg/L	200	0.00100
Ethylbenzene		1	1.30	mg/L	200	0.00100
Xylene		1	1.22	mg/L	200	0.00100
Total BTEX			43.6	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			20.0	mg/L	200	20.0	100	70 - 130
4-Bromofluorobenzene (4-BFB)			20.1	mg/L	200	20.0	100	70 - 130

Sample: 278209 - MW-34

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 85014

Prep Batch: 72192

Analytical Method: S 8021B

Date Analyzed: 2011-09-26

Sample Preparation: 2011-09-26

Prep Method: S 5030B

Analyzed By: MT

Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	u	1	<0.00100	mg/L	1	0.00100
Toluene	u	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	u	1	<0.00100	mg/L	1	0.00100
Xylene	u	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.108	mg/L	1	0.100	108	70 - 130
4-Bromofluorobenzene (4-BFB)			0.103	mg/L	1	0.100	103	70 - 130

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Sample: 278210 - MW-35

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 84973

Prep Batch: 72159

Analytical Method: S 8021B

Date Analyzed: 2011-09-23

Sample Preparation: 2011-09-23

Prep Method: S 5030B

Analyzed By: MT

Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr,Qs	1	0.00610	mg/L	1	0.00100
Toluene	Qr,Qs	1	0.00130	mg/L	1	0.00100
Ethylbenzene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			0.00810	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0923	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0951	mg/L	1	0.100	95	70 - 130

Sample: 278211 - MW-36

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 84973

Prep Batch: 72159

Analytical Method: S 8021B

Date Analyzed: 2011-09-23

Sample Preparation: 2011-09-23

Prep Method: S 5030B

Analyzed By: MT

Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr,Qs	1	0.00110	mg/L	1	0.00100
Toluene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,Qs,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0839	mg/L	1	0.100	84	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0903	mg/L	1	0.100	90	70 - 130

## Method Blanks

Method Blank (1) QC Batch: 84973

QC Batch: 84973  
Prep Batch: 72159

Date Analyzed: 2011-09-23  
QC Preparation: 2011-09-23

Analyzed By: MT  
Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000743	mg/L	0.001
Toluene		1	<0.000671	mg/L	0.001
Ethylbenzene		1	<0.000923	mg/L	0.001
Xylene		1	<0.000838	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0945	mg/L	1	0.100	94	70 - 130
4-Bromofluorobenzene (4-BFB)			0.102	mg/L	1	0.100	102	70 - 130

Method Blank (1) QC Batch: 85014

QC Batch: 85014  
Prep Batch: 72192

Date Analyzed: 2011-09-26  
QC Preparation: 2011-09-26

Analyzed By: MT  
Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000765	mg/L	0.001
Toluene		1	<0.000719	mg/L	0.001
Ethylbenzene		1	<0.000860	mg/L	0.001
Xylene		1	<0.000942	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0933	mg/L	1	0.100	93	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0932	mg/L	1	0.100	93	70 - 130

## Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 84973  
Prep Batch: 72159

Date Analyzed: 2011-09-23  
QC Preparation: 2011-09-23

Analyzed By: MT  
Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.105	mg/L	1	0.100	<0.000743	105	70 - 130
Toluene		1	0.0990	mg/L	1	0.100	<0.000671	99	70 - 130
Ethylbenzene		1	0.103	mg/L	1	0.100	<0.000923	103	70 - 130
Xylene		1	0.325	mg/L	1	0.300	<0.000838	108	70 - 130

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0972	mg/L	1	0.100	<0.000743	97	70 - 130	8	20
Toluene		1	0.0948	mg/L	1	0.100	<0.000671	95	70 - 130	4	20
Ethylbenzene		1	0.0944	mg/L	1	0.100	<0.000923	94	70 - 130	9	20
Xylene		1	0.287	mg/L	1	0.300	<0.000838	96	70 - 130	12	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)	0.0903	0.0917	mg/L	1	0.100	90	92	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0968	0.100	mg/L	1	0.100	97	100	70 - 130

### Laboratory Control Spike (LCS-1)

QC Batch: 85014  
Prep Batch: 72192

Date Analyzed: 2011-09-26  
QC Preparation: 2011-09-26

Analyzed By: MT  
Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.106	mg/L	1	0.100	<0.000765	106	70 - 130
Toluene		1	0.0898	mg/L	1	0.100	<0.000719	90	70 - 130
Ethylbenzene		1	0.0864	mg/L	1	0.100	<0.000860	86	70 - 130
Xylene		1	0.263	mg/L	1	0.300	<0.000942	88	70 - 130

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

Report Date: September 28, 2011  
700376.044.01

Work Order: 11092302  
Moore to Jal #1

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Lovington, NM

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Benzene		1	0.106	mg/L	1	0.100	<0.000765	106	70 - 130	0	20
Toluene		1	0.0973	mg/L	1	0.100	<0.000719	97	70 - 130	8	20
Ethylbenzene		1	0.0932	mg/L	1	0.100	<0.000860	93	70 - 130	8	20
Xylene		1	0.282	mg/L	1	0.300	<0.000942	94	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
4-Bromofluorobenzene (4-BFB)	0.0990	0.102	mg/L	1	0.100	99	102	70 - 130

**Matrix Spike (MS-1)** Spiked Sample: 278198

QC Batch: 84973  
Prep Batch: 72159

Date Analyzed: 2011-09-23  
QC Preparation: 2011-09-23

Analyzed By: MT  
Prepared By: MT

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Benzene	qs	1	0.0619	mg/L	1	0.100	<0.000743	62	70 - 130
Toluene	qs	1	0.0597	mg/L	1	0.100	<0.000671	60	70 - 130
Ethylbenzene	qs	1	0.0606	mg/L	1	0.100	<0.000923	61	70 - 130
Xylene	qs	1	0.182	mg/L	1	0.300	<0.000838	61	70 - 130

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

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Benzene	qr	1	0.0800	mg/L	1	0.100	<0.000743	80	70 - 130	26	20
Toluene	qr	1	0.0778	mg/L	1	0.100	<0.000671	78	70 - 130	26	20
Ethylbenzene	qr	1	0.0800	mg/L	1	0.100	<0.000923	80	70 - 130	28	20
Xylene	qr	1	0.240	mg/L	1	0.300	<0.000838	80	70 - 130	28	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
4-Bromofluorobenzene (4-BFB)	0.0971	0.0964	mg/L	1	0.1	97	96	70 - 130

Report Date: September 28, 2011  
700376.044.01

Work Order: 11092302  
Moore to Jal #1

Page Number: 16 of 19  
Lovington, NM

**Matrix Spike (MS-1) Spiked Sample: 278197**

QC Batch: 85014  
Prep Batch: 72192

Date Analyzed: 2011-09-26  
QC Preparation: 2011-09-26

Analyzed By: MT  
Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	62.7	mg/L	200	20.0	47.6	76	70 - 130
Toluene		1	20.1	mg/L	200	20.0	0.225	99	70 - 130
Ethylbenzene		1	20.8	mg/L	200	20.0	1.5	96	70 - 130
Xylene		1	58.0	mg/L	200	60.0	<0.188	97	70 - 130

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	62.7	mg/L	200	20.0	47.6	76	70 - 130	0	20
Toluene		1	17.5	mg/L	200	20.0	0.225	86	70 - 130	14	20
Ethylbenzene		1	18.4	mg/L	200	20.0	1.5	84	70 - 130	12	20
Xylene		1	51.7	mg/L	200	60.0	<0.188	86	70 - 130	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. Limit
Trifluorotoluene (TFT)	18.7	17.9	mg/L	200	20	94	90	70 - 130
4-Bromofluorobenzene (4-BFB)	18.8	17.8	mg/L	200	20	94	89	70 - 130

## Calibration Standards

### Standard (CCV-1)

QC Batch: 84973

Date Analyzed: 2011-09-23

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.103	103	80 - 120	2011-09-23
Toluene		1	mg/L	0.100	0.101	101	80 - 120	2011-09-23
Ethylbenzene		1	mg/L	0.100	0.107	107	80 - 120	2011-09-23
Xylene		1	mg/L	0.300	0.321	107	80 - 120	2011-09-23

### Standard (CCV-2)

QC Batch: 84973

Date Analyzed: 2011-09-23

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.102	102	80 - 120	2011-09-23
Toluene		1	mg/L	0.100	0.101	101	80 - 120	2011-09-23
Ethylbenzene		1	mg/L	0.100	0.102	102	80 - 120	2011-09-23
Xylene		1	mg/L	0.300	0.312	104	80 - 120	2011-09-23

### Standard (CCV-3)

QC Batch: 84973

Date Analyzed: 2011-09-23

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0955	96	80 - 120	2011-09-23
Toluene		1	mg/L	0.100	0.100	100	80 - 120	2011-09-23
Ethylbenzene		1	mg/L	0.100	0.0980	98	80 - 120	2011-09-23
Xylene		1	mg/L	0.300	0.298	99	80 - 120	2011-09-23

Report Date: September 28, 2011  
700376.044.01

Work Order: 11092302  
Moore to Jal #1

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Lovington, NM

**Standard (CCV-1)**

QC Batch: 85014

Date Analyzed: 2011-09-26

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.109	109	80 - 120	2011-09-26
Toluene		1	mg/L	0.100	0.105	105	80 - 120	2011-09-26
Ethylbenzene		1	mg/L	0.100	0.101	101	80 - 120	2011-09-26
Xylene		1	mg/L	0.300	0.304	101	80 - 120	2011-09-26

**Standard (CCV-2)**

QC Batch: 85014

Date Analyzed: 2011-09-26

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.108	108	80 - 120	2011-09-26
Toluene		1	mg/L	0.100	0.103	103	80 - 120	2011-09-26
Ethylbenzene		1	mg/L	0.100	0.0986	99	80 - 120	2011-09-26
Xylene		1	mg/L	0.300	0.295	98	80 - 120	2011-09-26

## Appendix

### Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704219-11-4	Lubbock

### Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

### Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.





## Summary Report

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

Report Date: January 12, 2012

Work Order: 12010201



Project Location: Lovington, NM  
Project Name: Moore to Jal #1  
Project Number: 700376.044.01  
SRS #: 2002-10270

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
285576	MW-14	water	2011-12-29	15:45	2011-12-30
285577	MW-16	water	2011-12-29	15:40	2011-12-30
285578	MW-17	water	2011-12-30	10:55	2011-12-30
285579	MW-18	water	2011-12-30	10:50	2011-12-30
285580	MW-19	water	2011-12-30	11:57	2011-12-30
285581	MW-20	water	2011-12-30	12:08	2011-12-30
285582	MW-21	water	2011-12-29	14:00	2011-12-30
285583	MW-22	water	2011-12-29	12:30	2011-12-30
285584	MW-23	water	2011-12-29	12:45	2011-12-30
285585	MW-26	water	2011-12-29	13:00	2011-12-30
285586	MW-27	water	2011-12-29	14:25	2011-12-30
285587	MW-28	water	2011-12-29	15:00	2011-12-30
285588	MW-29	water	2011-12-29	15:15	2011-12-30
285589	MW-34	water	2011-12-29	11:40	2011-12-30
285590	MW-35	water	2011-12-29	12:00	2011-12-30
285591	MW-36	water	2011-12-29	12:15	2011-12-30

Sample - Field Code	BTEX				Total BTEX Total BTEX (mg/L)
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	
285576 - MW-14	4.65	1.44	0.196	0.305	6.59
285577 - MW-16	33.2	0.320	0.772	<0.200	34.3
285578 - MW-17	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00600
285579 - MW-18	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00600
285580 - MW-19	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00600
285581 - MW-20	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00600
285582 - MW-21	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00600
285583 - MW-22	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00600

continued ...

... continued

Sample - Field Code	BTEX				Total BTEX Total BTEX (mg/L)
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	
285584 - MW-23	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00600
285585 - MW-26	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00600
285586 - MW-27	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00600
285587 - MW-28	0.0412 Qr	<0.00100 Qr	<0.00100 Qr	0.00200 Qr	0.0432
285588 - MW-29	32.5	<0.200	0.991	0.298	33.8
285589 - MW-34	0.00110 Qr	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00600
285590 - MW-35	0.00420 Qr	0.00340 Qr	<0.00100 Qr	<0.00100 Qr	0.00760
285591 - MW-36	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00100 Qr	<0.00600

## Sample: 285577 - MW-16

Param	Flag	Result	Units	RL
Naphthalene		0.0139	mg/L	0.0002
2-Methylnaphthalene		0.00324	mg/L	0.0002
1-Methylnaphthalene		0.00470	mg/L	0.0002
Acenaphthylene		<0.000201	mg/L	0.0002
Acenaphthene		<0.000201	mg/L	0.0002
Dibenzofuran		<0.000201	mg/L	0.0002
Fluorene		<0.000201	mg/L	0.0002
Anthracene		<0.000201	mg/L	0.0002
Phenanthrene		<0.000201	mg/L	0.0002
Fluoranthene		<0.000201	mg/L	0.0002
Pyrene		<0.000201	mg/L	0.0002
Benzo(a)anthracene		<0.000201	mg/L	0.0002
Chrysene		<0.000201	mg/L	0.0002
Benzo(b)fluoranthene		<0.000201	mg/L	0.0002
Benzo(k)fluoranthene		<0.000201	mg/L	0.0002
Benzo(a)pyrene		<0.000201	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.000201	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.000201	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000201	mg/L	0.0002

## Sample: 285586 - MW-27

Param	Flag	Result	Units	RL
Naphthalene		<0.000183	mg/L	0.0002
2-Methylnaphthalene		<0.000183	mg/L	0.0002
1-Methylnaphthalene		<0.000183	mg/L	0.0002
Acenaphthylene		<0.000183	mg/L	0.0002
Acenaphthene		<0.000183	mg/L	0.0002
Dibenzofuran		<0.000183	mg/L	0.0002
Fluorene		<0.000183	mg/L	0.0002
Anthracene		<0.000183	mg/L	0.0002
Phenanthrene		<0.000183	mg/L	0.0002

continued ...

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sample 285586 continued ...

Param	Flag	Result	Units	RL
Fluoranthene		<0.000183	mg/L	0.0002
Pyrene		<0.000183	mg/L	0.0002
Benzo(a)anthracene		<0.000183	mg/L	0.0002
Chrysene		<0.000183	mg/L	0.0002
Benzo(b)fluoranthene		<0.000183	mg/L	0.0002
Benzo(k)fluoranthene		<0.000183	mg/L	0.0002
Benzo(a)pyrene		<0.000183	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.000183	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.000183	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000183	mg/L	0.0002



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

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

## Analytical and Quality Control Report

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

Report Date: January 12, 2012

Work Order: 12010201



Project Location: Lovington, NM  
Project Name: Moore to Jal #1  
Project Number: 700376.044.01  
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
285576	MW-14	water	2011-12-29	15:45	2011-12-30
285577	MW-16	water	2011-12-29	15:40	2011-12-30
285578	MW-17	water	2011-12-30	10:55	2011-12-30
285579	MW-18	water	2011-12-30	10:50	2011-12-30
285580	MW-19	water	2011-12-30	11:57	2011-12-30
285581	MW-20	water	2011-12-30	12:08	2011-12-30
285582	MW-21	water	2011-12-29	14:00	2011-12-30
285583	MW-22	water	2011-12-29	12:30	2011-12-30
285584	MW-23	water	2011-12-29	12:45	2011-12-30
285585	MW-26	water	2011-12-29	13:00	2011-12-30
285586	MW-27	water	2011-12-29	14:25	2011-12-30
285587	MW-28	water	2011-12-29	15:00	2011-12-30
285588	MW-29	water	2011-12-29	15:15	2011-12-30
285589	MW-34	water	2011-12-29	11:40	2011-12-30
285590	MW-35	water	2011-12-29	12:00	2011-12-30
285591	MW-36	water	2011-12-29	12:15	2011-12-30

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



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

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## Case Narrative

Samples for project Moore to Jal #1 were received by TraceAnalysis, Inc. on 2011-12-30 and assigned to work order 12010201. Samples for work order 12010201 were received intact without headspace and at a temperature of 3.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	74339	2012-01-02 at 12:27	87540	2012-01-02 at 12:27
BTEX	S 8021B	74358	2012-01-03 at 16:01	87569	2012-01-03 at 16:01
PAH	S 8270D	74466	2012-01-05 at 15:00	87703	2012-01-05 at 15:00
Total BTEX	S 8021B	74339	2012-01-02 at 12:27	87540	2012-01-02 at 12:27
Total BTEX	S 8021B	74358	2012-01-03 at 16:01	87569	2012-01-03 at 16:01

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 12010201 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: 285576 - MW-14

Laboratory: Lubbock  
 Analysis: BTEX, Total BTEX      Analytical Method: S 8021B      Prep Method: S 5030B  
 QC Batch: 87569      Date Analyzed: 2012-01-03      Analyzed By: MT  
 Prep Batch: 74358      Sample Preparation: 2012-01-03      Prepared By: MT

Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene		1	4.65	mg/L	100	0.00100
Toluene		1	1.44	mg/L	100	0.00100
Ethylbenzene		1	0.196	mg/L	100	0.00100
Xylene		1	0.305	mg/L	100	0.00100
Total BTEX			6.59	mg/L	100	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			10.1	mg/L	100	10.0	101	70 - 130
4-Bromofluorobenzene (4-BFB)			10.6	mg/L	100	10.0	106	70 - 130

## Sample: 285577 - MW-16

Laboratory: Lubbock  
 Analysis: BTEX, Total BTEX      Analytical Method: S 8021B      Prep Method: S 5030B  
 QC Batch: 87569      Date Analyzed: 2012-01-03      Analyzed By: MT  
 Prep Batch: 74358      Sample Preparation: 2012-01-03      Prepared By: MT

Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene		1	33.2	mg/L	200	0.00100
Toluene		1	0.320	mg/L	200	0.00100
Ethylbenzene		1	0.772	mg/L	200	0.00100
Xylene	u	1	<0.200	mg/L	200	0.00100
Total BTEX			34.3	mg/L	200	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			18.8	mg/L	200	20.0	94	70 - 130
4-Bromofluorobenzene (4-BFB)			20.4	mg/L	200	20.0	102	70 - 130

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**Sample: 285577 - MW-16**

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 87703  
Prep Batch: 74466

Analytical Method: S 8270D  
Date Analyzed: 2012-01-05  
Sample Preparation: 2012-01-05

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Naphthalene		1	0.0139	mg/L	1.005	0.000200
2-Methylnaphthalene		1	0.00324	mg/L	1.005	0.000200
1-Methylnaphthalene		1	0.00470	mg/L	1.005	0.000200
Acenaphthylene	u	1	<0.000201	mg/L	1.005	0.000200
Acenaphthene	u	1	<0.000201	mg/L	1.005	0.000200
Dibenzofuran	u	1	<0.000201	mg/L	1.005	0.000200
Fluorene	u	1	<0.000201	mg/L	1.005	0.000200
Anthracene	u	1	<0.000201	mg/L	1.005	0.000200
Phenanthrene	u	1	<0.000201	mg/L	1.005	0.000200
Fluoranthene	u	1	<0.000201	mg/L	1.005	0.000200
Pyrene	u	1	<0.000201	mg/L	1.005	0.000200
Benzo(a)anthracene	u	1	<0.000201	mg/L	1.005	0.000200
Chrysene	u	1	<0.000201	mg/L	1.005	0.000200
Benzo(b)fluoranthene	u	1	<0.000201	mg/L	1.005	0.000200
Benzo(k)fluoranthene	u	1	<0.000201	mg/L	1.005	0.000200
Benzo(a)pyrene	u	1	<0.000201	mg/L	1.005	0.000200
Indeno(1,2,3-cd)pyrene	u	1	<0.000201	mg/L	1.005	0.000200
Dibenzo(a,h)anthracene	u	1	<0.000201	mg/L	1.005	0.000200
Benzo(g,h,i)perylene	u	1	<0.000201	mg/L	1.005	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0242	mg/L	1.005	0.0800	30	10 - 117
2-Fluorobiphenyl			0.0280	mg/L	1.005	0.0800	35	10 - 99
Terphenyl-d14			0.0277	mg/L	1.005	0.0800	35	22.6 - 115

**Sample: 285578 - MW-17**

Laboratory: Lubbock  
Analysis: BTEX, Total BTEX  
QC Batch: 87540  
Prep Batch: 74339

Analytical Method: S 8021B  
Date Analyzed: 2012-01-02  
Sample Preparation: 2012-01-02

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr,u	1	<0.00100	mg/L	1	0.00100

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sample 285578 continued ...

Parameter	Flag	Cert	RL		Dilution	RL
			Result	Units		
Toluene	Qr,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.110	mg/L	1	0.100	110	70 - 130
4-Bromofluorobenzene (4-BFB)			0.112	mg/L	1	0.100	112	70 - 130

**Sample: 285579 - MW-18**

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 87540

Prep Batch: 74339

Analytical Method: S 8021B

Date Analyzed: 2012-01-02

Sample Preparation: 2012-01-02

Prep Method: S 5030B

Analyzed By: ZLM

Prepared By: ZLM

Parameter	Flag	Cert	RL		Dilution	RL
			Result	Units		
Benzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Toluene	Qr,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0914	mg/L	1	0.100	91	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0958	mg/L	1	0.100	96	70 - 130

**Sample: 285580 - MW-19**

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 87540

Prep Batch: 74339

Analytical Method: S 8021B

Date Analyzed: 2012-01-02

Sample Preparation: 2012-01-02

Prep Method: S 5030B

Analyzed By: ZLM

Prepared By: ZLM

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr	1	<0.00100	mg/L	1	0.00100
Toluene	Qr,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0975	mg/L	1	0.100	98	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0974	mg/L	1	0.100	97	70 - 130

**Sample: 285581 - MW-20**

Laboratory: Lubbock  
 Analysis: BTEX, Total BTEX      Analytical Method: S 8021B      Prep Method: S 5030B  
 QC Batch: 87540      Date Analyzed: 2012-01-02      Analyzed By: ZLM  
 Prep Batch: 74339      Sample Preparation: 2012-01-02      Prepared By: ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Toluene	Qr,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0964	mg/L	1	0.100	96	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0983	mg/L	1	0.100	98	70 - 130

**Sample: 285582 - MW-21**

Laboratory: Lubbock  
 Analysis: BTEX, Total BTEX      Analytical Method: S 8021B      Prep Method: S 5030B  
 QC Batch: 87540      Date Analyzed: 2012-01-02      Analyzed By: ZLM  
 Prep Batch: 74339      Sample Preparation: 2012-01-02      Prepared By: ZLM

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Toluene	Qr,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0953	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0993	mg/L	1	0.100	99	70 - 130

Sample: 285583 - MW-22

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 87540

Prep Batch: 74339

Analytical Method: S 8021B

Date Analyzed: 2012-01-02

Sample Preparation: 2012-01-02

Prep Method: S 5030B

Analyzed By: ZLM

Prepared By: ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Toluene	Qr,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0959	mg/L	1	0.100	96	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0970	mg/L	1	0.100	97	70 - 130

Sample: 285584 - MW-23

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 87540

Prep Batch: 74339

Analytical Method: S 8021B

Date Analyzed: 2012-01-02

Sample Preparation: 2012-01-02

Prep Method: S 5030B

Analyzed By: ZLM

Prepared By: ZLM

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Parameter	Flag	Cert	RL		Dilution	RL
			Result	Units		
Benzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Toluene	Qr,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0897	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0921	mg/L	1	0.100	92	70 - 130

**Sample: 285585 - MW-26**

Laboratory: Lubbock  
 Analysis: BTEX, Total BTEX  
 QC Batch: 87540  
 Prep Batch: 74339  
 Analytical Method: S 8021B  
 Date Analyzed: 2012-01-02  
 Sample Preparation: 2012-01-02  
 Prep Method: S 5030B  
 Analyzed By: ZLM  
 Prepared By: ZLM

Parameter	Flag	Cert	RL		Dilution	RL
			Result	Units		
Benzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Toluene	Qr,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0954	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0996	mg/L	1	0.100	100	70 - 130

**Sample: 285586 - MW-27**

Laboratory: Lubbock  
 Analysis: BTEX, Total BTEX  
 QC Batch: 87540  
 Prep Batch: 74339  
 Analytical Method: S 8021B  
 Date Analyzed: 2012-01-02  
 Sample Preparation: 2012-01-02  
 Prep Method: S 5030B  
 Analyzed By: ZLM  
 Prepared By: ZLM

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Parameter	Flag	Cert	RL		Dilution	RL
			Result	Units		
Benzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Toluene	Qr,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.104	mg/L	1	0.100	104	70 - 130
4-Bromofluorobenzene (4-BFB)			0.109	mg/L	1	0.100	109	70 - 130

**Sample: 285586 - MW-27**

Laboratory: Lubbock  
Analysis: PAH  
QC Batch: 87703  
Prep Batch: 74466

Analytical Method: S 8270D  
Date Analyzed: 2012-01-05  
Sample Preparation: 2012-01-05

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

Parameter	Flag	Cert	RL		Dilution	RL
			Result	Units		
Naphthalene	u	1	<0.000183	mg/L	0.913	0.000200
2-Methylnaphthalene	u	1	<0.000183	mg/L	0.913	0.000200
1-Methylnaphthalene	u		<0.000183	mg/L	0.913	0.000200
Acenaphthylene	u	1	<0.000183	mg/L	0.913	0.000200
Acenaphthene	u	1	<0.000183	mg/L	0.913	0.000200
Dibenzofuran	u	1	<0.000183	mg/L	0.913	0.000200
Fluorene	u	1	<0.000183	mg/L	0.913	0.000200
Anthracene	u	1	<0.000183	mg/L	0.913	0.000200
Phenanthrene	u		<0.000183	mg/L	0.913	0.000200
Fluoranthene	u		<0.000183	mg/L	0.913	0.000200
Pyrene	u	1	<0.000183	mg/L	0.913	0.000200
Benzo(a)anthracene	u		<0.000183	mg/L	0.913	0.000200
Chrysene	u	1	<0.000183	mg/L	0.913	0.000200
Benzo(b)fluoranthene	u		<0.000183	mg/L	0.913	0.000200
Benzo(k)fluoranthene	u	1	<0.000183	mg/L	0.913	0.000200
Benzo(a)pyrene	u	1	<0.000183	mg/L	0.913	0.000200
Indeno(1,2,3-cd)pyrene	u	1	<0.000183	mg/L	0.913	0.000200
Dibenzo(a,h)anthracene	u	1	<0.000183	mg/L	0.913	0.000200
Benzo(g,h,i)perylene	u		<0.000183	mg/L	0.913	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0406	mg/L	0.913	0.0800	51	10 - 117
2-Fluorobiphenyl			0.0409	mg/L	0.913	0.0800	51	10 - 99

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sample continued ...

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Terphenyl-d14			0.0512	mg/L	0.913	0.0800	64	22.6 - 115

**Sample: 285587 - MW-28**

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 87540

Prep Batch: 74339

Analytical Method: S 8021B

Date Analyzed: 2012-01-02

Sample Preparation: 2012-01-02

Prep Method: S 5030B

Analyzed By: ZLM

Prepared By: ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr	1	0.0412	mg/L	1	0.00100
Toluene	Qr,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr	1	0.00200	mg/L	1	0.00100
Total BTEX			0.0432	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0805	mg/L	1	0.100	80	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0859	mg/L	1	0.100	86	70 - 130

**Sample: 285588 - MW-29**

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 87569

Prep Batch: 74358

Analytical Method: S 8021B

Date Analyzed: 2012-01-03

Sample Preparation: 2012-01-03

Prep Method: S 5030B

Analyzed By: MT

Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	32.5	mg/L	200	0.00100
Toluene	U	1	<0.200	mg/L	200	0.00100
Ethylbenzene		1	0.991	mg/L	200	0.00100
Xylene		1	0.298	mg/L	200	0.00100
Total BTEX			33.8	mg/L	200	0.00600

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Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			19.0	mg/L	200	20.0	95	70 - 130
4-Bromofluorobenzene (4-BFB)			20.5	mg/L	200	20.0	102	70 - 130

**Sample: 285589 - MW-34**

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 87540

Prep Batch: 74339

Analytical Method: S 8021B

Date Analyzed: 2012-01-02

Sample Preparation: 2012-01-02

Prep Method: S 5030B

Analyzed By: ZLM

Prepared By: ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr	1	0.00110	mg/L	1	0.00100
Toluene	Qr,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.112	mg/L	1	0.100	112	70 - 130
4-Bromofluorobenzene (4-BFB)			0.108	mg/L	1	0.100	108	70 - 130

**Sample: 285590 - MW-35**

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 87540

Prep Batch: 74339

Analytical Method: S 8021B

Date Analyzed: 2012-01-02

Sample Preparation: 2012-01-02

Prep Method: S 5030B

Analyzed By: ZLM

Prepared By: ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr	1	0.00420	mg/L	1	0.00100
Toluene	Qr	1	0.00340	mg/L	1	0.00100
Ethylbenzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			0.00760	mg/L	1	0.00600

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Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.101	mg/L	1	0.100	101	70 - 130
4-Bromofluorobenzene (4-BFB)			0.108	mg/L	1	0.100	108	70 - 130

**Sample: 285591 - MW-36**

Laboratory: Lubbock

Analysis: BTEX, Total BTEX

QC Batch: 87540

Prep Batch: 74339

Analytical Method: S 8021B

Date Analyzed: 2012-01-02

Sample Preparation: 2012-01-02

Prep Method: S 5030B

Analyzed By: ZLM

Prepared By: ZLM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr	1	<0.00100	mg/L	1	0.00100
Toluene	Qr,U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qr,U	1	<0.00100	mg/L	1	0.00100
Total BTEX			<0.00600	mg/L	1	0.00600

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.107	mg/L	1	0.100	107	70 - 130
4-Bromofluorobenzene (4-BFB)			0.107	mg/L	1	0.100	107	70 - 130

## Method Blanks

Method Blank (1)      QC Batch: 87540

QC Batch: 87540  
Prep Batch: 74339

Date Analyzed: 2012-01-02  
QC Preparation: 2012-01-02

Analyzed By: ZLM  
Prepared By: ZLM

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000765	mg/L	0.001
Toluene		1	<0.000719	mg/L	0.001
Ethylbenzene		1	<0.000860	mg/L	0.001
Xylene		1	<0.000942	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.108	mg/L	1	0.100	108	70 - 130
4-Bromofluorobenzene (4-BFB)			0.109	mg/L	1	0.100	109	70 - 130

Method Blank (1)      QC Batch: 87569

QC Batch: 87569  
Prep Batch: 74358

Date Analyzed: 2012-01-03  
QC Preparation: 2012-01-03

Analyzed By: MT  
Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000765	mg/L	0.001
Toluene		1	<0.000719	mg/L	0.001
Ethylbenzene		1	<0.000860	mg/L	0.001
Xylene		1	<0.000942	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0983	mg/L	1	0.100	98	70 - 130
4-Bromofluorobenzene (4-BFB)			0.102	mg/L	1	0.100	102	70 - 130

Method Blank (1)      QC Batch: 87703

QC Batch: 87703  
Prep Batch: 74466

Date Analyzed: 2012-01-05  
QC Preparation: 2012-01-05

Analyzed By: MN  
Prepared By: MN

Parameter	Flag	Cert	MDL Result	Units	RL
Naphthalene		1	<0.0000904	mg/L	0.0002
2-Methylnaphthalene		1	<0.000184	mg/L	0.0002
1-Methylnaphthalene			<0.000120	mg/L	0.0002
Acenaphthylene		1	<0.000101	mg/L	0.0002
Acenaphthene		1	<0.000122	mg/L	0.0002
Dibenzofuran		1	<0.000119	mg/L	0.0002
Fluorene		1	<0.000198	mg/L	0.0002
Anthracene		1	<0.000190	mg/L	0.0002
Phenanthrene			<0.000190	mg/L	0.0002
Fluoranthene			<0.000122	mg/L	0.0002
Pyrene		1	<0.000142	mg/L	0.0002
Benzo(a)anthracene			<0.000138	mg/L	0.0002
Chrysene		1	<0.000155	mg/L	0.0002
Benzo(b)fluoranthene			<0.000179	mg/L	0.0002
Benzo(k)fluoranthene		1	<0.000185	mg/L	0.0002
Benzo(a)pyrene		1	<0.000169	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		1	<0.000139	mg/L	0.0002
Dibenzo(a,h)anthracene		1	<0.000107	mg/L	0.0002
Benzo(g,h,i)perylene			<0.000143	mg/L	0.0002

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0275	mg/L	1	0.0800	34	10 - 117
2-Fluorobiphenyl			0.0249	mg/L	1	0.0800	31	10 - 99
Terphenyl-d14			0.0324	mg/L	1	0.0800	40	22.6 - 115

## Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 87540  
Prep Batch: 74339

Date Analyzed: 2012-01-02  
QC Preparation: 2012-01-02

Analyzed By: ZLM  
Prepared By: ZLM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0985	mg/L	1	0.100	<0.000765	98	70 - 130
Toluene		1	0.0993	mg/L	1	0.100	<0.000719	99	70 - 130
Ethylbenzene		1	0.0938	mg/L	1	0.100	<0.000860	94	70 - 130
Xylene		1	0.274	mg/L	1	0.300	<0.000942	91	70 - 130

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0993	mg/L	1	0.100	<0.000765	99	70 - 130	1	20
Toluene		1	0.101	mg/L	1	0.100	<0.000719	101	70 - 130	2	20
Ethylbenzene		1	0.0967	mg/L	1	0.100	<0.000860	97	70 - 130	3	20
Xylene		1	0.280	mg/L	1	0.300	<0.000942	93	70 - 130	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)	0.102	0.0930	mg/L	1	0.100	102	93	70 - 130
4-Bromofluorobenzene (4-BFB)	0.101	0.0919	mg/L	1	0.100	101	92	70 - 130

### Laboratory Control Spike (LCS-1)

QC Batch: 87569  
Prep Batch: 74358

Date Analyzed: 2012-01-03  
QC Preparation: 2012-01-03

Analyzed By: MT  
Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0965	mg/L	1	0.100	<0.000765	96	70 - 130
Toluene		1	0.101	mg/L	1	0.100	<0.000719	101	70 - 130
Ethylbenzene		1	0.0963	mg/L	1	0.100	<0.000860	96	70 - 130
Xylene		1	0.281	mg/L	1	0.300	<0.000942	94	70 - 130

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

Report Date: January 12, 2012  
700376.044.01

Work Order: 12010201  
Moore to Jal #1

Page Number: 18 of 24  
Lovington, NM

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Benzene		1	0.0931	mg/L	1	0.100	<0.000765	93	70 - 130	4	20
Toluene		1	0.0970	mg/L	1	0.100	<0.000719	97	70 - 130	4	20
Ethylbenzene		1	0.0946	mg/L	1	0.100	<0.000860	95	70 - 130	2	20
Xylene		1	0.272	mg/L	1	0.300	<0.000942	91	70 - 130	3	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	0.0982	0.0887	mg/L	1	0.100	98	89	70 - 130

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

QC Batch: 87703  
Prep Batch: 74466

Date Analyzed: 2012-01-05  
QC Preparation: 2012-01-05

Analyzed By: MN  
Prepared By: MN

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Naphthalene		1	0.0323	mg/L	1	0.0800	<0.0000904	40	10 - 89.9
2-Methylnaphthalene		1	0.0363	mg/L	1	0.0800	<0.000184	45	13.8 - 98.4
1-Methylnaphthalene			0.0345	mg/L	1	0.0800	<0.000120	43	13.1 - 103
Acenaphthylene		1	0.0401	mg/L	1	0.0800	<0.000101	50	20 - 104
Acenaphthene		1	0.0384	mg/L	1	0.0800	<0.000122	48	21.6 - 94.6
Dibenzofuran		1	0.0339	mg/L	1	0.0800	<0.000119	42	22.9 - 74.9
Fluorene		1	0.0413	mg/L	1	0.0800	<0.000198	52	30.8 - 109
Anthracene		1	0.0475	mg/L	1	0.0800	<0.000190	59	37.6 - 96.4
Phenanthrene			0.0471	mg/L	1	0.0800	<0.000190	59	42.4 - 99.8
Fluoranthene			0.0512	mg/L	1	0.0800	<0.000122	64	48 - 118
Pyrene		1	0.0484	mg/L	1	0.0800	<0.000142	60	45.3 - 109
Benzo(a)anthracene			0.0564	mg/L	1	0.0800	<0.000138	70	48 - 113
Chrysene		1	0.0587	mg/L	1	0.0800	<0.000155	73	35.2 - 175
Benzo(b)fluoranthene			0.0363	mg/L	1	0.0800	<0.000179	45	16.6 - 106
Benzo(k)fluoranthene		1	0.0474	mg/L	1	0.0800	<0.000185	59	36.8 - 99.4
Benzo(a)pyrene		1	0.0424	mg/L	1	0.0800	<0.000169	53	32.3 - 99.7
Indeno(1,2,3-cd)pyrene		1	0.0432	mg/L	1	0.0800	<0.000139	54	34.1 - 106
Dibenzo(a,h)anthracene		1	0.0492	mg/L	1	0.0800	<0.000107	62	47.1 - 103
Benzo(g,h,i)perylene			0.0436	mg/L	1	0.0800	<0.000143	54	21.9 - 112

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

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Naphthalene		1	0.0372	mg/L	1	0.0800	<0.0000904	46	10 - 89.9	14	20

*continued ...*

control spikes continued ...

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
2-Methylnaphthalene	1		0.0425	mg/L	1	0.0800	<0.000184	53	13.8 - 98.4	16	20
1-Methylnaphthalene			0.0400	mg/L	1	0.0800	<0.000120	50	13.1 - 103	15	20
Acenaphthylene	1		0.0458	mg/L	1	0.0800	<0.000101	57	20 - 104	13	20
Acenaphthene	1		0.0435	mg/L	1	0.0800	<0.000122	54	21.6 - 94.6	12	20
Dibenzofuran	1		0.0381	mg/L	1	0.0800	<0.000119	48	22.9 - 74.9	12	20
Fluorene	1		0.0462	mg/L	1	0.0800	<0.000198	58	30.8 - 109	11	20
Anthracene	1		0.0541	mg/L	1	0.0800	<0.000190	68	37.6 - 96.4	13	20
Phenanthrene			0.0537	mg/L	1	0.0800	<0.000190	67	42.4 - 99.8	13	20
Fluoranthene			0.0582	mg/L	1	0.0800	<0.000122	73	48 - 118	13	20
Pyrene	1		0.0555	mg/L	1	0.0800	<0.000142	69	45.3 - 109	14	20
Benzo(a)anthracene			0.0638	mg/L	1	0.0800	<0.000138	80	48 - 113	12	20
Chrysene	1		0.0669	mg/L	1	0.0800	<0.000155	84	35.2 - 175	13	20
Benzo(b)fluoranthene			0.0399	mg/L	1	0.0800	<0.000179	50	16.6 - 106	9	20
Benzo(k)fluoranthene	1		0.0499	mg/L	1	0.0800	<0.000185	62	36.8 - 99.4	5	20
Benzo(a)pyrene	1		0.0487	mg/L	1	0.0800	<0.000169	61	32.3 - 99.7	14	20
Indeno(1,2,3-cd)pyrene	1		0.0493	mg/L	1	0.0800	<0.000139	62	34.1 - 106	13	20
Dibenzo(a,h)anthracene	1		0.0564	mg/L	1	0.0800	<0.000107	70	47.1 - 103	14	20
Benzo(g,h,i)perylene			0.0500	mg/L	1	0.0800	<0.000143	62	21.9 - 112	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
Nitrobenzene-d5	0.0323	0.0369	mg/L	1	0.0800	40	46	10 - 117
2-Fluorobiphenyl	0.0353	0.0405	mg/L	1	0.0800	44	51	10 - 99
Terphenyl-d14	0.0502	0.0561	mg/L	1	0.0800	63	70	22.6 - 115

Matrix Spike (MS-1) Spiked Sample: 285578

QC Batch: 87540  
Prep Batch: 74339

Date Analyzed: 2012-01-02  
QC Preparation: 2012-01-02

Analyzed By: ZLM  
Prepared By: ZLM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0956	mg/L	1	0.100	<0.000765	96	70 - 130
Toluene		1	0.0975	mg/L	1	0.100	<0.000719	98	70 - 130
Ethylbenzene		1	0.0943	mg/L	1	0.100	<0.000860	94	70 - 130
Xylene		1	0.272	mg/L	1	0.300	<0.000942	91	70 - 130

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

continued ...

matrix spikes continued ...

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	Qr	Qr	1 0.0775	mg/L	1	0.100	<0.000765	78	70 - 130	21	20
Toluene	Qr	Qr	1 0.0793	mg/L	1	0.100	<0.000719	79	70 - 130	21	20
Ethylbenzene	Qr	Qr	1 0.0764	mg/L	1	0.100	<0.000860	76	70 - 130	21	20
Xylene	Qr	Qr	1 0.220	mg/L	1	0.300	<0.000942	73	70 - 130	21	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)	0.102	0.0948	mg/L	1	0.1	102	95	70 - 130
4-Bromofluorobenzene (4-BFB)	0.100	0.0932	mg/L	1	0.1	100	93	70 - 130

Matrix Spike (MS-1) Spiked Sample: 285588

QC Batch: 87569  
Prep Batch: 74358

Date Analyzed: 2012-01-03  
QC Preparation: 2012-01-03

Analyzed By: MT  
Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	47.3	mg/L	200	20.0	32.5	74	70 - 130
Toluene		1	19.0	mg/L	200	20.0	<0.144	95	70 - 130
Ethylbenzene		1	19.4	mg/L	200	20.0	0.991	92	70 - 130
Xylene		1	53.8	mg/L	200	60.0	0.298	89	70 - 130

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	47.8	mg/L	200	20.0	32.5	76	70 - 130	1	20
Toluene		1	19.6	mg/L	200	20.0	<0.144	98	70 - 130	3	20
Ethylbenzene		1	20.2	mg/L	200	20.0	0.991	96	70 - 130	4	20
Xylene		1	55.6	mg/L	200	60.0	0.298	92	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)	15.6	19.0	mg/L	200	20	78	95	70 - 130
4-Bromofluorobenzene (4-BFB)	16.0	19.3	mg/L	200	20	80	96	70 - 130

## Calibration Standards

### Standard (CCV-1)

QC Batch: 87540

Date Analyzed: 2012-01-02

Analyzed By: ZLM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.103	103	80 - 120	2012-01-02
Toluene		1	mg/L	0.100	0.104	104	80 - 120	2012-01-02
Ethylbenzene		1	mg/L	0.100	0.0980	98	80 - 120	2012-01-02
Xylene		1	mg/L	0.300	0.282	94	80 - 120	2012-01-02

### Standard (CCV-2)

QC Batch: 87540

Date Analyzed: 2012-01-02

Analyzed By: ZLM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.101	101	80 - 120	2012-01-02
Toluene		1	mg/L	0.100	0.103	103	80 - 120	2012-01-02
Ethylbenzene		1	mg/L	0.100	0.0981	98	80 - 120	2012-01-02
Xylene		1	mg/L	0.300	0.284	95	80 - 120	2012-01-02

### Standard (CCV-3)

QC Batch: 87540

Date Analyzed: 2012-01-02

Analyzed By: ZLM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0984	98	80 - 120	2012-01-02
Toluene		1	mg/L	0.100	0.101	101	80 - 120	2012-01-02
Ethylbenzene		1	mg/L	0.100	0.0954	95	80 - 120	2012-01-02
Xylene		1	mg/L	0.300	0.277	92	80 - 120	2012-01-02

**Standard (CCV-1)**

QC Batch: 87569

Date Analyzed: 2012-01-03

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0970	97	80 - 120	2012-01-03
Toluene		1	mg/L	0.100	0.101	101	80 - 120	2012-01-03
Ethylbenzene		1	mg/L	0.100	0.0967	97	80 - 120	2012-01-03
Xylene		1	mg/L	0.300	0.280	93	80 - 120	2012-01-03

**Standard (CCV-2)**

QC Batch: 87569

Date Analyzed: 2012-01-03

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0935	94	80 - 120	2012-01-03
Toluene		1	mg/L	0.100	0.0961	96	80 - 120	2012-01-03
Ethylbenzene		1	mg/L	0.100	0.0932	93	80 - 120	2012-01-03
Xylene		1	mg/L	0.300	0.270	90	80 - 120	2012-01-03

**Standard (CCV-1)**

QC Batch: 87703

Date Analyzed: 2012-01-05

Analyzed By: MN

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		1	mg/L	60.0	54.3	90	80 - 120	2012-01-05
2-Methylnaphthalene		1	mg/L	60.0	56.4	94	80 - 120	2012-01-05
1-Methylnaphthalene		1	mg/L	60.0	56.4	94	80 - 120	2012-01-05
Acenaphthylene		1	mg/L	60.0	55.3	92	80 - 120	2012-01-05
Acenaphthene		1	mg/L	60.0	55.9	93	80 - 120	2012-01-05
Dibenzofuran		1	mg/L	60.0	54.7	91	80 - 120	2012-01-05
Fluorene		1	mg/L	60.0	54.0	90	80 - 120	2012-01-05
Anthracene		1	mg/L	60.0	53.5	89	80 - 120	2012-01-05
Phenanthrene		1	mg/L	60.0	54.0	90	80 - 120	2012-01-05
Fluoranthene		1	mg/L	60.0	58.9	98	80 - 120	2012-01-05
Pyrene		1	mg/L	60.0	54.0	90	80 - 120	2012-01-05
Benzo(a)anthracene		1	mg/L	60.0	56.7	94	80 - 120	2012-01-05

continued ...

standard continued ...

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chrysene		1	mg/L	60.0	57.6	96	80 - 120	2012-01-05
Benzo(b)fluoranthene			mg/L	60.0	59.7	100	80 - 120	2012-01-05
Benzo(k)fluoranthene		1	mg/L	60.0	53.6	89	80 - 120	2012-01-05
Benzo(a)pyrene		1	mg/L	60.0	53.6	89	80 - 120	2012-01-05
Indeno(1,2,3-cd)pyrene		1	mg/L	60.0	53.4	89	80 - 120	2012-01-05
Dibenzo(a,h)anthracene		1	mg/L	60.0	53.8	90	80 - 120	2012-01-05
Benzo(g,h,i)perylene			mg/L	60.0	53.5	89	80 - 120	2012-01-05

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			51.8	mg/L	1	60.0	86	-
2-Fluorobiphenyl			56.0	mg/L	1	60.0	93	-
Terphenyl-d14			54.6	mg/L	1	60.0	91	-

## Appendix

### Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

### Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704219-11-5	Lubbock

### Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

### Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.





**APPENDIX D**

**NMOCD C-141**



**ENVIRONMENTAL PLUS, INC.**

*Micro-Blaze*

*Micro-Blaze Out™*

**STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES**

October 23, 2003

Mr. Paul Sheeley  
Environmental Engineer  
New Mexico Oil Conservation Division  
1625 North French  
Hobbs, New Mexico 88240

Subject: EOTT Initial C-141

Re: 8" Moore to Jal #1, 2002-10270  
UL- F, SE¼ of the NW¼ of Section 16 T17S R37E  
Latitude 32° 50' 12.36"N and Longitude 103° 15' 26.234"W.  
Landowner: State of New Mexico

Dear Mr. Sheeley,

Environmental Plus, Inc. (EPI), on behalf of Mr. Frank Hernandez, EOTT, submits the attached New Mexico Oil Conservation Division (NMOCD) form C-141 for the above referenced leak site located on land owned by the State of New Mexico, approximately ~8 miles southeast of Lovington, New Mexico. The New Mexico Tech Geo-Information Database records a groundwater depth of ~66' bgs. The attached site information and metrics form ranks the site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993).

A remediation plan will be developed and submitted for NMOCD approval and will address issues identified during delineation of the vertical and horizontal extents of contamination of the Constituents of Concern (CoCs), i.e., Chloride, Total Petroleum Hydrocarbon EPA method 8015m (TPH<sup>8015m</sup>), Benzene, and BTEX, i.e., the mass sum of Benzene, Toluene, Ethyl Benzene, and Xylenes. The contaminated soil is not exempted from RCRA 40 CFR Part 261.

If there are any questions please call Mr. Ben Miller or myself at the office or at 505.390.0288 and 505.390.7864, respectively or Mr. Frank Hernandez at 915.638.3799. All official communication should be addressed to:

Mr. Frank Hernandez  
EOTT  
PO Box 1660 5805 East Highway 80  
Midland, Texas 79702

Sincerely,

Pat McCasland  
EPI Technical Services Manager

cc: Frank Hernandez, EOTT, w/enclosure  
Ben Miller, EPI Vice President and General Manager  
Sherry Miller, EPI President  
file

ENVIRONMENTAL PLUS, INC.

<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
SITE: 8" Moore to Jal #1		Assigned Site Reference #: 2002-10270	
Company: EOTT			
Street Address: PO Box 1660			
Mailing Address: 5805 East Highway 80			
City, State, Zip: Midland, Texas 79702			
Representative: Frank Hernandez			
Representative Telephone: 915.638.3799			
Telephone:			
Fluid volume released (bbls): 200 bbls		Recovered (bbls): 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)			
Leak, Spill, or Pit (LSP) Name: 8" Moore to Jal #1			
Source of contamination: 8" Steel Pipeline			
Land Owner, i.e., BLM, ST, Fee, Other: State of New Mexico			
LSP Dimensions ~200' x 40'			
LSP Area: 8,000 sqft ft <sup>2</sup>			
Location of Reference Point (RP)			
Location distance and direction from RP			
Latitude: 32° 50' 12.36"N			
Longitude: 103° 15' 26.234"W.			
Elevation above mean sea level:			
Feet from South Section Line			
Feet from West Section Line			
Location- Unit or ¼¼: SE¼ of the NW¼		Unit Letter: F	
Location- Section: 16			
Location- Township: T17S			
Location- Range: R37E			
Surface water body within 1000' radius of site: none			
Surface water body within 1000' radius of site:			
Domestic water wells within 1000' radius of site: none			
Domestic water wells within 1000' radius of site:			
Agricultural water wells within 1000' radius of site: none			
Agricultural water wells within 1000' radius of site:			
Public water supply wells within 1000' radius of site: none			
Public water supply wells within 1000' radius of site:			
Depth from land surface to ground water (DG) ~66'bgs			
Depth of contamination (DC) - ?			
Depth to ground water (DG - DC = DtGW) - ?			
<b>1. Ground Water</b>		<b>2. Wellhead Protection Area</b>	<b>3. Distance to Surface Water Body</b>
If Depth to GW <50 feet: 20 points		If <1000' from water source, or; <200' from private domestic water source: 20 points	<200 horizontal feet: 20 points
If Depth to GW 50 to 99 feet: 10 points		If >1000' from water source, or; >200' from private domestic water source: 0 points	200-100 horizontal feet: 10 points
If Depth to GW >100 feet: 0 points		Wellhead Protection Area Score= 0	>1000 horizontal feet: 0 points
Ground water Score = 10		Wellhead Protection Area Score= 0	Surface Water Score= 0
Site Rank (1+2+3) = 10			
<b>Total Site Ranking Score and Acceptable Concentrations</b>			
Parameter	>19	10-19	0-9
Benzene <sup>1</sup>	10 ppm	10 ppm	10 ppm
BTEX <sup>1</sup>	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm
<sup>1</sup> 100 ppm field VOC headspace measurement may be substituted for lab analysis			

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 <b>EOTT</b>	Contact <b>Frank Hernandez</b>
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:	<b><u>OIL CONSERVATION DIVISION</u></b>	
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

